### 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, 2013

Commission file number: 001-34175

ECOPETROL S.A. (Exact name of Registrant as specified in its charter)

N/A (Translation of Registrant's name into English)

#### **REPUBLIC OF COLOMBIA** (Jurisdiction of incorporation or organization)

Carrera 13 No. 36 – 24 BOGOTA – COLOMBIA (Address of principal executive offices)

> Alejandro Giraldo Investor Relations Officer investors@ecopetrol.com.co Tel. (571) 234 5190 Carrera 13 N.36-24 Piso 7 Bogota, Colombia

(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:
American Depository Shares (as evidenced by American Depository Receipts),	New York Stock Exchange
each representing 20 common shares par value Ps\$250 per share	
Ecopetrol common shares par value Ps\$250 per share	New York Stock Exchange (for listing purposes only)
7.625% Notes due 2019	New York Stock Exchange
4.250% Notes due 2018	New York Stock Exchange
5.875% Notes due 2023	New York Stock Exchange
7.375% Notes due 2043	New York Stock Exchange
Securities registered or to be register	ed pursuant to Section 12(g) of the Act: None

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

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

41,116,698,456 Ecopetrol common shares, par value Ps\$250 per share

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

⊠Yes □No

If this report is an annual or transition 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

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

⊠Yes □No

Indicate by check mark 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).

N/A

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 and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer 🗵

Accelerated filer  $\square$ 

Non-accelerated filer  $\Box$ 

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 🗵 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:

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).  $\Box$ Yes  $\boxtimes$ No

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## FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F contains forward-looking statements within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements are not based on historical facts and reflect our expectations for future events and results. Most facts are uncertain because of their nature. Words such as "anticipate," "believe," "could," "estimate," "expect," "should," "plan," "potential," "predicts," "prognosticate," "project," "target," "achieve" and "intend," among other similar expressions, are understood as forward-looking statements. We have made forward-looking statements that address, among other things:

- our exploration and production activities, including drilling;
- import and export activities;
- our liquidity, cash flow, and sources of funding;
- our projected and targeted capital expenditures and other cost commitments and revenues; and
- dates by which certain areas will be developed or will come on-stream.

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. Actual results could differ materially from those expressed or forecast in any forward-looking statements as a result of a variety of factors. These factors may include, but are not limited to, the following:

- general economic and business conditions, including crude oil and other commodity prices, refining margins and prevailing exchange rates;
- competition;
- our ability to obtain financing;
- our ability to find, acquire or gain access to additional reserves and our ability to develop existing reserves;
- uncertainties inherent in making estimates of our reserves;
- significant political, economic and social developments in Colombia and other countries where we do business;
- natural disasters, military operations, terrorist acts, wars or embargoes;
- regulatory developments, including regulations related to climate change;
- receipt of government approvals and licenses;
- technical difficulties; and
- other factors discussed in this document as "Risk Factors."

All forward-looking statements attributed to us 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 for any other reason. Accordingly, readers should not place undue reliance on the forward-looking statements contained in this annual report.



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

## ENFORCEMENT OF CIVIL LIABILITIES

We are a Colombian company. All of our Directors and executive officers and some of the experts named in this annual report reside outside the United States. All or a substantial portion of our assets and the assets of these persons are located outside of the United States. As a result, it may not be possible for you to effect service of process within the United States upon us or these persons or to enforce against us or them judgments in U.S. courts obtained in such courts predicated upon the civil liability provisions of the U.S. federal securities laws. Colombian courts will determine whether to enforce a U.S. judgment predicated on the U.S. securities laws through a proceeding known as *exequatur*. The Colombian Supreme Court will enforce a foreign judgment, without reconsideration of the merits only if the judgment satisfies the following requirements:

- a treaty exists between Colombia and the country where the judgment was granted or there is reciprocity in the recognition of foreign judgments between the courts of the relevant jurisdiction and the courts of Colombia;
- the foreign judgment does not relate to "in rem rights" vested in assets that were located in Colombia at the time the suit was filed and does not contravene or conflict with Colombian laws relating to public order other than those governing judicial procedures;
- the foreign judgment, in accordance with the laws of the country where it was rendered, is final and is not subject to appeal and a duly certified and authenticated copy of the judgment has been presented to a competent court in Colombia;
- the foreign judgment does not refer to any matter upon which Colombian courts have exclusive jurisdiction;
- no proceeding is pending in Colombia with respect to the same cause of action, and no final judgment has been awarded in any proceeding in Colombia on the same subject matter and between the same parties; and
- in the proceeding commenced in the foreign court that issued the judgment, the defendant is served in accordance with the laws of such jurisdiction and in a manner reasonably designated to give the defendant an opportunity to defend against the action.

The United States and Colombia do not have a bilateral treaty providing for automatic reciprocal recognition and enforcement of judgments in civil and commercial matters. The Colombian Supreme Court has in the past accepted that reciprocity exists when it has been proven that either a U.S. court has enforced a Colombian judgment or that a U.S. court would enforce a foreign judgment, including a judgment issued by a Colombian court. However, such enforceability decisions are considered by Colombian courts on a case-by-case basis.

#### PRESENTATION OF FINANCIAL INFORMATION

Unless the context otherwise requires, the terms "Ecopetrol," "we," "us," "our" or the "Company" are used in this annual report to refer to Ecopetrol S.A. and its subsidiaries on a consolidated basis.

In this annual report, references to "US\$" or "U.S. dollars" are to United States dollars and references to "Ps\$," "Peso" or "Pesos" are to Colombian Pesos, the functional currency under which we prepare our financial statements. Certain figures shown in this annual report have been subject to rounding adjustments and, accordingly, certain totals may therefore not precisely equal the sum of the numbers presented. In this annual report a billion is equal to one with nine zeros.



Our consolidated financial statements are prepared in accordance with accounting principles for Colombian state-owned entities issued by the Colombian National Accounting Office (*Contaduría General de la Nación*), or CGN, and other applicable legal provisions.

Our consolidated financial statements at and for the years ended December 31, 2013, 2012 and 2011 and the selected financial data at and for the years ended December 31, 2013, 2012, 2011, 2010 and 2009 have been prepared under the Public Accounting Regime (*Régimen de Contabilidad Pública*), or RCP, as adopted by the CGN in September, 2007 and applicable to Ecopetrol beginning with the fiscal year ended December 31, 2008. See Note 1 to our consolidated financial statements included in this Annual Report. We refer to RCP as Colombian Government Entity GAAP. Colombian Government Entity GAAP differs in certain significant respects from generally accepted accounting principles in the United States, or U.S. GAAP. Note 35 to our consolidated financial statements included in this annual report provides a description of the principal differences between Colombian Government Entity GAAP and U.S. GAAP as they relate to our audited consolidated financial statements and provides a reconciliation of net income and shareholders' equity for the years and dates indicated therein. As a state-owned company, our consolidated financial statements are periodically reviewed by the CGN. However, the review of our accounts by the CGN does not constitute an audit.

We are in the process of transitioning our financial reporting to International Financial Reporting Standards. For more information on our transition to IFRS, please see Note 1(aa) to our consolidated financial statements.

The accompanying audited consolidated financial statements of Ecopetrol and our consolidated subsidiaries for the years ended December 31, 2013, 2012 and 2011 have been prepared from accounting records, which are maintained under the historical cost convention as modified in 1992, to comply with the legal provisions of the CGN.

Certain line items from our consolidated financial statements as of December 31, 2011 and 2012 related to the presentation of the consolidated Balance Sheet and the Consolidated Statement of Financial, Economic, Social and Environmental Activities have been reclassified in order to make the presentation of such financial statements comparable to that of our financial statements as of December 31, 2013. The main reclassifications were under cost of sales, operational expenses, marketing and projects, accounts payable and related parties, taxes, contributions and duties payable, deposits held in trust and other assets.

Our consolidated financial statements were consolidated line by line and all transactions and significant balances between affiliates have been eliminated. These financial statements include the financial results of the following companies:

COMPANY	<b>OWNERSHIP %</b> (as of Dec. 31, 2013)	Included in consolidated Financial Statements for the year ended		
		2013	2012	2011
Black Gold Re Ltd.	100.00	Х	X	X
Ecopetrol Óleo e Gás do Brasil Ltda.	100.00	Х	Х	Х
Ecopetrol del Perú S.A.	100.00	Х	Х	Х
Ecopetrol America Inc.	100.00	Х	Х	Х
Andean Chemicals Ltd.	100.00	Х	Х	Х
Polipropileno del Caribe S.A. (Propilco)	100.00	Х	Х	Х
Ecopetrol Global Energy SLU	100.00	Х	Х	Х
Refinería de Cartagena S.A. (Reficar)	100.00	Х	Х	Х
COMAI Compounding and Masterbatching Industry Ltda.	100.00	Х	Х	Х
Hocol Petroleum Ltd.	100.00	Х	Х	Х
Ecopetrol Capital AG	100.00	Х	Х	Х
Ecopetrol Pipelines International Limited	100.00	Х	Х	Х
Ecopetrol Global Capital SL	100.00	Х	Х	Х
Cenit Transporte y Logística de Hidrocarburos S.A.S (Cenit).	100.00	Х	Х	
Ecopetrol Transportation Company Ltd <sup>(1)</sup> .	100.00			Х
Ecopetrol Transportation Investment Ltd <sup>(1)</sup>	100.00			Х
Bioenergy S.A.	91.43	Х	Х	Х
ODL Finance S.A.	65.00	Х	Х	Х
Oleoducto Central S.A. (Ocensa)	72.65	Х	Х	Х
Oleoducto de Colombia (ODC)	73.00	Х	Х	Х
Equión Energía Limited (Equión)	51.00	Х	Х	Х
Oleoducto Bicentenario de Colombia S.A.S	55.97	Х	Х	Х

(1) In 2012, Ecopetrol Transportation Company Ltd and Ecopetrol Transportation Investment Ltd merged with Ecopetrol Pipelines International Ltd.

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This annual report translates certain Peso amounts into U.S. dollars at specified rates solely for the convenience of the reader. Unless otherwise indicated, such Peso amounts have been translated at the rate of Ps\$1,926.83 per US\$1.00, which corresponds to the *Tasa Representativa del Mercado* (TRM), or Representative Market Exchange Rate, for December 31, 2013. The Representative Market Exchange Rate is computed and certified by the *Superintendencia Financiera*, or Superintendency of Finance, the Colombian banking and securities regulator, on a daily basis and represents the weighted average of the buy and sell foreign exchange rates negotiated on the previous day by financial institutions authorized to engage in foreign exchange transactions. The Superintendency of Finance also calculates the Representative Market Exchange Rate for each month for purposes of preparing financial statements and converting amounts in foreign currency to Pesos. Such conversion should not be construed as a representation that the Peso amounts correspond to, or have been or could be converted into, U.S. dollars at that rate or any other rate. On April 25, 2014, the Representative Market Exchange Rate was Ps\$1,936.07 per US\$1.00.

## PRESENTATION OF ABBREVIATIONS

The following is a list of crude oil and natural gas measurement abbreviations commonly used throughout this annual report.

bpd	Barrels per day
boe	Barrels of oil equivalent
boepd	Barrels of oil equivalent per day
btu	British thermal units
cf	Cubic feet
cfpd	Cubic feet per day
mcf	Million cubic feet
mcfpd	Million cubic feet per day
mbtu	Million British thermal units
gbtu	Giga British thermal units
gbtud	Giga British thermal units per day
bcf	Billion Cubic feet

## PRESENTATION OF THE NATION AND GOVERNMENT OF COLOMBIA

References to the Nation in this annual report relate to the Republic of Colombia, our controlling shareholder. References made to the Government of Colombia or the Government correspond to the executive branch including the President of Colombia, the ministries and other governmental agencies responsible for regulating our business.

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## PRESENTATION OF INFORMATION CONCERNING RESERVES

The estimates of our proved reserves of crude oil and natural gas included in this annual report have been calculated according to the technical definitions required by the U.S. Securities and Exchange Commission, or SEC. Our hydrocarbon net proved reserves have been audited in 2013 by Ryder Scott Company L.P., DeGolyer and MacNaughton and Gaffney, Cline & Associates Inc., which we refer to collectively as the External Engineers, and their reserves reports are included as exhibits herein. All reserve estimates involve some degree of uncertainty. See "Item 4. Information on the Company—Overview by Business Segment—Exploration and Production—Reserves" for additional information on our reserves estimates.

The following table sets forth the percentage of our estimated net proved reserves audited by External Engineers and the percentage calculated internally for the years ended December 31, 2013, 2012 and 2011. Our proved reserves as of December 31, 2013, 2012 and 2011 are based on the SEC average price methodology for purposes of both Colombian Government Entity GAAP and U.S. GAAP. See "Item 3. Key Information—Risk Factors—Risks related to our business" for a description of the risks relating to our reserves and our reserve estimates.

	-	Estimated proved reserves for the year ended		
		December 31,		
	2013	2012	2011	
Net proved reserves audited by External Engineers	99%	99%	99%	
Net proved reserves estimates on our own calculations	1%	1%	1%	

We are required, as are all oil companies undertaking exploratory and production activities in Colombia, to pay a percentage of our production to the Government as royalties. The oil and gas reserve figures included in this annual report are net of such royalties.

#### ITEM 1. Identity of Directors, Senior Management and Advisors

Not applicable.

## ITEM 2. Offer Statistics and Expected Timetable

Not applicable.

## ITEM 3. Key Information

### SELECTED FINANCIAL DATA

The following table sets forth, for the periods and at the dates indicated, our selected historical financial data, which have been derived from and should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated audited financial statements, presented in Pesos. PricewaterhouseCoopers Ltda. audited our consolidated financial statements for the year ended December 31, 2013. KPMG Ltda. audited our consolidated financial statements for the years ended December 31, 2010 and 2009 were audited by PricewaterhouseCoopers Ltda. The information included below and elsewhere in this annual report is not necessarily indicative of our future performance. See also "Item 5. Operating and Financial Review and Prospects" in this annual report.

Colombian Government Entity GAAP differs in certain significant respects from U.S. GAAP. Note 35 to our consolidated financial statements included in this annual report provides a description of the principal differences between Colombian Government Entity GAAP and U.S. GAAP as they relate to our financial statements and provides a reconciliation to U.S. GAAP of net income and shareholders' equity for the years and dates indicated therein.

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	2013 <sup>(1)</sup> (USS in thousands except for common share and dividends per share amounts)	2013 (Pesos in	BALANCE S For the year ended 2012	December 31, 2011	2010 lends per share amo	2009
Total assets	68,728,426	132,427,994	113,879,578	92,277,386	68,769,356	55,559,517
Shareholders' Equity	36,909,952	71,119,203	64,740,881	54,688,855	41,328,181	32,569,957
Subscribed capital	5,334,760	10,279,175	10,279,175	10,279,175	10,118,128	10,118,128
Number of common shares	41,116,698,456 <sup>(2)</sup>	41,116,698,456 <sup>(2)</sup>	41,116,698,456 <sup>(2)</sup>	41,116,698,456 <sup>(2)</sup>	40,472,512,588	40,472,512,588
Dividends declared per share <sup>(3)</sup>	0.13	260	300	145	91	220
Amounts in accordance with U.S. GAAP						
Total Assets	47,584,850	91,687,916	81,519,332	70,909,079	52,332,148	42,624,352
Shareholders' Equity	21,732,704	41,875,226	37,648,352	36,055,173	27,175,285	22,383,712
Number of common shares	41,116,698,456	41,116,698,456	41,116,698,456 <sup>(2)</sup>	41,116,698,456 <sup>(2)</sup>	40,472,512,588	40,472,512,588
Dividends declared per share <sup>(3)</sup>	0.13	260	300	145	91	220

<sup>(1)</sup> Amounts stated in U.S. dollars have been translated for the convenience of the reader at the rate of Ps\$ 1,926.83 to US\$1.00, which is the Representative Market Exchange Rate as of December 31, 2013, as reported and certified by the Superintendency of Finance.

(3) Represents dividends declared in 2013, 2012, 2011, 2010 and 2009, based on net income for the years ended December 31, 2012, 2011, 2010, 2009 and 2008 respectively.

	INCOME STATEMENT					
		For the year ended December 31,				
	2013 <sup>(1)</sup>	2013	2012	2011	2010	2009
	(USS in thousands except for net income per share and average number of shares amounts)	(Pesos in millio	ons except for net inco	me per share and aver	age number of share	es amounts)
Total revenue	36,551,597	70,428,714	68,852,002	65,967,514	42,089,745	30,404,390
Operating income	11,331,944	21,834,729	23,342,904	25,044,016	12,747,448	7,873,339
Net operating income per share	0.28	531	589	616	315	195
Income before income tax and non-controlling interest	11,356,584	21,882,207	22,331,701	23,641,432	11,492,617	7,250,844
Net income	6,802,107	13,106,503	14,778,947	15,452,334	8,146,471	5,132,054
Weighted average number of shares outstanding	41,116,698,456	41,116,698,456	41,116,698,456 <sup>(2)</sup>	40,634,882,725 <sup>(2)</sup>	40,472,512,588	40,472,512,588
Net income per share <sup>(3)</sup>	0.17	319	359	380	201	127
Amounts in accordance with U.S. GAAP						
Total revenue	35,515,663	68,432,645	66,867,137	62,715,815	40,879,324	29,551,574
Operating income	12,102,747	23,319,936	23,556,963	23,673,787	13,878,515	8,055,213
Net operating income per share	0 29	567	573	583	343	199
Income before income tax	12,072,348	23,261,363	22,413,482	23,456,685	12,840,721	8,768,383
Net income attributable to Ecopetrol	7,238,238	13,946,855	14,695,649	14,817,207	8,211,035	5,718,304
Net income per share	0.18	339	357	365	203	141
Weighted average number of shares outstanding <sup>(4)</sup>	41,116,698,456 <sup>(2)</sup>	41,116,698,456 <sup>(2)</sup>	41,116,698,456 <sup>(2)</sup>	40,634,882,725 <sup>(2)</sup>	40,472,512,588	40,472,512,588

<sup>(1)</sup> Amounts stated in U.S. dollars have been translated for the convenience of the reader at the rate of Ps\$1,926.83 to US\$1.00, which was the Representative Market Exchange Rate as of December 31, 2013, as reported and certified by the Superintendency of Finance.

(3) Net income per share is calculated using the weighted-average number of outstanding shares during the year.

<sup>(4)</sup> Calculated in accordance with U.S. GAAP, which differs in certain respects from the calculation of weighted average number of shares pursuant to Colombian Government Entity GAAP.



<sup>(2)</sup> The number of common shares includes 644,185,868 shares issued to the public in connection with our second offering of shares in Colombia in September 2011.

<sup>(2)</sup> The weighted average number of common shares outstanding reflect the issuance of 644,185,868 shares to the public in connection with our second offering of shares in Colombia in September 2011.

## **EXCHANGE RATE INFORMATION**

On April 25, 2014, the Representative Market Exchange Rate was Ps\$1,936.07 per US\$1.00. The Federal Reserve Bank of New York does not report a noon-buying rate for Colombian Pesos. The Superintendency of Finance calculates the Representative Market Exchange Rate based on the weighted averages of the buy and sell foreign exchange rates quoted daily by foreign exchange rate market intermediaries including financial institutions for the purchase and sale of U.S. dollars.

The following table sets forth the high, low, average and period-end exchange rate for Peso/U.S. dollar Representative Market Exchange Rate for each of the last five years and for the last six months.

		Exchange Rates			
	High	Low	Average	Period-End	
2009	2,596.37	1,825.68	2,156.29	2,044.23	
2009	2,044.23	1,786.20	1,897.89	1,913.98	
2011	1,972.76	1,748.41	1,848.17	1,942.70	
2012	1,942.70	1,754.89	1,798.23	1,768.23	
2013	1,952.11	1,758.45	1,868.90	1,926.83	
October	1,908.29	1,879.46	1,885.91	1,884.06	
November	1,932.77	1,889.16	1,922.14	1,931.88	
December	1,948.48	1,921.22	1,934.08	1,926.83	
2014:					
January	2,013.17	1,924.79	1,960.41	2,008.26	
February	2,054.90	2,021.10	2,040.51	2,054.90	
March	2,052.51	1,965.32	2,022.19	1,965.32	
April (through April 25)	1,969.45	1,920.93	1,939.51	1,936.07	

Source: Superintendency of Finance for historical data. Banco de la República, or the Colombian Central Bank, for averages.

## **RISK FACTORS**

#### **Risks related to our business**

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

Reserves estimates are prepared using generally accepted geological and engineering evaluation methods and procedures. Estimates are based on geological, topographical and engineering facts. Hydrocarbon reserves were calculated in accordance with SEC regulations and the requirements of the Financial Accounting Standards Board, or FASB. Actual reserves and production may vary materially from estimates presented in this annual report, and downward revisions in our reserve estimates could lead to lower future production which could affect our results of operations and financial condition. For more information, see "Item 4. Information on the Company – Reserves."

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## Achieving our long-term growth prospects depends on our ability to execute our Strategic Plan — specifically, the discovery and successful development of additional reserves.

Our Strategic Plan is discussed at length in "Item 4. Information on the Company—The Company—Our Strategic Plan." Our long-term growth objectives depend largely on our ability to discover and/or acquire new reserves, and in turn successfully develop them and to improve our recovery factor. Our exploration activities expose us to the inherent risks of drilling, including the risk that we will not discover commercially productive crude oil or natural gas reserves and the risk that some exploratory wells initially budgeted for may be drilled at a later stage or not be drilled at all. The costs associated with drilling wells are often uncertain, and numerous factors beyond our control may cause drilling operations to be curtailed, delayed or cancelled.

If we are unable to successfully discover and develop additional reserves, or if we do not acquire properties having proved reserves, our level of proved reserves will decline. Failure to secure additional reserves may impede us from achieving or maintaining production targets, and may have a negative impact on our results of operation and financial condition.

# Our business depends substantially on international prices for crude oil and refined products. The prices for these products are volatile; a sharp decrease could adversely affect our business prospects and results of operations.

As of December 2013, nearly 95% of our revenues came from sales of crude oil, natural gas and refined products and 99% of our revenues from the sales of these products are indexed to international reference prices or benchmarks such as brent and fuel oil. Consequently, fluctuations in those international indexes have a direct effect on our financial condition and results of operations.

Prices of crude oil, natural gas and refined products have traditionally fluctuated as a result of a variety of factors including, among others, competition within the oil and natural gas industry; changes in international prices of natural gas and refined products; long-term changes in the demand for crude oil, natural gas and refined products; regulatory changes; inventory levels; changes in the cost of capital; adverse economic conditions; global financial crises, such as the financial crisis of 2008; development of new technologies; global and regional economic and political developments in the Organization of the Petroleum Exporting Countries, or OPEC; the willingness and ability of the OPEC and its members to set production levels and prices; local and global demand and supply for crude oil, refined products and natural gas; trading activity in oil and natural gas; transactions in derivative financial instruments related to oil and gas; development or availability of alternative fuels; weather conditions; natural events or disasters; and terrorism and global conflict.

Substantial or extended declines in international crude oil prices may have a material adverse effect on our business, results of operations and financial condition, and the value of our proved reserves. In addition, a reduction of international crude oil prices could result in a delay or a change in our capital expenditure plan, in particular delaying exploration and development activities, thereby delaying the development of reserves and affecting future cash flows.

# An appreciation of the Peso against the U.S. dollar could have an adverse effect on our financial condition and results of operations given that approximately 99% of our revenues are derived from sales of products quoted in or with reference to U.S. dollars.

Approximately 99% of our revenues are derived from sales of products quoted in or with reference to U.S. dollars. The impact of fluctuations in exchange rates, especially the Peso/U.S. dollar rate, on our operations has been and may continue to be material. In addition, a substantial share of our liquid assets are held in U.S. dollars and gain value when converted into Pesos as the Peso depreciates against the U.S. dollar and lose value when converted into Pesos as the Peso appreciates against the U.S. dollar.

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The U.S. dollar/Peso exchange rate has fluctuated during the last several years. The Peso appreciated 2.7% on average against the U.S. dollar in 2012, and in 2013 depreciated 3.9%. When the Peso appreciates against the U.S. dollar, our revenues from exports decrease when converted into Pesos. However, imported goods, oil services and interest on external debt denominated in U.S. dollars become less expensive for us. Conversely, when the Peso depreciates against the U.S. dollar, our revenues from exports, when converted into Pesos, increase, and our imports and external debt service become more expensive. Because of our current composition of revenues as described above and the fact that our assets and liabilities are denominated in U.S. dollars and our assets are almost twice as much as our liabilities, we prefer the depreciation of the Peso against the U.S. dollar. We cannot assure that measures adopted by the government of Colombia and the Colombian Central Bank (*Banco de la República de Colombia*) such as the purchase of U.S. dollars in the foreign exchange market in response to the appreciation of the Peso, and the government's intervention through the purchase of significant amounts of U.S. dollars in the spot market to pay interest and principal on foreign bonds coming due will be sufficient to control this fluctuation. Future appreciation in the exchange rate of the Peso to the U.S. dollar may adversely affect our financial condition and results of operations when converted into Pesos and our ability to comply with our obligations under our existing indebtedness and our ability to pay dividends.

## Increased competition from local and foreign crude oil companies may have a negative impact on our ability to gain access to additional crude oil and natural gas reserves in Colombia.

Prior to the enactment of Decree Law 1760 of 2003, we had an automatic right to explore any territory in Colombia and to enter into joint venture agreements with foreign and local oil companies. Under current law, by contrast, we no longer have unfettered ability to engage in exploratory activities; we must instead bid for exploration blocks offered by the ANH, the governmental entity responsible for promoting oil and gas investments in Colombia, establishing terms of reference for exploration rounds and assigning exploration blocks to domestic and foreign oil and gas companies via competitive rounds. This means we compete under the same conditions as other domestic and foreign oil and gas companies, and receive no special treatment. Our ability to obtain access to potential production fields also depends on our ability to evaluate and select potential hydrocarbon-producing fields and to adequately bid for these exploration fields.

We are also exposed to international competition as a result of our international exploratory activities. Currently, we are developing exploratory activities in Brazil, Peru and the Gulf of Mexico, where we face competition from other oil and gas companies operating in those locations.

If we are unable to adequately compete with local and foreign oil companies, or if we cannot enter into joint ventures with market players with exploration projects where we could potentially find additional reserves, we may be limited to conducting exploration activities in less attractive blocks. This could reduce our share of the market and, in turn, adversely affect our financial condition.

# If operational risks to which we are exposed in Colombia or overseas materialize, the health and safety of our workforce, the local community and the environment may be affected. In addition, we may suffer a disruption or shutdown of our operational activities.

Our exploration, production, refining and transportation activities in Colombia and in the foreign countries in which we operate are subject to industryspecific operating risks, some of which, despite our internal procedures and adherence to industry practices, are beyond our control. Our operations may be curtailed, delayed or cancelled due to adverse or abnormal weather conditions, natural disasters, equipment failures or accidents, oil or natural gas spills or leaks, shortages or delays in the availability or in the delivery of equipment, delays or cancellation of environmental licenses or other government authorizations, fires, explosions, blow-outs, surface cratering, pipeline failures, theft and damage to our transportation infrastructure, sabotage, terrorist attacks and criminal activities.

Some of our operations in Colombia and abroad could be conducted in remote and uninhabited locations which involve health and safety risks that could affect our workforce. By our own Company policy and practices, as well as under Colombian law and international industrial safety regulations, we are required to have health and safety practices that minimize risks and health issues faced by our workforce. Failure to comply with health and safety regulations in the jurisdictions where we operate may lead to investigations by health officials that could result in lawsuits or fines.

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We may be required to incur additional costs and expenses to allocate funds to industrial safety and health compliance under Colombian law and international industrial safety regulations. Additionally, if any operational incident occurs that affects local communities in nearby areas, we will need to incur additional costs and expenses in order to return affected areas to normality and to compensate for any damages we may cause. These additional costs may have a negative impact on the profitability of the projects we may decide to undertake.

The occurrence of any of these operating risks could result in substantial losses or slowdowns to our operations, including injury to our employees, malfunction or destruction of property, equipment and infrastructure, clean-up responsibilities, third-party liability claims, government investigations and imposition of fines, withdrawal of environmental licenses and other government permits, suspension or shutdown of our activities and loss of revenue. The occurrence of any of these events may have a material adverse effect on our financial condition and results of operations.

# Our involvement in deep water drilling either as direct operators or in conjunction with our business partners involves certain risks and costs, which may be outside of our control.

Ecopetrol plans to spud two or three offshore exploration wells in the deep waters of the Colombian Caribbean Sea during 2014; all of them will be operated by our partners in the Tayrona and Fuerte Norte and Sur blocks (Petróleo Brasileiro S.A.—Petrobras and Anadarko Petroleum Corporation, respectively). Ecopetrol will continue its exploration campaign in the Colombian Caribbean Sea in 2015 and 2016, with three to four new exploration wells planned, in association with our business partners, such as Repsol and ONGC Videsh Limited, among others. In association with our business partners, we have undertaken deep water exploratory drilling in the U.S. Gulf Coast and in Brazil. Additionally, as of December 31, 2013, we were involved in off-shore production operations on the Colombian Caribbean coast where Chevron acts as operator and 18 off-shore exploratory blocks in Colombia that involve deep-water drilling, in four of which Ecopetrol S.A. acts as operator, while Equión acts as operator in two. Our deep water drilling activities present several risks, such as the risk of spills, explosions in platforms and drilling operations, and natural disasters. The occurrence of any of these events or other incidents could result in personal injuries, loss of life, severe environmental damage with the resulting containment, clean-up and repair expenses, equipment damage and liability in civil and administrative proceedings. Heightened risks and costs associated with deep water drilling may have a negative effect on our results of operations, financial condition and reputation.

As a result of the oil spill in the Macondo field operated by British Petroleum in the U.S. Gulf Coast in April 2010, significant concerns regarding the safety of deep water drilling have been raised and, as a result, applicable regulations in various countries have changed. More stringent government regulation may result in increased costs and longer exploration and development timeframes for our deep water drilling operations and consequently could adversely affect our results of operations and financial condition.

# We are exposed to the credit risks of our customers and any material nonpayment or nonperformance by our key customers could adversely affect our cash flow and results of operations.

Some of our customers may experience financial problems that could have a significant negative effect on their creditworthiness. Severe financial problems 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. In addition, many of our customers finance their activities through their cash flows from operations, the incurrence of short and long term debt or the issuance of equity.

The combination of decreasing cash flows as a result of declines in commodity prices, a reduction in borrowing bases under reserve-based credit facilities and the lack of availability of debt or equity financing may result in a significant reduction of our customers' liquidity and limit their ability to make payments or perform their obligations to us.

Furthermore, some of our customers may be highly leveraged and subject to their own operating expenses. Therefore, the risk we face in doing business with these customers may increase. Other customers may also be subject to regulatory changes, which could increase the risk of defaulting on their obligations to us. For example, constraints on foreign currency transactions by the Venezuelan government have resulted in delays by PDVSA Gas to make payments to its suppliers, including us. Financial problems experienced by our customers could result in the impairment of our assets, a decrease in our operating cash flows and may also reduce or curtail our customers' future use of our products and services, which may have an adverse effect on our revenues and our ability to make payments under our existing debt obligations.



## Our ability to access the credit and capital markets on favorable terms to obtain funding for our capital projects may be limited due to the deterioration of these markets and the authorizations we need before incurring any financial indebtedness.

We expect to make significant capital and operations expenditures to reach the corporate goals established by our Strategic Plan. See "Item 4. Information on the Company—The Company—Our Strategic Plan." Our ability to fund these expenditures is dependent on our ability to access the capital necessary to finance them on terms acceptable to us. In recent years, domestic and global financial markets and economic conditions have been weak and volatile and have contributed significantly to a substantial deterioration in the credit and capital markets. A new financial crisis or a renewal of the European sovereign debt crisis, which in turn could worsen the risk perception in the emerging markets, could also make it more difficult for us and our subsidiaries to access international capital markets and finance our operations and capital expenditures in the future on terms acceptable to us. These conditions, along with significant write-offs in the financial services sector and the re-pricing of credit risk, can make it difficult for us to obtain funding for our capital needs on favorable terms. As a result, we may be forced to revise the timing and scope of these projects as necessary to adapt to existing market and economic conditions, or access the financial markets on terms less favorable, therefore negatively affecting our results of operations and financial condition.

In addition, under applicable regulation, the Government, through the Ministry of Finance and Public Credit and the National Planning Department, must authorize all indebtedness of state-owned entities and government-controlled companies through a majority equity stake. Consequently, all of our own indebtedness and our subsidiaries' indebtedness, except for our foreign subsidiaries or those subsidiaries in which we hold minority interest, must be previously authorized by the Colombian Ministry of Finance and Public Credit and the National Planning Department. As such, our indebtedness is subject to the Government's time frames and policies, and we cannot guarantee that such authorizations would be granted in a timely fashion or granted at all.

### We may be exposed to increases in interest rates, thereby increasing our financial costs.

We may incur debt locally and in the international capital markets and, consequently, may be affected by changes in prevailing interest rates. If market interest rates increase, our financing expenses may increase, which could have an adverse effect on our results of operations and financial condition.

As of December 31, 2013, approximately 42%—US\$4.8 billion of our total indebtedness—consisted of floating rate debt. If market interest rates rise, our financing expenses will increase, which could have an adverse effect on our results of operations and financial condition. In addition, 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 in or indexed to. We cannot assure you that such changes will not result in increased financing expenses borne by us.

## Our current and planned investments and exploration activities outside Colombia are exposed to political and economic risks.

As part of our Strategic Plan, we operate through business partners, subsidiaries or affiliates outside of Colombia. We currently have investments and subsidiaries incorporated in Peru, Brazil, Bermuda, Panama, the Cayman Islands, Switzerland, Spain, the United Kingdom and the United States, and we are analyzing investments in other countries. In connection with making investments, we are and will be subject to risks relating to economic and political conditions and governmental economic actions. We cannot predict the positions of foreign governments relating to the oil and gas industry, land tenure, protection of private property, environmental standards, regulation or taxation; nor can we assure you that future governments will maintain policies favorable to foreign investment or repatriation of capital.

We began exploration activities outside Colombia in 2006 through our Brazilian subsidiary, Ecopetrol Óleo e Gás do Brasil Ltda. Our foreign subsidiaries have subsequently entered into a number of joint venture exploration agreements with regional and international oil companies to explore blocks in Peru, Brazil and the U.S. Gulf Coast. We have limited experience exploring outside Colombia. We may face new and unexpected risks involving environmental and other legal requirements beyond those we currently face.

The results of operations and financial condition of our subsidiaries in these countries also may be adversely affected not only by risks associated with hydrocarbon exploration and production, but also by fluctuations in their local economies, political instability and government actions, including: the imposition of price controls, the imposition of restrictions on hydrocarbon exports, fluctuation of local currencies against the Peso, the nationalization of oil and gas reserves, increases in export tax and income tax rates for crude oil and oil products, and unilateral (governmental) institutional and contractual changes, including controls on investments and limitations on new projects.

Any of these conditions occurring could disrupt or terminate our operations, causing our development activities to be curtailed or terminated in these areas, or our production to decline; limit our ability to pursue new opportunities; affect the recoverability of our assets; or cause us to incur additional costs or delay the timeline of our projects.

### Our future performance depends on the successful development and deployment of new technologies and the knowledge to apply and improve them.

Technology, knowledge and innovation are essential to our business, especially for improvements in the production of heavy crude oil, the exploitation of mature fields and the development of unconventional hydrocarbons. If we do not develop the right technology or do not obtain the expertise to operate new technology or to improve our processes, do not have access to, or do not deploy the knowledge necessary to apply and improve such technology effectively, the execution of our Strategic Plan, our profitability and our earnings may be adversely affected.

## We may not be able to achieve our corporate goals if we face difficulty in finding competent successors to our current management and employees.

Our growth strategy and the successful achievement of our corporate goals depend on the competence and skills of our management and employees, and our ability to successfully recruit new employees, in particular technical specialists such as petroleum engineers and scientists, as well as our ability to retain our current employees. If our managers and employees decide to retire or leave us, it may be difficult for us to find adequate successors with the required skills, knowledge, leadership and qualifications for the job. In addition, we may face difficulties in retaining our key managers and employees because of the high level of competition for human resources with experience and knowledge in the oil and gas industries. Furthermore, our compensation structure may not be able to meet industry levels and as a result our key employees may leave for jobs offering higher compensation.

Inability to develop human capacity and capability, both across the organization and in specific operating locations, could jeopardize performance delivery. Execution of short- and long- and term goals will depend on recruiting and retaining high-quality employees. See "Item 6. Directors, Senior Management and Employees—Employees."

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## Legislation and regulatory initiatives relating to hydraulic fracturing and other drilling activities for unconventional oil and gas reserves could increase the cost of implementing our Strategic Plan and the future costs of doing business or cause delays and adversely affect our operations.

Hydraulic fracturing is a commonly used process that involves injecting water, sand and small volumes of chemicals into the wellbore to fracture the hydrocarbon-bearing rock thousands of feet below the surface to facilitate higher flow of hydrocarbons into the wellbore. We expect to begin to use hydraulic fracturing combined with horizontal drilling in the production of oil and natural gas from certain reservoirs, especially shale formations. The Government has not issued any permits for the exploration and exploitation of unconventional hydrocarbons. The Government has promulgated a new technical regulation, Ministry of Mines and Energy Resolution 90341 of 2014, which sets forth technical requirements and procedures for unconventional reservoirs exploration and exploitation, particularly for the use of hydraulic fracturing and the construction of wells. As a complement to this technical regulation, the Colombian national environmental authority is preparing a terms of reference for environmental impact assessment for unconventional reservoirs exploration and exploitation. Outside Colombia a number of groups have proposed initiatives to, among other things: further regulate hydraulic fracturing practices; limit water withdrawals and water use; require disclosure of fracturing fluid constituents; restrict which additives may be used; and implement temporary or permanent bans on hydraulic fracturing. Should Colombia adopt any of these initiatives, or impose stringent regulatory and permitting requirements related to the practice of hydraulic fracturing, this could significantly increase the cost of, or cause delays in, the implementation of our Strategic Plan and adversely affect our operations and results of operations.

#### We may incur losses and spend time and money defending pending lawsuits and arbitrations.

We are currently a party to several legal proceedings filed against us. We are also subject to labor-related lawsuits filed by current and former employees in connection with pension plans and retirement benefits. As of December 31, 2013, we were a party to 2,357 legal proceedings relating to civil, administrative, environmental, tax, and labor claims filed against us of which 273 met the accounting threshold for an accrual provision. We allocate substantial amounts of money and time to defend against these claims, in which the claimants often seek substantial sums of money as well as other remedies. See Notes 19 and 31 to our consolidated financial statements and "Item 8. Financial Information—Legal Proceedings."

## Our operations may not be able to keep pace with the increasing demand for natural gas or our natural gas supply commitments.

According to Colombian Commission for Regulation of Energy and Gas (CREG) Resolution 089 of 2013, a supplier of natural gas must possess sufficient economically viable natural gas before executing a natural gas delivery contract with a customer. In the long term we may not be able to keep up with increasing local demand for natural gas if demand outpaces the rate of our new natural gas developments and discoveries or because of the decline of our fields. As a result, we may lose market share, which may negatively impact our financial condition and results of operations.

Additionally, we are party to certain national and international gas supply contracts that have firm gas commitments. If we are unable to deliver natural gas to these clients as a result of cuts in operations, delays in the completion of projects relating to our production facilities or the acceleration of the decline in our gas production, among other reasons, we may be required to compensate our customers (which include utilities, power generators and other large customers in the Colombian market and PDVSA in Venezuela) for our failure to supply natural gas.

During 2012, delays in the start of new projects, mainly the Planta de Gas Cupiagua and projects to increase the production capacity at the Guajira fields, resulted in penalties imposed on us by our clients. The main causes of delays in the start of the new projects were: delays in processing environmental licenses for the natural gas pipeline Cupiagua–Cusiana, landslides caused by adverse weather conditions and isolated labor strikes in project areas belonging to other oil and gas companies. During 2010, 2011 and 2012, we paid the following penalties paid in compensation for non-delivery of natural gas: Ps\$85.2 billion (approximately US\$44.5 million), Ps\$2.5 billion (approximately US\$1.3 million) and Ps\$9.2 billion (approximately US\$5.2 million), respectively. Although we did not pay any such penalties in 2013, we cannot assure you that in the future we will not be subject to additional monetary fines which can in turn affect our financial condition and result of operations.

We depend on others for the construction and availability of natural gas transportation infrastructure for the transport of our gas, which may limit our ability to develop new or existing fields or lead to the deterioration of related assets and may not allow us to recover the cost of capital invested in natural gas discoveries.



We are prohibited by law from holding more than 25% of the equity of any natural gas transportation company. Therefore, there can be no assurance that the transportation infrastructure necessary to transport natural gas from the fields to distribution points and our customers will be built by third parties or that if built there will be sufficient capacity available to us for the exploitation of new natural gas discoveries or the development of existing fields. The failure to commercially exploit new or existing discoveries may result in impairment of the related assets and our inability to recover the capital expenditures invested to make these natural gas discoveries. As a result, we may be required to enter into agreements with natural gas transportation companies on terms that are not favorable to us.

For example, we have developed natural gas reserves in the Cusiana and Cupiagua fields, but transportation capacity to deliver gas from these fields is currently limited.

## Our operations could be affected by conflicts with labor unions.

In the past, we have been affected by strikes and work stoppages promoted by our own and our industry's labor unions. These strikes are most prevalent during collective bargaining negotiations, some of which occurred prior to April 2009 during the negotiations of our current collective bargaining agreement, which expires on June 30, 2014. That agreement covers three labor unions that exist in the industry: Petroleum Workers' Labor Union (USO), ADECO and SINDISPETROL. See "Item 6. Directors, Senior Management and Employees—Employees." The negotiation of a new collective bargaining agreement with the labor unions could result in labor disputes, work slowdowns or stoppages. Although we expect that we will reach an agreement during the "direct arrangement" stage, no assurance can be given that such agreement will be reached or that the terms of such agreement will be favorable to us. According to Colombian labor legislation, the expiration of a collective bargaining agreement does not result in the termination of the conditions that were originally agreed to in the expired collective bargaining agreement. In this case, the collective bargaining agreement will be extended until a new agreement is signed or an arbitral award is rendered.

During 2013, there were a number of work stoppages organized and promoted by employees of certain of our contractors and subcontractors, and promoted by the USO. One stoppage affected our subsidiary Equión, which was caused by workers of the firm Ismocol. Similarly, there was a stoppage that took place during the collective bargaining process between Reficar and the contractor CB&I. Our subsidiary Bionergy was also affected by another stoppage caused by workers of the company Colmáquinas and by workers of the contractor Montajes JF.

Those stoppages did not have a material adverse effect on our operations. We cannot assure you that we will not experience labor unrest in the future. If relations with the labor unions deteriorate, which could result in strikes, work stoppages or even sabotage, our results of operations and financial condition could be adversely affected.

### Our activities may be interrupted or affected by external factors, such as abnormal weather conditions and natural disasters.

We are exposed to several risks that may partially interrupt our activities. They include fires or explosions, natural disasters, criminal acts and acts of terror, malfunction of pipelines and emission of toxic substances.

For instance, in 2011 we were affected by weather conditions that intensified the strength of the average rain season in Colombia, causing landslides due to the abnormal concentration of water in the soil. These abnormal landslides affected transportation of crude oil by trucks, transportation of crude oil, natural gas and other products by pipelines and the normal operation of our production fields and Reficar, which experienced floods at its facilities as a result of torrential rains.

On December 23, 2011, our Salgar-Cartago pipeline ruptured. We believe that this incident occurred as a result of a creep movement as a consequence of severe weather conditions in the area, causing the surrounding soil to exert strong pressure on the pipeline, causing it to rupture. The spilled gasoline from the pipeline subsequently came into contact with a heat source which ignited it causing several explosions, resulting in 33 fatalities, 77 injuries, and damaged and destroyed property. On December 11, 2011, our Caño Limón-Coveñas oil pipeline ruptured as a result of soil movement caused by the heavy rainy season. While the accident did not result in any fatalities, it resulted in crude oil spilling into the Iscala creek. See "Item 4. Information on the Company—Transportation Infrastructure—Incidents at Transportation Facilities."



As a result of the occurrence of any of the above, our activities could be significantly affected or paralyzed. These risks could result in property damage, loss of revenue, loss of life, pollution and harm to the environment, among others. If any of these occur, we may be exposed to economic sanctions, damages, fines or penalties in addition to the costs required to repair or remediate the related damage. These costs, fines and penalties may adversely affect our financial condition and results of operations.

## Our operations, which includes activities in areas classified as indigenous reserves and Afro-Colombian lands are subject to social risks.

We carry out and plan to carry out exploration and production activities in areas classified by the Government as indigenous reserves (*resguardos*) and Afro-Colombian lands (*territorios colectivos*). We may not be able to undertake exploration or production activities in these areas until we reach an agreement with the indigenous or Afro-Colombian communities living on these lands. In order to undertake exploration and production activities we must first comply with the Previous Consultancy process, set forth by Colombian law. Generally these consultation processes last between four to six months, but may be significantly delayed if we cannot reach an agreement with the communities. For example, we conduct operations in areas in the Northeastern region, which are inhabited by the U'wa community. Commencement of operations on two blocks in this region have been delayed, in each case, for 21 years and 11 years as of December 2013, because that community has refused to participate in the consultation process and the applicable legislation does not contemplate any alternatives in such a case. The U'wa community still refuses to permit hydrocarbon exploration or exploitation in their territory. In regions like Sucre and Tolima, the communities are divided into "councils" (*cabildos*) that claim to be treated like independent communities. In La Guajira, territorial conflicts or population growth leads to the creation of new settlements within that jurisdiction that must be considered in the decision-making process. Difficulties in determining the precise legal boundaries of the Orinoquía region require us to conduct detailed baseline surveys prior to our activities in the region.

These consultation processes may be lengthy and require that we devote substantial resources and manpower in order to reach an agreement. No assurance can be given that we will be able to reach an agreement with the different communities or that the communities will participate in such processes. We may be exposed to similar delays due to opposition from local communities in other countries where we carry out exploration activities in indigenous reserves, such as Peru.

Our activities are also subject to social risks, including protests by communities surrounding our operations. For example, during the construction of the Bicentenario oil pipeline, construction was suspended as a result of lockouts used by communities in the area of influence of the oil pipeline to demand greater participation of the Government and social investment, as well as greater participation of private companies in the development plans of towns in the departments of Arauca and Casanare. While we are committed to operating in a socially responsible manner, we may face opposition from local communities with respect to our current and future projects and such opposition could adversely affect our business, results of operations and financial condition.

#### Our operations are subject to extensive regulation.

The Colombian hydrocarbons industry is subject to extensive regulation and supervision by the Government and regulatory agencies in matters including the award of exploration and production blocks by the ANH, the imposition of specific drilling and exploration obligations, restrictions on production, price controls, capital expenditures and required divestments. Existing regulation applies to virtually all aspects of our operations in Colombia and abroad. The commercialization activities of some of our products also face extensive regulation. Such regulation is subject to change by the applicable regulator affecting our ability to commercialize our products. See "Item 4. Information on the Company—Overview by Business Segment—Regulatory Framework."

The terms and conditions of the agreements with the ANH under which we explore and produce crude oil and natural gas generally reflect negotiations with the ANH and other governmental authorities and may vary by fields, basins and hydrocarbons discovered.

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We are required, as are all oil companies undertaking exploratory and production activities in Colombia, to pay a percentage of our production to the Government as royalties. The oil and gas reserve figures included in this annual report are net of such royalties. The Colombian Congress has modified the royalty program for crude oil and natural gas production several times in the last 20 years, as it has modified the regime regulating new contracts entered into with the Government. In the future, the Colombian Congress may once again amend royalty payment levels for new contracts and such changes could have an adverse effect on our future exploration and production in Colombia. See "Item 4. Information on the Company—Overview by Business Segment—Regulatory Framework" for a description of the current royalty scheme.

Our operations in Colombia are subject to extensive national, state and local environmental regulations. Environmental rules and regulations are applicable to our exploration, production, refining, transportation, supply and marketing activities, as well as the biofuels we produce. These regulations establish, among other things, quality standards for hydrocarbon products, air emissions and greenhouse gases, water discharges and waste disposal, environmental standards for abandoned crude oil wells, soil remediation, water pollution and the general storage, handling, transportation and treatment of hydrocarbons in Colombia. Currently, all exploratory projects drilling in areas that do not yet have a license must undergo an environmental limpact assessment and must receive an environmental license from the governmental agency responsible for awarding environmental licenses, the Environmental License National Agency or ANLA. The Ministry of the Environment routinely inspects our crude oil fields, refineries and other production sites and may decide to open investigations which may result in fines, restrictions on operations or other sanctions in connection with potential non-compliance with environmental laws.

We are also subject to regional environmental regulations issued by the *corporaciones autónomas regionales* or CARs, or regional environmental authorities, which oversee compliance with each region's environmental regulations. If we fail to comply with any of these national or regional environmental regulations, we could be subject to administrative and criminal penalties, including warnings, fines or closure orders of our facilities. See "Item 4. Information on the Company—Overview by Business Segment—Environmental Matters."

Environmental regulation has become more stringent in Colombia in recent years and as a result we have allocated a greater percentage of our expenditures toward compliance with applicable law, and dedicated a management team in charge of environmental compliance. If environmental laws continue to impose additional costs on us, and as new laws and regulations relating to climate change become applicable to us, we may need to reduce our investments on strategic projects in order to allocate funds to environmental compliance. We are also exposed to delays in obtaining environmental licenses from ANLA, which can lead to cost overruns or to changes in our investment plans. These additional costs may have a negative impact on the profitability of the projects we intend to undertake or may make them economically unattractive, in turn having a negative impact on our results of operations and financial condition.

We are subject to foreign environmental regulations for the exploratory activities conducted by us outside Colombia. Failure to comply with foreign environmental regulations may result in investigations by foreign regulators, which could lead to fines, warnings or temporary suspensions of our operations, which could have a negative impact on our financial condition and results of operations.

Under certain of our credit agreements, we are under an obligation to comply with international environmental standards established by our lenders or by multilateral institutions. Failure to comply with such environmental standards could result in an event of default under the relevant credit agreements that we, or our subsidiaries, have entered into, which would affect our financial condition. For instance, the credit facility executed by Reficar for the financing of its expansion and modernization project includes an obligation to comply with the U.S.-Exim Environmental Procedures and Guidelines and the Organization for Economic Cooperation and Development (OECD) Common Approaches on Environment and Officially Supported Export Credits, and a credit agreement executed by Ecopetrol S.A. to finance purchases of U.S. goods and services requires Ecopetrol S.A. to comply with the U.S.-Exim Environmental Procedures and Guidelines.

In addition, we may be subject to foreign health and safety and environmental regulations for our exploratory activities conducted outside Colombia. Foreign health and safety regulations may be more severe than those established under Colombian law and, therefore, we may be required to make additional investments to comply with those regulations.

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### We have made significant investments in acquisitions and we may not realize the expected value.

We have acquired interests in several companies in Colombia and abroad. See "Item 4. Information on the Company." Obtaining the expected benefits of the acquisitions will depend, in part, on our ability to (1) obtain the expected operational and financial results from these acquisitions, (2) manage disparate operations and integrate distinct corporate cultures and (3) manage our objectives as a corporate group. These efforts may not succeed. Our failure to successfully obtain the expected results from our acquisitions could adversely affect our financial condition and results of operations.

## Our subsidiaries Refinería de Cartagena S.A. (Reficar) and Bioenergy are currently engaged in their own construction projects. If those projects are delayed or cost more than we projected, our operating results and financial condition may be affected.

Reficar has raised US\$3.5 billion through a limited-recourse project financing in which we have acted as sponsor and have provided both a construction support and a debt service guarantee. If the construction of the project to upgrade the Cartagena refinery is delayed because of operational problems, we may be required to provide sufficient financial resources, either by means of capital contributions or by the extension of a subordinated loan, so that the project can reach completion. Operational problems may include, but are not limited to, labor productivity or unavailability of construction material in the development of the project, or failure of the upgraded refinery to reach the expected performance level in terms of the quality of products and/or volumes produced. If we are required to provide additional capital or guarantees, other strategic projects may be delayed or cancelled, thereby affecting our operating results and financial condition. Additionally, delays in the implementation of the project may result in larger capital expenditures, which could increase the overall cost of the project and impact our financial position.

During 2013 and 2014 we were called upon to provide Reficar with financial support beyond the US\$3.5 billion Reficar raised through limited-recourse project financing. First, in 2013, Reficar requested approximately US\$1 billion under the Construction Support Agreement, which was contributed as follows: (i) US\$750 million by a shared capitalization process carried out by its main shareholders Ecopetrol S.A. and Andean Chemicals Ltd and (ii) US\$252 million from a subordinated loan from Ecopetrol Capital AG. Any increase in the project's capital expenditures is expected to be funded under the Construction Support Agreement between Reficar and us.

In 2014, Reficar requested US\$1.35 billion under the Construction Support Agreement. This amount will be contributed as follows: (i) a capitalization process carried out by its main shareholders Ecopetrol S.A. and Andean Chemicals Ltd and (ii) a subordinated loan from Ecopetrol Capital AG. See "Item 4. Information on the Company—Overview by Business Segment—Refining and Petrochemicals—Reficar."

Bioenergy is constructing an ethanol plant with an installed capacity of 480,000 liters per day. Mechanical completion of the project was delayed, which caused the delay of other milestones of the project, including the start of its commercial operation. Currently, the project is expected to be in commercial operation in mid-2016 mainly due to poor performance by the EPC contractor, which has also led to social and labor strikes. We are currently reviewing the budgeted amount of the project and a possible schedule to achieve its completion. Thus, we may be required to provide additional funding in excess of the original budgeted amounts. Any increase in the project's capital and preoperative expenditures are expected to be funded by capitalization. This operation is being analyzed by Bioenergy's shareholders in order to determine whether the minority stakeholders will participate in funding or have their stakes in Bioenergy diluted.

Other investment projects that are part of our Strategic Plan could face similar planning and implementation problems, which could impact the competitiveness of our programs and projects, adversely affecting our results of operation and financial condition.



## Our results may be affected by the performance of our business partners, as many of our operations are executed under association and joint venture agreements with business partners.

Many of our operations are executed through associations, joint ventures and other agreements with our business partners. Consequently, we depend on the performance of our business partners. The poor performance of any of our business partners, especially in those projects in which we do not act as operators, could negatively impact oil and natural gas production, which in turn could have a negative impact on our results of operations and financial condition. In addition, we are exposed to the risk of not finding business partners with the appropriate skills and performance that we require for our projects.

#### Our insurance policies do not cover all liabilities and may not be available for all risks.

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

### A failure in our information technology systems or cyber security attacks may adversely affect our financial results.

We depend on the reliability and security of our information technology systems to conduct certain exploration, development and production activities, process and record financial and operating data, communicate with our employees and business partners, and for many other activities related to our business. Our information technology systems may fail or have other significant shortcomings due to operational system flaws or employee misuse, tampering or manipulation. In addition, we may become the target of cyber-attacks or information security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of proprietary and other information. Any of these occurrences could disrupt our business, result in potential liability or reputational damage or otherwise have an adverse effect on our financial results. We have experienced a number of cyber attacks, and although we have not experienced any material losses relating to failure of our information technology systems or cyber incidents, there can be no assurance that we will not suffer such losses in the future.

#### We are exposed to behaviors incompatible with our ethics and compliance standards.

Given the large number of contracts that we are party to in Colombia and abroad with local and foreign suppliers, the geographic distribution of our operations and the great variety of actors that we interact within the course of business, we are subject to the risk that our employees, contractors, or any person having business relations with us may misappropriate our assets, manipulate our assets or information or engage in money laundering or the financing of terrorism, for such person's personal or business advantage. Our systems for identifying and monitoring these risks may not be effective to fully mitigate them in all situations. Such acts may result in material financial losses or reputational harm to the Company.

### Unavailability of electric power may affect or limit the continuity of our operations or growth.

Ecopetrol's energy demand is expected to increase significantly in 2015 to 1,422 MW of which 88.33% would be supplied through self-generation, and the remaining 11.67% by unregulated purchases of electrical energy in the open market. Given the growth in production and the start of a new transport and refining system, it is possible that during the next few years there will be insufficient electrical energy for our operations. This is because of the unavailability of market power given the delay of several energy transmission and generation infrastructure projects, the increase in the share of consumption by non-regulated users, and because of high dependency on the execution of self-generation and transmission that are exposed to a number of risks, including high volatility in national energy conditions (such as hydrology, availability of natural gas), licensing restrictions and attacks on infrastructure, among others.



### Risks relating to Colombia's political and regional environment

## Colombia has experienced internal security issues that have had or could have a negative effect on the Colombian economy and on us.

Colombia has experienced internal security issues, primarily due to the activities of guerrillas, paramilitary groups, drug cartels and criminal bands known as *Bacrim*. From time to time, guerrillas target crude oil and multi-purpose pipelines, including the Oleoducto Transandino, Caño Limón-Coveñas and Ocensa pipelines, and other related infrastructure disrupting our activities and those of our business partners. During 2013, the attacks against our pipeline infrastructure increased by 49% in relation to 2012 (151 attacks in 2012 compared with 225 attacks in 2013). This situation especially affected the infrastructure located in Putumayo, Nariño, Arauca and Norte de Santander and the following pipelines: San Miguel Orito, Transandino and Caño Limón Coveñas. On several occasions, guerilla attacks have resulted in unscheduled shutdowns of transportation systems in order to repair or replace sections of pipelines or production facilities that have been damaged and deferral of production in certain fields, and have also caused us to undertake environmental remediation. The direct cost of repairs to our pipeline infrastructure due to terrorist attacks in 2013 was approximately Ps\$60.2 billion (US\$32 million). Guerrilla groups and other illegal armed groups also attacked natural gas transportation infrastructure that have affected our natural gas production in the past. These activities, their possible escalation and the effects associated with them have had, and may have in the future, a negative impact on the Colombian economy or on us, which may affect our customers, employees, assets or the environment, with resulting containment, clean-up and repair expenses. In the context of this complex security situation, allegations and court judgments have been levied against members of the Colombian Congress and on government officials for possible ties with illegal groups. This situation may have a negative impact on the colombian economy or on us in the future.

The Colombian government engaged in 2012 in negotiations with the Revolutionary Armed Forces of Colombia, or FARC, the largest guerrilla group in Colombia, with a view to end the armed conflict. This is the latest attempt in a series of unsuccessful negotiations between the Colombian government and the FARC. While the process is ongoing, military operations and hostilities continue. If the negotiations fail, the intensity of the internal armed conflict is likely to continue, which could negatively impact our future operating results. We cannot assure you that, if the negotiations turn out to be successful, certain guerrilla groups may not continue their illegal and terrorist activities which could affect our operations.

## There have been certain events in Colombia and abroad, which have resulted in political tensions between Colombia and some of its neighboring countries.

Diplomatic relations between Colombia and some of its neighboring countries, in particular Ecuador and Venezuela, have been tense in the past. These political tensions were heightened by the Colombian Government's allegations that neighboring countries are supporting the guerilla groups, as well as by claims made by Venezuela stating that the Colombian army has entered its territory while in pursuit of FARC members. The Colombian army and air force continue to combat FARC members in Colombian territory, including Colombia's borders with neighboring countries. Although relations with these countries have stabilized recently, there can be no assurance that similar allegations could not be made again that may result in new and heightened tensions with Colombia's neighbors, which have had in the past, and could have in the future, a negative impact on Colombia's economy and general security situation.

# Companies operating in Colombia, including us, are subject to the prevailing economic conditions and the investment climate in Colombia, which may be less stable than the prevailing economic conditions and investment climate in developed countries.

Market prices of securities issued by Colombian companies, including us, are subject to the prevailing economic conditions in Colombia. A large portion of our assets and operations are located in Colombia and most of our sales are currently derived from our crude oil and natural gas production and the production of our refineries located in Colombia. Accordingly, our financial condition and results of operations depend to a significant extent on macroeconomic and political conditions prevailing from time to time in Colombia and on the rates of exchange between the Peso and the U.S. dollar.



The investment and security climate in Colombia continues to be tied to the results and performance of President Juan Manuel Santos's economic, security and social policies and the perception of such policies by foreign investors. Since his election in 2010, President Juan Manuel Santos has continued policies to increase foreign investment in Colombia as well as to improve relations with neighboring countries, which have resulted in economic stability for Colombia. In 2013, Colombia's annual gross domestic product increased by 4.3%. Mining activities accounted for 7.7% of Colombian GDP and grew 4.9% year-on-year. Oil and gas production accounted for 72% of mining activities. In 2012, Colombia's annual gross domestic product increase of 5.9% in crude oil and mining production.

If the perception of improved overall security in Colombia deteriorates or if the investment climate worsens, the Colombian economy may face lower growth rates than the ones posted recently, which could negatively affect our financial condition and results of operations. Furthermore, the market price of our shares and American Depositary Shares, or ADSs, may be adversely affected by changes in governmental policies, particularly those affecting economic growth, exchange rates, interest rates, inflation and taxes. The Government has changed monetary, fiscal, taxation, labor and other policies over time and has thus influenced the performance of the Colombian economy. We have no control over the extent and timing of government intervention and policies.

### Colombian political and economic conditions have a direct impact on our business and may have a material adverse effect on us.

Colombia's economic policies may have direct impact on our company as well as market conditions and the prices of securities. Our financial condition and results of operations may be adversely affected by the following factors and the Government's response: devaluations and other exchange rate movements; inflation; exchange control policies; price instability; interest rates; liquidity of domestic capital and lending markets; tax policy; regulatory policy for the oil and gas industry, including pricing policy; and other political, diplomatic, social and economic developments in or affecting Colombia.

Uncertainty over whether the 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 Colombia and increase the volatility of the Colombian securities market and securities issued abroad by Colombian companies, which may have a material adverse effect on our results of operations and financial condition.

Developments and the perception of risk in other countries, especially emerging market countries, may adversely affect the market price of Colombian securities, including our ADSs.

Securities issued by Colombian companies may be affected by economic and market conditions in other countries, including other Latin American and emerging market countries. Although economic conditions in Latin American countries and in other emerging market countries may differ significantly from economic conditions in Colombia, investors' reactions to developments in these other countries may have an adverse effect on the market value of securities of Colombian issuers.

Due to past financial crises in several emerging market countries (such as the Asian financial crisis of 1997, the Russian financial crisis of 1998 and the Argentine financial crisis of 2001), the world financial crisis of 2008 and the recent sovereign debt crises in certain European countries, investors may view investments in emerging markets with heightened caution. In the past, as a result of crises in other countries, flows of investments into Colombia have been reduced. Crises in other countries, especially in emerging market countries, may hamper investor enthusiasm for securities of Colombian issuers. If Latin America experiences a new slow-down or if the price for securities of Latin American issuers falls, the price for our ADSs could follow this trend and could be adversely affected.

#### Our controlling shareholder's interests may be different from those of our minority shareholders.

Colombian Law 1118 of 2006 requires the Nation to maintain the majority of our outstanding capital stock. The Nation currently holds 88.49% of our outstanding capital stock, making it our controlling shareholder. The Nation as our controlling shareholder has majority voting rights at the shareholders' meeting to elect the members of our Board of Directors. The Nation may propose and approve decisions that are in its own interest and in furtherance of its own economic and political interests that do not necessarily benefit minority shareholders.

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Our controlling shareholder may approve dividends at the ordinary general shareholders' meeting, notwithstanding the interest of minority shareholders, in an amount that results in us having to reduce our capital expenditures, thereby negatively affecting our prospects, results of operations and financial condition. See "Item 8. Financial Information—Dividends."

Additionally, given our controlling shareholder's interests, it may undertake projects, approve decisions or make announcements about its intentions related to its holding of our capital stock which may not be in our best interest or in the best interest of our minority shareholders, including holders of our ADSs, and could impact the price of our shares or ADSs.

# The Government may delay the payment of gasoline and diesel fuel price differentials and proposed legislation regarding the differentials, if enacted, could have a negative impact on our financial condition, results of operations and liquidity.

The Government regulates domestic prices of liquid fuels according to a formula based on international market prices. When domestic prices of liquid fuels are lower than international parity prices, the Government is responsible for paying importers or refiners the difference, which is called the fuel price differential, pursuant to Law 1151 of 2007, through the Fuel Stabilization Fund (*Fondo de Estabilización de Precios de los Combustibles*) or FEPC. The fuel price differential is calculated on a monthly basis and reported to the Ministry of Mines and Energy on a quarterly basis. In recent periods, however, payment of the differentials has been significantly delayed. See "Item 5. Operating and Financial Review and Prospects—Gasoline and Diesel Price Differentials."

Similar to the approach followed by other countries, the FEPC has been funded with payments by producers when international prices are lower than the internal price and, as described above, depleted when international prices are higher, in order to mitigate the effects of international gasoline and diesel fuel price volatility on the domestic market. Domestic prices for end users of gasoline and diesel fuel may vary a maximum of 3% per month regardless of the size of the variation of international prices. The difference between the international and the domestic price is paid by the fund to the refiner or importer. In September 2013, a ruling of the Constitutional Court of Colombia eliminated the ability of the Colombian Government to fund the FEPC with payments from producers. Currently, funds for the FEPC must originate from the general revenues of the Colombian Government. Congress is discussing further changes to the fuel price differential methodology and funding methods for the FEPC.

Delays in fuel price differential payments make it difficult to determine when we will collect any such payments. Any material delay in the payment of these fuel price differentials by the Government or significant changes to laws imposing additional responsibilities on us with respect to the FEPC, or altering the calculation of fuel price differentials or the formulas for establishing the price of domestic liquid fuels, could have a negative impact on our financial condition, results of operations and liquidity.

# New or higher taxes resulting from changes in tax regulations or the interpretation thereof in Colombia could adversely affect our results of operations and financial condition.

New tax laws and regulations, and uncertainties in the interpretation with respect to existing and future tax policies pose risks to us. In recent years, the Colombian Congress and tax authorities have imposed additional taxes and enacted modifications to taxes related to financial transactions, income, value added tax, or VAT, and taxes on net worth. Changes in tax-related laws and regulations, and interpretations thereof, can affect tax burdens by increasing tax rates and fees, creating new taxes, limiting tax deductions, and eliminating tax-based incentives and non-taxed income. In addition, tax authorities and tax courts may interpret tax regulations differently than we do, which could result in tax litigation and associated costs and penalties. For Colombian income tax purposes and, as a general rule, dividends that are distributed from profits taxed at the corporate level are not taxed or subject to withholding tax at the shareholder level. Tax treaty rules might also apply on dividend distributions when a shareholder is a resident in a country that has executed a tax treaty with Colombia. However, this tax treatment may change in the future, and any change could have an adverse effect on our results of operations and financial condition.



### **Risks relating to our ADSs**

#### Holders of our ADSs may encounter difficulties in protecting their interests.

Holders of our ADSs do not have the same voting rights as holders of our shares. As set forth in the Deposit Agreement, ADSs may instruct our current depositary, JPMorgan Chase Bank, N.A., to vote on shareholder matters prior to a shareholders' meeting. Colombia law does not, however, require Ecopetrol to request proxies from existing shareholders. Thus, shareholders may not become aware of some matters in time to instruct the depositary to vote their shares.

The Deposit Agreement provides ADSs with the right to instruct the depositary to vote common shares separately. The viability of this contractual provision is unclear. This is because regulatory agencies have advanced inconsistent positions regarding whether a depository must vote common shares as a single block or may vote them separately. Going forward, the Colombian regulatory authorities may change their interpretation as to how the voting rights should be exercised by ADS holders, and such possible interpretation could adversely affect the value of the common shares and ADSs.

## Our ADSs holders may be subject to restrictions on foreign investment in Colombia.

Colombia's International Investment Statute regulates the manner in which non-Colombian residents can invest in Colombia and participate in the Colombian securities market. Among other requirements, Colombian law requires foreign investors to register certain foreign exchange transactions with the Colombian Central Bank and outlines the necessary procedures to authorize certain types of foreign investments. Colombian law requires that certain foreign exchange transactions, including international investment in foreign currency between Colombian residents and non-Colombian residents, must be made through authorized foreign exchange market participants. Any income or expenses under our American Depositary Receipt, or ADR, program must be made through the foreign exchange market.

Investors acquiring our ADRs are not required to register with the Colombian Central Bank, as they will benefit from the registration to be obtained by the custodian for our common shares underlying the ADRs in Colombia. If investors in ADRs choose to surrender their ADRs and withdraw common shares, they must register their investment in the common shares as a portfolio investment through their local representative, which may be a brokerage firm, trust company or investment companies supervised by the Superintendency of Finance. Investors will only be allowed to transfer dividends abroad after their foreign investment registration procedure with the Colombian Central Bank has been completed. Investors withdrawing common shares could incur expenses and/or suffer delays in the application process. The failure of a non-resident investor to report or register foreign exchange transactions with the Colombian Central Bank relating to investments in Colombia on a timely basis may prevent the investor from remitting dividends, or initiate an investigation that may result in a fine. In the future, the Government, the Colombian Congress or the Colombian Central Bank may amend Colombia's International Investment Statute or the foreign investment rules, which could result in more restrictive rules and could negatively affect trading of our ADSs.

While Colombia currently has a floating exchange rate system, it is subject to change. If a more restrictive system is implemented, the depositary may experience difficulties converting Peso amounts into U.S. dollars to remit dividend payments. See "Item 10. Additional Information—Exchange Controls."

# Holders of our ADSs may not be able to effect service of process on us, our directors or executive officers within the United States, which may limit your recovery in any foreign judgment you obtain against us.

We are a mixed economy company organized under the laws of Colombia. In addition, most of our Directors and executive officers reside outside the United States. All or a substantial portion of our assets and the assets of these persons are located outside of the United States. As a result, it may not be possible for you to effect service of process within the United States upon us or these persons or to enforce judgments against us or them in U.S. courts obtained in such courts predicated upon the civil liability provisions of the U.S. federal securities laws. Colombian courts determine whether to enforce a U.S. judgment predicated on the U.S. securities laws through a procedural system known as *exequatur*. For a description of these limitations, see "Enforcement of Civil Liabilities."

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## The protections afforded to minority shareholders in Colombia are different from those in the United States, and may be difficult to enforce.

Under Colombian law, the protections afforded to minority shareholders are different from those in the United States. In particular, the legal framework with respect to shareholder disputes is substantially different under Colombian law than U.S. law and there are different procedural requirements for commencing shareholder lawsuits, such as shareholder derivative suits. As a result, it may be more difficult for our minority shareholders to enforce their rights against us or our Directors or controlling shareholder than it would be for shareholders of a U.S. company.

#### ADRs do not have the same tax benefits as other equity investments in Colombia.

Although ADRs represent Ecopetrol's common shares, for Colombian tax purposes, ADRs are securities different from their underlying assets. Therefore, ADR holders are not entitled to the tax benefits—*e.g.*, those relating to dividends and profits from the sale of Colombian common shares—granted to holders of the common shares. Such tax benefits are, among others, those relating to dividends and profits derived from sale of Colombian common shares. For further information see "Item 10. Additional Information—Taxation—Colombian Tax Considerations."

### Judgments of Colombian courts with respect to our ADSs will be payable only in Pesos.

If proceedings are brought in the courts of Colombia seeking to enforce the rights of ADS holders of common shares, we will be required to discharge our obligation amounts in Pesos. Colombian law provides that an obligation in Colombia to pay amounts denominated in foreign currency may only be satisfied in Colombian currency at the Representative Market Exchange Rate of the date the judgment is obtained, and such amounts are then adjusted to reflect exchange rate variations through the effective payment date.

# The relative volatility and illiquidity of the Colombian securities markets may substantially limit our investors' ability to sell our ADSs at the price and time they desire.

Investing in securities that are traded in emerging markets, such as Colombia, often involves greater risk when compared with other world markets, and these investments are generally considered to be more speculative in nature.

The Colombian securities market is substantially smaller, less liquid, more concentrated and can be more volatile than other securities markets. The Colombian Stock Exchange (*Bolsa de Valores de Colombia*), or BVC, had a market capitalization of approximately Ps\$413,916 billion (US\$214.8 billion using the closing rate for 2013) as of December 31, 2013, a 14.4% decrease when compared with the amount at the end of 2012, a daily average trading volume of approximately Ps\$167,538 million (US\$89.6 million, using the average exchange rate for 2013), an 11% decrease when compared with the volume in 2012. By comparison, the New York Stock Exchange, or NYSE, had a market capitalization of US\$17.94 trillion as of December 31, 2013, and a daily trading volume of approximately US\$37.53 billion in 2013.

As of December 31, 2013, our shares represented the highest market capitalization of the BVC with 37% of the total. In addition, they had the highest trading volume in the BVC, averaging Ps\$21,103 million traded per day. On November 1, 2013, the *Índice General de la Bolsa de Valores de Colombia*, or IGBC, and the COL20 index were replaced by a new set of indexes: COLCAP, COLEQTY, COLSC and COLIR, all weighted by the adjusted market capitalization of the issuers. COLCAP reflects the price volatility of the 20 most-liquid stocks; COLEQTY is composed by 40 stocks whose liquidity is measured as follows: volume (80%), frequency (15%) and rotation (5%); COLSC comprises the 15 stocks with the lower market capitalization in the COLEQTY; and COLIR includes the issuers that were recognized for their best practices in Investor Relations for the Colombian Stock Exchange and that are also part of the COLCAP.



For the period between February 1st and April 30th of 2014 our shares represent 19.736% of the COLCAP, 10.648% of the COLEQTY, and 10.640% of the COLIR. Ecopetrol does not participate in the COLSC.

Given the current ownership structure of our shares, it may be difficult for you to purchase large quantities of shares from a single shareholder. We cannot assure you that a liquid trading market for our ADSs will develop or, if developed, that it will be maintained. Without a liquid trading market, the ability of investors in our ADSs to sell them at the desired price and time could be substantially limited.

#### We are not required to disclose as much information to investors as a U.S. issuer is required to disclose.

We are subject to the reporting requirements of the Superintendency of Finance and the BVC. The corporate disclosure requirements that apply to us may not be equivalent to the disclosure requirements that apply to a U.S. issuer and, as a result, you may receive less interim information about us than you would receive from a U.S. issuer.

#### ITEM 4. Information on the Company

### THE COMPANY

We are a vertically integrated oil company with presence in Colombia, Peru, Brazil and the U.S. Gulf Coast. We divide our operations into three business segments: exploration and production; transportation and logistics; and refining and petrochemicals. We are the largest corporation in Colombia as measured by revenues, profits, assets, shareholders' equity, sales, net income and net worth, and we play a key role in the local hydrocarbon market. We do not directly perform commercial natural gas transportation activities.

#### **Corporate History**

Ecopetrol is a mixed economy company, incorporated on August 25, 1951, and existing under the laws of Colombia. The term of our duration is unlimited. Our legal name is Ecopetrol S.A. Our principal executive offices are located at Carrera 13 No. 36-24 Bogota, Colombia and our telephone number is +571 234 4000.

In 1951, we were incorporated as the Empresa Colombiana de Petróleos as a result of the reversion of the De Mares concession to the Government by the Tropical Oil Company. We began our operations as a governmental industrial and commercial company, responsible for administering Colombia's hydrocarbon resources. In the same year, we began operating the crude oil fields at La Cira-Infantas and the pipeline that connected that field with the Barrancabermeja refinery and the port of Cartagena. Three years later, the first national seismic study was performed under the De Mares concession, which led to the discovery of the Llanito crude oil field in 1960.

In 1961, we assumed the direct operation of the Barrancabermeja refinery and continued its transformation into an industrial complex. The Government contracted with International Petroleum Colombia Limited, Intercol, to begin the construction of a new facility in Mamonal, Cartagena, where the pipeline terminal of the Andean National Corporation was already located and which also included a loading port. In December 1957, the Cartagena refinery began operations, and in 1974 it was acquired by us.

In 1970, we adopted our first bylaws that transformed us into a governmental industrial and commercial company linked to the Ministry of Mines and Energy. In order to make us more competitive, Decree Law 1760 of 2003 transformed us from an industrial and commercial company into a state-owned corporation through shares linked to the Ministry of Mines and Energy, renaming us Ecopetrol S.A. in the process.

Since 2003, the Company has been evolving from a wholly state-owned entity to a mixed economy company with private capital, carried out through the initial public offering in November 2007. This process has resulted in a substantial change in the legal framework to which we are subject and in the nature of our relationship with the Nation.



The Nation currently controls 88.49% of our voting capital stock. Since September 18, 2008, our ADRs have been trading on the NYSE under the symbol "EC." On December 4, 2009, our ADRs began trading on the Lima Stock Exchange under the symbol "EC." On March 16, 2011 our ADRs were delisted from the Lima Stock Exchange. In addition, on August 13, 2010, our ADRs began trading on the Toronto Stock Exchange under the symbol "ECP." Each ADR represents 20 common shares of the Company.

The following table sets forth our material acquisitions within the past five years and the effective date as of which each has been reflected in our operating results.

Company	Date	Participation acquired in transaction	Sector	Price (US\$) <sup>(1)</sup>
			Exploration and	
Offshore International Group Inc. (OIG)	February 2009	50% <sup>(2)</sup>	Production	639 million
Oleoducto Central S.A. (Ocensa)	March 2009	24.7%(3)	Transportation	418 million
			Exploration and	
Hocol Petroleum Limited	March 2009	$100\%^{(4)}$	Production	807 million
Refinería de Cartagena S.A. (Reficar)	May 2009	51% <sup>(5)</sup>	Refining	545 million
Equión Energía	January 2011	51% <sup>(6)</sup>	Exploration and Production	814 million

(1) Includes amounts of adjustment on transaction prices.

(2) U.S. parent of Savía Perú (formerly Petrotech Peruana S.A.).

(3) As a result of this transaction, our ownership of Ocensa increased to 60%.

(4) We acquired 100% of Maurel et Prom's interest in Hocol Petroleum Limited, whose most important assets are Hocol S.A. and Homcol Cayman Inc. As a result of the acquisition, our ownership in Oleoducto de Colombia, increased from 43.85% to 65.57%.

(5) As a result of this transaction, we became the sole owner of Reficar.

(6) As a result of this acquisition, our ownership increased to 72.65% in Ocensa, 73.00% in ODC, and to 85.12% in Oleoducto del Alto Magdalena or OAM. We also obtained a 10.2% interest in Transgas de Occidente.

In August 2010, we incorporated Oleoducto Bicentenario de Colombia S.A.S., or Oleoducto Bicentenario, a new company to build and operate a private pipeline that will run from the Casanare Department to the port of Coveñas. The new pipeline will facilitate oil exports from the Llanos region. We have, indirectly, a 55.97% ownership of the company and five other shareholders own the remaining 44.03%.

The transactions described above were funded mainly through cash on hand and cash flow from our operations.

In January 2011, our participation in Invercolsa S.A., a holding company with investments in natural gas transportation and distribution companies in Colombia, increased to 43.35% as a result of a final court judgment that awarded us approximately 145 million shares of Invercolsa.

In June 2012, we incorporated Cenit as our wholly owned subsidiary. In October 2012, we transferred all of our direct interests in Ocensa, ODC, Oleoducto Bicentenario, ODL and Serviport to Cenit and in April 2013, we transferred our crude oil and products transportation assets to it. This new subsidiary performs all of our hydrocarbon transport activities, pursuant to transport agreements between Cenit, us and other producers and distributors in Colombia. We continue operating Cenit's transportation infrastructure in accordance with an operation and maintenance agreement. See "Item 4. Information on the Company—Overview by Business Segment—Transportation and Logistics—Summary—Cenit."

In 2012, we undertook a process of reorganization, consisting of the following actions:

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- On May 11, 2012, Ecopetrol Pipelines International (EPI) merged with Ecopetrol Transportation Company Limited (ETI) and Ecopetrol Transportation Investments Limited, with EPI as the surviving entity.
- On July 12, 2012, Ecopetrol S.A. transferred to Ecopetrol Global Energy S.L.U. all of its shares in Ecopetrol America Inc.
- On August 14, 2012, Ecopetrol S.A. transferred to Ecopetrol Global Energy S.L.U. all of its shares in Ecopetrol del Perú S.A.
- On November 2, 2012, Equión Energía, in which we have a 51% interest, transferred 12.648% of its shares in Oleoducto Central S.A. (Ocensa) to Ecopetrol Equity Investments (Cayman), a wholly owned subsidiary of Ecopetrol S.A.
- On December 11, 2012, Ecopetrol S.A. transferred to Ecopetrol Global Energy S.L.U. all of its shares in Ecopetrol Óleo e Gás do Brasil Ltda.
- On December 21, 2012, Ecopetrol Pipelines International (EPI) merged with Ecopetrol Oil & Gas Investments and Ecopetrol Equity Investments.
- On December 27, 2012, Hocol S.A., or Hocol, merged with Hocol Limited and Homcol Cayman Inc., or Homcol.
- On June 25, 2013, Ecopetrol Pipelines International Limited transferred to Cenit all of its shares in Oleoducto Central S.A. (Ocensa) and Oleoducto Bicentenario de Colombia S.A.S.
- On February 14, 2014, Ecopetrol Pipelines International Limited merged into Cenit.

#### Subsidiaries

We are a mixed economy company and have a number of directly and indirectly held subsidiaries both in Colombia and abroad. Our subsidiaries are either directly owned by us or indirectly owned by us through one or more of our other subsidiaries. As of March 31, 2014, there were nine subsidiaries directly owned by us: one was incorporated in Colombia and the other eight abroad. Eighteen subsidiaries were indirectly owned by us: eight were incorporated in Colombia and the other ten abroad.

Our wholly-owned subsidiaries Refinería de Cartagena (Reficar) and Cenit Transporte y Logística de Hidrocarburos S.A.S. (Cenit) are significant subsidiaries as such term is defined under SEC Regulation S-X. The following table sets forth some of our subsidiaries, their respective countries of incorporation, our percentage ownership in each (both directly and indirectly through other subsidiaries) and our voting percentage in each as of March 31, 2014:

СОМРАНУ	COUNTRY OF INCORPORATION	OWNERSHIP AND VOTING %
Exploration and Production		
Ecopetrol Óleo e Gás do Brasil Ltda.**	Brazil	100.00
Ecopetrol del Perú S.A.**	Peru	100.00
Ecopetrol America Inc.**	United States	100.00
Hocol S.A.	Cayman Island	100.00
Equión Energía Limited	United Kingdom	51.00
Transportation		
Oleoducto de los Llanos Orientales S.A. (ODL)**	Panama	65.00
Oleoducto de Colombia S.A.**	Colombia	73.00
Oleoducto Central S.A.**	Colombia	72.65
Oleoducto Bicentenario de Colombia S.A.S. **	Colombia	55.97
Cenit Transporte y Logística de Hidrocarburos S.A.S.*	Colombia	100.00
Refining and Petrochemicals		
Refinería de Cartagena S.A.*	Colombia	100.00
Propilco S.A.*	Colombia	100.00
Compounding and Masterbatching Industry Ltda. (COMAI)**	Colombia	100.00
Biofuels		
Bioenergy S.A.**	Colombia	91.43
Other		
Black Gold Re Ltd.	Bermuda	100.00

\* Direct and indirect participation.

\*\* Solely indirect participation through other subsidiaries or affiliates.

See Exhibit 8.1 to this annual report for a complete list of our subsidiaries, their respective countries of incorporation, our percentage of ownership in each (both directly and indirectly through our other subsidiaries) and our voting ownership in each.

### Our Strategic Plan

Our Strategic Plan is tailored toward Ecopetrol's objectives as an integrated corporate group focused on the exploration and development of crude oil, natural gas, refining and alternative fuels. We intend to be a key market player recognized for our international positioning, innovation and commitment to sustainable growth.

Our goal is to provide our shareholders with an average return on capital employed, or ROCE, of 17% and to produce Clean Barrels while staying committed to economic, social and environmental sustainability. We use the term "Clean Barrels" to refer to the production of crude oil barrels without accidents or environmental incidents and in harmony with our stakeholders. We continue to pursue operational excellence through our commitment to ensure our operations are clean and safe, all while optimizing the use of resources and striving to exceed our clients' and interest groups' expectations.

Our Strategic Plan contemplates investments of US\$85.6 billion for the period 2012-2020(US\$68.5 billion for the period 2014-2020), to be allocated as follows:

*Upstream*: Investments in exploration and production are tentatively US\$55.7 billion during 2014-2020, which corresponds to 81% of the total investment plan. Our operations in Colombia are expected to receive approximately 89% of our total investment in this segment. The additional 11% is expected to be allocated to projects abroad. Our development plan is mainly concentrated on certain existing fields and areas, including: Castilla, Chichimene, Apiay, Casabe, La Cira-Infantas, Rubiales, Quifa, Putumayo, Arauca and Catatumbo.

Downstream: In order to modernize the refining segment, we plan to invest approximately US\$6.4 billion during the period 2014-2020, which represents 9% of our Strategic Plan.

*Midstream:* By 2020, we expect to invest US\$6.1 billion in pipelines (transportation systems) and logistic facilities in order to mobilize our crude oil and refined products, mainly through our participation in different projects such as the Bicentenario Pipeline, the expansion of the Ocensa Pipeline, San Fernando-Monterrey system, and the expansion of the Pozos Colorados – Galán system.

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The breakdown by business segment of our Strategic Plan investments (annually reviewed and approved by the Board of Directors) is the following:

SEGMENT	2012-2020 (in millions of U.S. doll:	2014-2020* ars) (in millions of U.S. dollars)
UPSTREAM	66,194	55,704
DOWNSTREAM	10,528	6,537
MIDSTREAM	8,400	6,116
OTHER	575	222
TOTAL	85,698	68,579

\* 2013 Strategic Plan projection. These projections are annually reviewed and approved by the Board of Directors.

The investments that our Strategic Plan envisions are subject to market analysis, conceptual engineering and financial feasibility. We expect to fund the investments of our Strategic Plan 2012-2020 as follows: 75% from our operational cash generation, 9% from a primary equity offering and 16% from debt. We believe that we should be able to access local and international debt markets if it is required, although we can make no assurances that these external sources of financing will be available on terms acceptable to us, if at all. See "Item 5. Operating and Financial Review and Prospects— Liquidity and Capital Resources." We are also authorized by Law 1118 of 2006 to issue up to 20% of equity, of which we have so far issued 11.51%, leaving us with the ability to issue an additional 8.49%, which are to be used as an additional source of funding for our Strategic Plan. In our Strategic Plan, we have adopted conservative assumptions for our projections, avoiding the use of high oil prices. In our last review, we used an average price of US\$80 per barrel for WTI reference and US\$90 for Brent reference, all in real terms. We expect that the dividend payout ratio will be close to 70%. However, in recent years our dividend payout ratio has been close to 80%. For further information—Dividends." Our Strategic Plan assumes a profitability close to 17% of ROCE by 2020.

We maintain strategic initiatives with respect to each of our different segments, as outlined below.

### **UPSTREAM**

### **Exploration and Production**

Become an international player with the capacity to incorporate reserves and increase production of crude oil and natural gas in a sustainable way.

We aim to develop a competitive advantage in heavy crudes, increasing our capacity to add reserves and produce oil and gas in a sustainable way. Around 95% of our current total production is coming from fields in primary recovery phases. In the near term we plan to continue with infill drilling and water injection projects to further developing enhanced oil recovery projects for certain mature fields.

*National Exploration*: We expect to keep acquiring more 3D seismic and drilling more stratigraphic wells, as we continue exploring prospects in the heavy crude oil belt located in the Llanos, Caguan-Putumayo and Piedemonte regions. We are also performing exploration activities in the Caribbean offshore, since we believe there is reasonable likelihood of finding oil and gas in that basin. If successful, we expect offshore the Caribbean to contribute with some production from 2020 onwards.



International Exploration: We continue to believe that the Gulf of Mexico and Brazil exhibit a high potential for exploration and production growth. In the Gulf of Mexico, we focus on the following plays: Miocene subsalt, Paleogene and Jurassic. In Brazil, our focus is the Santos and Campos Basins and Equatorial margins as well as the pre-salt plays. We also keep on studying other international plays and opportunities on basins of interest.

Unconventional Hydrocarbons: Since 2012, our Strategic Plan contemplates the potential presented by unconventional reservoirs, as defined by Colombian law, including shale oil, shale gas and tight reservoirs, among others. Our activities in this regard are subject to further contribute to the development of the regulatory framework in Colombia. See "Item 4. Information on the Company—Overview by Business Segment—Regulatory Framework: Regulation of Exploration and Production Activities."

### DOWNSTREAM

## Refining and Petrochemicals

The main drivers are to produce cleaner and more valuable products, improving profitability through synergies and taking advantage of market opportunities by adding greater value to the refining streams.

*Refining:* We continue to be the sole major refiner in Colombia for medium distillates, gasolines and LPG's. We aim to continue with the modernization plans to improve value creation and operational standards. To that end, we plan to (1) ensure the completion of the modernization of the Cartagena refinery currently in progress, (2) continue realizing the plan for the modernization of Barrancabermeja refinery (3) improving our reputation as a producer of clean fuels to develop further market opportunities within local, regional and international markets, (4) become the preferred provider of raw material supply to the petrochemical industry, and (5) grow sustainably and profitably by maximizing the value of heavy crude oils in the supply chain and optimizing their performance to achieve the expected value of projects.

Petrochemical: Our strategy focuses on (1) keeping our current position in the market, and (2) improving the competitiveness and reliability of our existing infrastructure.

Our Strategic Plan sets out guidelines for sales and marketing that emphasizes the importance of consolidating our markets, clients and key products. Our strategy considers supplying the local market of liquid fuels, as well as exporting crude oil, some refined products and natural gas to end-users, including refineries and wholesalers. Our market positioning plans are to strengthen our sales of crude oil and refined products to sustainable and profitable destinations all around the world.

We also participate in the Colombian renewable energy market in partnership with local investors, with whom we have undertaken the development of industrial facilities to process sugar cane and palm oil for biofuels.

#### MIDSTREAM

#### Transportation and Logistics

We seek to turn the Transportation and Logistics sector into a facilitator for the development of the entire value chain for the country by providing solutions and ensuring the efficiency of crude oil flows and their derivatives for use by our company and third parties.

We aim to accomplish by 2020 the following main objectives: (1) increase capacity of crude oil transportation in line with the upstream segment's production goals, (2) significantly increase capacity of refining products transportation, (3) design and implement profitable projects that can increase the transportation logistic capacity of the country, (4) perform with operational excellence, and (5) be consumer-oriented.

#### Cenit

In June 2012, we incorporated Cenit as a wholly owned subsidiary specializing in logistics and transportation of hydrocarbons within Colombia. With the incorporation of Cenit, we aim to enhance the strategic and logistical framework of Colombia's oil industry in response to the increase in hydrocarbon production and higher sales of crudes and refined products, both within Colombia and on the international markets. Cenit charges market rate tariffs to all of its customers, including our other segments, and has an open model in which all interested parties will have the opportunity to access its transportation infrastructure. See "Item 4. Information on the Company—Overview by Business Segment—Transportation and Logistics—Cenit."

### **OVERVIEW BY BUSINESS SEGMENT**

Our reporting segments changed since the first quarter of 2013 with the elimination of the Marketing and Supply segment. This change was made because of the marginal role of the segment with respect to our core business. Therefore, the activities of Marketing and Supply presented in Item 4 in previous years have been reclassified to the Exploration and Production segment and the Refining segment.

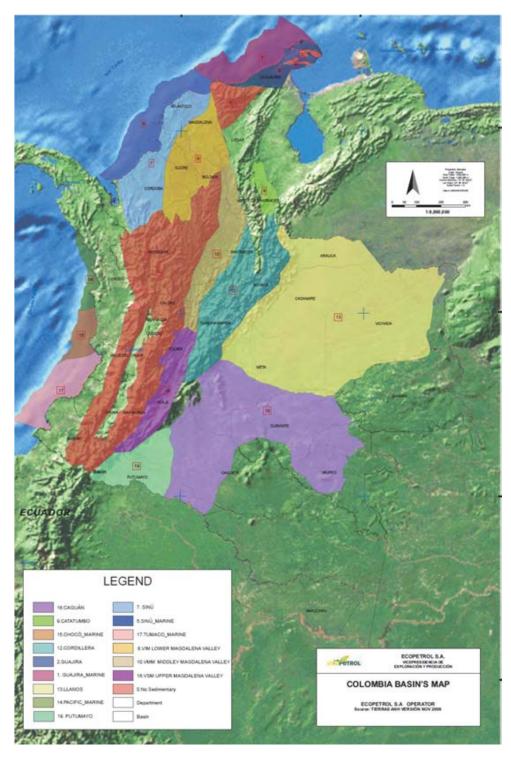
#### **Exploration and Production**

#### Summary

Our Exploration and Production business segment includes exploration, development and production activities in Colombia and abroad. We began local exploration in 1955 and international exploration in 2006. We conduct exploration and production activities directly and through joint ventures with third parties. As of December 31, 2013, we were the largest operator and the largest producer of crude oil and natural gas, and we maintained the largest acreage under exploration in Colombia.

We have exploratory activities in all of the sedimentary basins that currently have activity in Colombia. The following map shows the basins where we conduct exploratory activities.

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We have divided Ecopetrol S.A.'s production activities in Colombia into six administrative regions. The administrative regions, and their respective 2013 production results, prior to deducting royalties, are as follows:

Northeastern Region – The Northeastern region comprises two areas: one located in the north of Colombia along the Atlantic coast and the other located in the Piedemonte Llanero. The Northeastern region covers 549,580 gross proved acres and includes the natural gas fields located in La Guajira and the crude oil and natural gas fields located in Cusiana-Cupiagua. In 2013, the Northeastern region had a total production of 43.2 thousand bpd of crude oil, 648.7 million cubic feet per day, or mcfpd, of natural gas and 3.9 thousand bpd of liquids from the natural gas process.

*Mid-Magdalena Valley Region* – The Mid-Magdalena Valley region runs along the Magdalena river valley and covers 997,839 gross proved acres. It includes the crude oil fields located in the Santander department and part of the Antioquia, Cesar and Boyacá departments near the Barrancabermeja refinery. In 2013, the Mid-Magdalena Valley region had a total production of 103.6 thousand bpd of crude oil, 32.4 mcfpd of natural gas and 1.5 thousand bpd of liquids from the natural gas process.

*Central Region* – The Central region includes the western part of the Meta department. It covers 588,856 gross proved acres and in 2013 had a total production of 188.8 thousand bpd of mainly heavy crude oil and 1.5 thousand bpd of liquids from the natural gas process.

*Eastern Region* – In 2012 this region was divided into two separate regions: the Central Region and the Eastern Region. The Eastern region is located in Colombia's central area and includes the northeastern and eastern part of the Meta department. Operations in this region are made up mainly of joint venture fields. It covers 779,297 gross proved acres and in 2013 had a total production of 160.1 thousand bpd of mainly heavy crude oil.

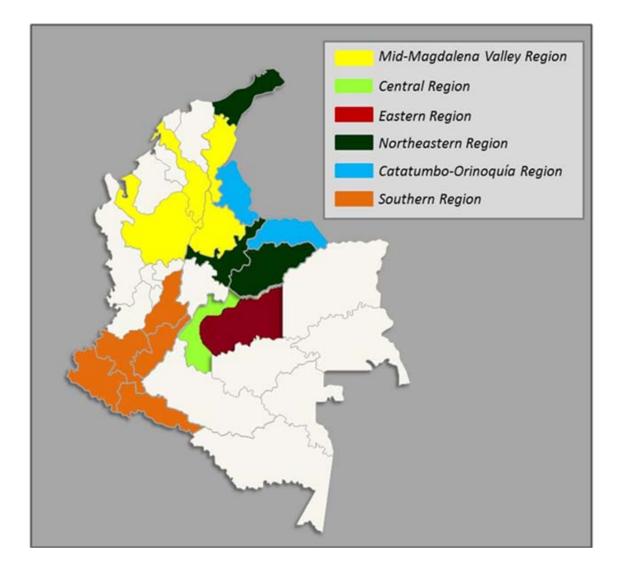
*Catatumbo-Orinoquía Region* – The Catatumbo-Orinoquía region is located in the eastern part of Colombia and runs along the border with Venezuela, covering 1,197,310 gross proved acres. It includes the Caño Limón crude oil field, with a total production in 2013 of 55.3 thousand bpd of crude oil and 3.2 mcfpd of natural gas.

Southern Region – The Southern region is located on the southwestern region of Colombia and covers 917,780 gross proved acres. It includes the Orito, Guando, Tello and San Francisco fields located mainly in the Putumayo, Tolima and Huila departments. In 2013, the Southern region had a total production of 55.5 thousand bpd of crude oil, 5.8 mcfpd of natural gas.

In addition to the administrative regions mentioned above, we have established a minor fields area comprising 411,433 gross acres that covers some of our smaller fields throughout Colombia. The main purpose of this minor fields area is to establish strategies to improve efficiency in the production of reserves from these fields. The total production of the minor fields area during 2013 was 5.9 thousand bpd of crude oil and 3.5 mcfpd of natural gas.

The map below indicates the locations of our operations in Colombia.

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#### **Exploration**

Our exploration plan in Colombia is focused on exploration of: (1) production sites in close proximity to existing ones and (2) currently producing basins and exploration of frontier areas, including off-shore areas primarily operated by our business partners, which we believe have the potential for large findings. Our exploration strategy outside of Colombia is focused on locating prospects and establishing joint ventures with experienced operators. For purposes of this exploration section, "we" refers to Ecopetrol, its subsidiaries and partnerships in which Ecopetrol has an interest. Unless otherwise stated, all figures are given before deductions for royalties.

During 2013, we drilled 22 gross wildcats exploratory wells (A3-A2), 19 in Colombia and three overseas. A2 exploratory wells are drilled adjacent to proven oil deposits in a productive oil field. We drill A3 exploratory wells to find oil deposits in fields where no wells have yet proven productive. We discovered hydrocarbon presence in eight productive wells, all of them located in Colombia. Twelve wells were dry, out of which ten were located in Colombia and two in the Gulf Coast. As of December 31, 2013, two wells were under evaluation, one located in Colombia and the other in Peru.



# Exploration Activities in Colombia

We conduct exploration activities in Colombia on our own and through joint ventures with regional and global oil and gas companies. In some instances, we benefit from sole risk contracts pursuant to which we do not take any exploration risk. See "Contractual Arrangements with the Government of Colombia for the Exploration and Production of Crude Oil and Natural Gas in Colombia."

In 2013, we acquired 6,931 equivalent kilometers of seismic data in Colombia. Ecopetrol S.A. acquired 6,560 equivalent kilometers, both directly and through business partners, corresponding to 1,397 kilometers of 2D seismic data and 5,163 equivalent kilometers of 3D seismic data. Ecopetrol S.A. directly acquired 1,159 of those kilometers of seismic data and 5,401 kilometers were acquired by our business partners. In addition, Hocol acquired 371 equivalent kilometers.

Ecopetrol S.A. drilled a total of 12 wildcat exploratory wells (A3-A2) in 2013. There was evidence of hydrocarbons in seven wells (Pastinaca-1, Venus-2, Cusuco-1, Guainiz-1, Qfe-S-1x, Qfn-C-1x, Qfe-D-1x). Four wells were dry and the remaining one was under evaluation. Hocol drilled seven A3 wells. There was evidence of hydrocarbons in one of the Hocol wells (Canario Sur-1), while the other six were dry.

During 2013, Ecopetrol S.A. participated in three farmed-in exploration and production contracts with Emerald Energy PLC. These blocks cover a total area of more than 988 thousand hectares and are located in Caguan (province of Caquetá). Ecopetrol S.A. has a 50% stake in these contracts.

### Exploration Activities Outside of Colombia

Our international exploration strategy is focused on participating in bidding rounds to secure blocks available for exploration and entering into joint ventures with international and regional oil companies. We believe exploring outside Colombia allows us to diversify our risks and improve the possibilities of increasing our crude oil and natural gas reserves.

In 2013, we drilled three international gross exploratory wells through our subsidiaries and partners as follows:

- Gulf of Mexico: Ecopetrol America drilled two wells: Madagascar, in which Ecopetrol America had a 30% working interest, was drilled with Marathon Oil Company (operator) and Murphy Exploration and Production Company USA, and the Odd Job well, in which Ecopetrol America has a 20% working interest, was drilled with our partners ENI US (operator), Calypso Exploration LLC and Deep Gulf Energy Offshore LLC. Both wells were declared dry.
- *Peru:* Savía Perú S.A., in which Ecopetrol S.A. has a 50% ownership interest, drilled one well (Colan 2x) off the Peruvian coast. As of December 31, 2013, this well was under evaluation.

Additionally, in Brazil, the Jandaia wildcat well, which was under evaluation as of December 31, 2012, was declared dry in 2013.

During the second quarter of 2013, Ecopetrol America Inc. acquired a 31.5% stake of BP's participation in the Gunflint discovery in deep waters of the U.S. Gulf Cost. The Gunflint discovery is operated by Noble Energy Inc., whose participation is 31.14%. The other partners are Marathon Oil Company (18.23%) and Samson Offshore LLC (19.13%).

In the first half of 2013, Ecopetrol Óleo e Gás do Brasil Ltda. submitted competitive bids for three offshore exploratory blocks in the eleventh bidding round carried out in Rio de Janeiro by the Agencia Nacional do Petroleo, Gas Natural e Biocombustiveis (ANP) of Brazil. Ecopetrol Óleo e Gás do Brasil Ltda. has a 100% interest in the bids for the POT-M-567 and FZA-M-320 blocks and a 50% interest in the bid for the CE-M-715 block together with Chevron Brasil Ventures APS, who will be the operator and owns the remaining 50%.

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During 2013, we acquired 60,966 kilometers of additional seismic equivalent outside Colombia: 43,940 kilometers in the U.S. Gulf Coast and 17,026 kilometers in Brazil, an increase of 155% compared with seismic data acquired during 2012.

# Exploratory Wells

The following table sets forth the number of gross and net productive and dry exploratory wells drilled by us and our joint venture partners, and the exploratory wells drilled by third parties pursuant to sole risk contracts with us for the years ended December 31, 2013, 2012 and 2011.

	For the year ended December 31,		
	2013	2012	2011
COLOMBIA			
Ecopetrol S.A.			
Gross Exploratory Wells			
Owned and operated by Ecopetrol			
Productive <sup>(1)</sup>	4	4	-
Dry <sup>(2)</sup>	2	2 <sup>(7)</sup>	1(
Total	<u>6</u> <sup>(3)</sup>	6	17
Operated by Partner in Joint Venture			
Productive <sup>(1)</sup>	3	_(4)	
Dry <sup>(2)</sup>	2		
Total	5		
Operated by Ecopetrol in Joint Venture			
Productive <sup>(1)</sup>	-	-	2
Dry <sup>(2)</sup>		-	2
Total	<u> </u>	-	2
Net Exploratory Wells <sup>(5)</sup>			
Productive <sup>(1)</sup>	5.5	3.3	7.8
Dry <sup>(2)</sup>	3.0	2.0	10.9
Total	8.5	5.3	18.7
Sole Risk <sup>(6)</sup>			
Productive <sup>(1)</sup>	-	-	2
Dry <sup>(2)</sup>	-	1	(
Total	(6)	1	:
Hocol			
Gross Exploratory Wells			
Productive <sup>(1)</sup>	1	4	, 4
Dry <sup>(2)</sup>	6	4	2
Total	7	8	4
Net Exploratory Wells <sup>(5)</sup>			
Productive <sup>(1)</sup>	0.5	3	2
Dry <sup>(2)</sup>	5.0	4	1.5
Total	5.5	7	3.5
Equión		·	
Gross Exploratory Wells			
Productive <sup>(1)</sup>	-	-	
Dry <sup>(2)</sup>	-	1	
Total		1	
Net Exploratory Wells <sup>(5)</sup>			
Productive <sup>(1)</sup>		-	
$Dry^{(2)}$		-	
Total			

	For the y	For the year ended December 31,		
	2013	2012	2011	
INTERNATIONAL				
Ecopetrol America Inc.				
Gross Exploratory Wells				
Productive <sup>(1)</sup>	-	2		
Dry <sup>(2)</sup>	2	1		
Total	2	3		
Net Exploratory Wells <sup>(5)</sup>				
Productive <sup>(1)</sup>	0	0.3	(	
Dry <sup>(2)</sup>	0.5	0.6	(	
Total	0.5	0.9	(	
Ecopetrol Óleo e Gás do Brasil Ltda.				
Gross Exploratory Wells				
Productive <sup>(1)</sup>	-	-		
Dry <sup>(2)</sup>	<u>-</u>	3		
Total		3(7)		
Net Exploratory Wells <sup>(5)</sup>				
Productive <sup>(1)</sup>	-	-		
Dry <sup>(2)</sup>	0.3	1	(	
Total	0.3	1	(	
Ecopetrol del Perú				
Gross Exploratory Wells				
Productive <sup>(1)</sup>	-	-		
Dry <sup>(2)</sup>				
Total	_(3)	-		
Net Exploratory Wells <sup>(5)</sup>				
Productive <sup>(1)</sup>	-	-		
Dry <sup>(2)</sup>	-	-		
Total		_		
Savía Perú				
Gross Exploratory Wells				
Productive <sup>(1)</sup>	-	-		
Dry <sup>(2)</sup>	-	2		
Total	(3)	3		
Net Exploratory Wells <sup>(5)</sup>				
Productive <sup>(1)</sup>	- ·	-		
Dry <sup>(2)</sup>	0.5	2	(	
Total	0.5	2	3	

(1) A productive well is an exploratory well that has evidence of hydrocarbons.

(2) A dry well or hole is an exploratory well found to be incapable of producing either crude oil or natural gas in sufficient quantities to justify completion as a crude oil or natural gas well.

(3) This number does not include the Tiribita-1 well in Colombia and one well in Peru which were under evaluation as of December 31, 2013.

(4) This number does not include the Mapale well, which is included in Equión's operation.

(5) Net exploratory wells are calculated according to our percentage of ownership in these wells.

(6) We do not take any risk in sole risk contracts but we benefit from successful exploratory efforts.

(7) This number includes one well that was under evaluation at December 31, 2012 and was declared dry in 2013.

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#### Production

We plan to increase the recovery factor in the fields currently held by Ecopetrol S.A., including those that were discovered more than 20 years ago, in order to increase our average daily production of hydrocarbons and reserves. 87% of the fields of Ecopetrol S.A. are in primary recovery. Secondary recovery (waterflooding) is or has been implemented in 9% of the fields. Finally, enhanced oil recovery has been applied in 4% of the fields. We continue to focus our efforts on improving the productivity ratio of several directly operated fields and other fields currently held through joint ventures with other oil companies.

Our total average consolidated daily production of hydrocarbons in 2013 totaled 788.2 thousand boepd, of which 651.1 thousand bpd corresponded to crude oil and 137.1 thousand boepd corresponded to natural gas and liquids. This production includes the production contribution from our subsidiaries and affiliates on the basis of our participation in Hocol and Equión in Colombia and in Ecopetrol America Inc. and Savía Perú internationally.

During 2012, our consolidated average daily production of hydrocarbons totaled 754 thousand boepd, out of which 635 thousand bpd corresponded to crude oil and 119 thousand boepd corresponded to natural gas. In 2011, our consolidated average daily production of hydrocarbons totaled 724 thousand boepd, out of which 616 thousand bpd corresponded to crude oil and 108 thousand boepd corresponded to natural gas.

Ecopetrol S.A.'s crude oil production during 2013 consisted of approximately 43% light and medium crudes (above 15° American Petroleum Institute, or API, gravity) and 57% of heavy crudes, with a gravity equal or lower than API gravity 15°. In 2012, approximately 49% of the crude oil production corresponded to light and medium crudes while the remaining 51% to heavy crudes. During 2011, production distribution was approximately 51% of light and medium crudes and 49% of heavy crudes.

As of December 31, 2013, we were the largest participant in the Colombian hydrocarbons industry, with approximately 63.9% of crude oil production and approximately 61.8% of natural gas and liquids production.

We undertake development drilling in producing regions, drilling 170 gross development wells operated by us in Colombia in 2013, 19% less than in 2012 and 41% less than in 2011. Of the total gross development wells drilled by Ecopetrol S.A. and through joint ventures in 2013, 11 wells were dry in the Eastern Region, four in the Catatumbo Orinoquía Region, four in the Southern Region, one in the Northeastern Region and one was dry in the minor fields. In 2012, Ecopetrol S.A. had 21 dry development wells and in 2011 we had seven.

# Relevant Operational Activities

The following table sets forth the number of gross and net productive and dry development wells drilled exclusively by us and in joint ventures for the years ended December 31, 2013, 2012 and 2011.



	For the y	ear ended December	· 31,
	2013	2012	2011
COLOMBIA			
Ecopetrol S.A.			
Northeastern region:	1		
Gross wells owned and operated by Ecopetrol	1	-	2
Gross wells in joint ventures	3	6	4
Net wells <sup>(1)</sup>	3	3	4
Mid-Magdalena Valley region:	(7	16	7.
Gross wells owned and operated by Ecopetrol	67	46 212	74
Gross wells in joint ventures	255		314
Net wells <sup>(1)</sup>	173	135	233
Central region: <sup>(2)</sup>			
Gross wells owned and operated by Ecopetrol	76	134	170
Gross wells in joint ventures	-	-	175
Net wells <sup>(1)</sup>	76	134	245
Eastern region: <sup>(3)</sup>			
Gross wells owned and operated by Ecopetrol	-	-	N/A
Gross wells in joint ventures	287	265	N/A
Net wells <sup>(1)</sup>	120	115	N/A
Catatumbo-Orinoquía region:			
Gross wells owned and operated by Ecopetrol	-	1	14
Gross wells in joint ventures	48	36	44
Net wells <sup>(1)</sup>	24	17	34
Southern region:			
Gross wells owned and operated by Ecopetrol	2	1	2
Gross wells in joint ventures	24	20	21
Net wells <sup>(1)</sup>	3	8	11
Minor fields:			
Gross wells owned and operated by Ecopetrol	-	-	
Gross wells in joint ventures	11	2	]
Net wells <sup>(1)</sup>	5	-	1
Hocol			
Gross wells owned and operated by Hocol	18	25	20
Gross wells in joint ventures	4	5	10
Net wells <sup>(1)</sup>	18	24	23
Equión			
Gross wells owned and operated by Equión	6	3	2
Gross wells in joint ventures	-	-	-
Net wells <sup>(1)</sup>	2	2	1
Total gross wells owned and operated in Colombia	170	210	286
Total gross wells in joint ventures in Colombia	632	546	569
Total net wells (Colombia)	424.5	438	552
NTERNATIONAL			
Savía Perú			
Gross wells	20	18	20
Net wells <sup>(1)</sup>	10	9	10
Ecopetrol America Inc.			
Gross wells	-	-	
Net wells <sup>(1)</sup>	-	-	
Total gross wells (International)	20	18	20
Total net wells (International)		9	10
round not wells (inter national)			10

(1) Net wells correspond to the sum of wells entirely owned by us (or Hocol, Equión or Savía Perú, as the case may be) and our ownership percentage of wells owned in joint ventures with our partners.

(2) The joint venture from the Central region was reclassified as part of the Eastern region in 2012.

(3) Figures are not included for the Eastern region for 2011, as it was the year of the Eastern region's creation.

# Production Activities in Colombia

Our average daily production of crude oil in Colombia reached 644 thousand bpd in 2013, a 2.8% increase compared with 2012. The increase in our average daily production is mainly due to a 2.2% increase in production from fields operated by us, which totaled 357 thousand bpd in 2013 compared with 349 thousand bpd in 2012.

During 2012, we had an average daily production of crude oil of 627 thousand bpd of crude oil, which represents a 2.9% growth compared with 2011. This increase in our average daily production was due to a 7.7% increase in production from fields operated by us, which totaled 349 thousand bpd in 2012 compared with 324 thousand bpd in 2011.

The following table sets forth our average daily crude oil production, prior to deducting royalties, for the years ended December 31, 2013, 2012 and 2011.

	For the year ended December 31,		
	2013	2012	2011
		(thousand bpd)	
COLOMBIA			
Ecopetrol S.A.			
Northeastern region:			
Joint venture operation	25	27	2
Direct operation	19	21	2
Total Northeastern region	43	48	4
Mid-Magdalena Valley region:			
Joint venture operation	24	22	2
Direct operation	80	79	7
Total Mid-Magdalena Valley region	104	100	9
Central region <sup>(1)</sup> :			
Joint venture operation	-	-	12
Direct operation	189	178	16
Total Central region	189	178	28
Eastern region <sup>(2)</sup> :	107	110	
Joint venture operation	159	130	N/z
Direct operation	1	150	N/A
Total Eastern region	<u> </u>	130	N/2
Catatumbo-Orinoquía region:	100	150	11/2
Joint venture operation	53	66	7
Direct operation	2	4	
			0
Total Catatumbo-Orinoquía region	55	/0	8
Southern region:	21	25	2
Joint venture operation	21	25	3
Direct operation	34	32	2
Total Southern region	55	57	5
Minor fields:			
Joint venture operation	3	4	
Direct operation	3	2	
Total Minor fields	6	6	
Hocol <sup>(1)</sup>			
Joint venture operation	2.6	3	
Direct operation	18.6	22	2
Total Hocol	21.2	25	3
Equión			
Joint venture operation	-	-	
Direct operation	10	11	
Total Equión	10	11	
Production tests		2.1	0.
Total average daily crude oil production (Colombia)	644	627	60
NTERNATIONAL Sará Durá		1	
Savía Perú Facencial America Inc	5	6	
Ecopetrol America Inc.	1.4	2	
Total average daily crude oil production (International)	6.4	8	
TOTAL AVERAGE DAILY CRUDE OIL PRODUCTION	651	635	61

The joint venture from the Central region was reclassified as part of the Eastern region in 2012.
 Figures are not included for the Eastern region for 2011, as it was the year of its creation.

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The following table sets forth our developed and undeveloped gross and net acreage of crude oil and natural gas production by region for the year ended December 31, 2013.

	Prod Develo	luction acreage as o	of December 31, 20 Undeve		Average crude oil and natural gas production for the year ended December 31, 2013 <sup>(1)</sup> (thousand
	Gross	Net	Gross	Net	boepd)
		(in act	res)		
COLOMBIA					
Ecopetrol S.A.					
Northeastern region	83,078	59,013	466,502	377,346	161
Mid-Magdalena Valley region	77,219	49,436	920,621	833,941	111
Central region	28,997	28,781	559,859	328,509	190
Eastern region	96,790	62,106	682,507	400,749	160
Catatumbo-Orinoquía region	51,716	41,924	1,145,594	694,970	56
Southern region	45,639	34,037	872,141	625,121	57
Minor fields	6,712	5,726	404,721	250,875	6
Hocol	4,291	3,907	525	473	21
Equión	21,757	8,590	888,396	360,555	18
Total (Colombia)	416,199	293,520	5,940,866	3,872,539	780
INTERNATIONAL					
Savía Perú	80,725	80,725	5,915	5,915	6
Ecopetrol America Inc. <sup>(2)</sup>	20,880	1,925	28,800	8,640	2
Total (International)	101,605	82,650	34,715	14,555	8
Total	517,804	376,170	5,975,581	3,887,094	788

(1) Does not include 0.3 thousand bpd of production from exploratory activities.

(2) Production and acreage from Ecopetrol America Inc. is related to the K2 field lease contracts in the Gulf of Mexico. There are five lease contracts, four of which are in the production stage and do not have expiration dates, while one is an exploratory lease that expires on June 30, 2016. For the Dalmatian production acreage five leases are included as undeveloped acreage until production starts. These leases do not have an expiration date.

The following table sets forth our total gross and net productive wells by region for the year ended December 31, 2013.

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	As of December 31, 2013			
	Crude (	Dil	Natural Gas	
	Gross	Net	Gross	Net
COLOMBIA				
Ecopetrol S.A.				
Northeastern region	73	57	27	16
Mid-Magdalena Valley region	3,371	2,158	11	1
Central region	563	561	-	-
Eastern region	810	345	-	-
Catatumbo-Orinoquía region	659	408	-	-
Southern region	797	520	3	3
Minor fields	153	80	2	2
Hocol	194	129	1	1
Equión	44	13	-	-
Total (Colombia)	6,664	4,271	44	23
INTERNATIONAL				
Savía Perú	648	324	-	-
Ecopetrol America Inc.	7	1	-	-
Total (International)	655	325	-	-
Total	7,319	4,596	44	23

We consider crude oil wells to be those in which the main operation is oil production, although many of these wells produce gas associated with oil production that, in some cases, have a commercial purpose. Natural gas wells are those in which operations are directed only towards production of commercial gas. The above table reflects the productive wells that directly contribute to hydrocarbons production and therefore excludes wells used for injection, disposal, captation, or other similar activities.

# Crude Oil

# Volume of Crude Oil Purchased

The table below sets forth the volumes of crude oil purchased from our business partners and third parties and volumes of crude oil purchased from the ANH corresponding to royalties that have been received by the ANH in-kind from producers for the years ended December 31, 2013, 2012 and 2011.

	For the year ended December 31,		
	2013	2012 (million barrels)	2011
Ecopetrol S.A. <sup>(1)</sup>			
Crude oil purchased from the ANH	49.5	48.0	46.7
Crude oil purchased from our business partners and third parties	18.9	25.4	22.8
Hocol			
Crude oil purchased from our business partners and third parties	9.7	10.8	10.3
Equión			
Crude oil purchased from our business partners and third parties	3.3	3.5	4.4
Total	81.4	87.7	84.2

(1) Crude oil purchased from the ANH, our business partners and third parties is either processed by our Refining and Petrochemicals segment or is exported.

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# Purchase Commitments with Our Business Partners and Third Parties

We have signed a number of crude oil purchase contracts with certain of our business partners and third parties. Crude oil purchased from the ANH and our business partners is either processed in our refineries or exported. The purchase price is calculated based on international market prices. Consequently, part of our financial exposure under these contracts depends on international oil prices. We believe that the risk of such exposure is naturally hedged since we either export the crude oil at international market prices or sell refined products at prices which are correlated with international market prices. Under most of our existing contracts, the purchases are subject to the pipeline capacity.

The term of some of our purchase contracts is linked to the term of the joint venture agreements signed with our business partners. Other clauses of the contracts such as price and place of delivery may be subject to renegotiation during the term of the contract. Certain purchase contracts not linked to joint venture agreements may be extended and renegotiated by the parties. During 2013, total volumes of crude oil Ecopetrol S.A. purchased from our business partners and third parties amounted to 51.7 thousands bpd, representing 15.9% of our total crude oil volume sales.

# Import of Diluents

We have increased imports of naphtha, used as a diluent to allow our heavy crudes to be pumped through pipelines. In 2013, we imported 50.7 thousand bpd of naphtha as compared to 39.6 thousand bpd in 2012. The additional imports of diluents in 2013 were mainly due to the growth in production of heavy grades.

### Light Crude Oil

Light crude oil has API gravity 35° or higher and tends to have a higher sales price in the international market. We develop and produce light crude oil in the Cusiana, Cupiagua, Pauto and Floreña fields. During 2013, 2012 and 2011, Ecopetrol S.A.'s production of light crude oil was 49 thousand, 60 thousand and 61 thousand bpd, respectively.

# Heavy Crude Oil

We consider heavy crudes as those with API gravity below 15°. Ecopetrol S.A. develops, upgrades and produces heavy crude in the Central, Eastern and Mid-Magdalena Valley regions. Ecopetrol S.A.'s production of heavy crude oil increased from 24 thousand bpd in 2000 to 348 thousand bpd in 2013 and production from 2012 to 2013 increased 15% as a result of the development of the Rubiales, Castilla and Chichimene fields. In 2012, Ecopetrol S.A.'s production of heavy crudes amounted to 304 thousand bpd, compared with 278 thousand bpd produced in 2011, mainly as a result of the development of the same fields. We are committed to developing our heavy crude reserves as they are a key element of our growth strategy.

Our most important heavy crude oil projects are:

- *Cubarral*. The Cubarral block is located in the Central region and is comprised of the Castilla and Chichimene fields. Together, these fields in 2013 produced approximately 166 thousand bpd, a 6.7% increase compared with 2012 production.
- *Rubiales Quifa.* The Rubiales and Quifa fields are located in the Eastern region and are developed in joint venture with Metapetroleum. The Rubiales and Quifa fields increased our production from 124.9 thousand bpd in 2012 to 153.5 thousand bpd in 2013.



# Marketing of Crude Oil

Our crude oil export sales are made both in the spot market and through long-term contracts, primarily to refiners in the U.S. Gulf Coast, Asia, Europe and the U.S. West Coast.

# Natural Gas

In 2013, our average daily production of natural gas in Colombia reached 137 thousand boepd, a 16.1% increase when compared with 2012 production. Natural gas production increased by 9.3% in 2012 compared with 2011.

The following table sets forth our average daily natural gas production, prior to deducting royalties, for the years ended December 31, 2013, 2012 and 2011.

	For the year ended December 31,		
	2013	2012	2011
	(Thous	and boepd ) <sup>(1)</sup>	
COLOMBIA			
Ecopetrol S.A.			
Northeastern region:			
Joint Venture	97	94	94
Direct Operation	20	5	-
Total Northeastern region	118	99	95
Mid-Magdalena Valley region:			
Joint Venture	2	1	1
Direct Operation	5	6	3
Total Mid-Magdalena Valley region	7	8	4
Central region:			
Joint Venture	-	-	
Direct Operation	1	2	
Total Central region	1	2	-
Eastern region: <sup>(2)</sup>			
Joint Venture	-	-	
Direct Operation	-	-	
Total Eastern region		_	
Catatumbo-Orinoquía region:			
Joint Venture	-	-	
Direct Operation		_	
Total Catatumbo-Orinoquía region	1		
Southern region:	1		
Joint Venture	-		
Direct Operation	1	1	1
Total Southern region	1	1	1
Minor fields:	1	1	L
Joint venture operation			1
Direct operation	-	-	l
	1		
Total Minor fields	1	1	1
Hocol			
Joint venture operation	-	-	
Direct operation			
Total Hocol	-	-	
Equión <sup>(3)</sup>			
Joint venture operation	-	-	
Direct operation	8	7	6
Total Equión	8	7	(
Production Tests			•
Total Natural Gas Production (Colombia)	137	118	108
INTERNATIONAL			
Savía Perú	1	1	1
Ecopetrol America Inc.		-	
Total Natural Gas Production (International)	1	1	1
Total Natural Gas Production	137	<u> </u>	109

<sup>(1)</sup> Conversion between mcfpd and boepd is performed at 5,700 mcfpd to 1 boepd.

<sup>(2)</sup> Figures are not included for the Eastern region for 2011, as it was the year of its creation.

<sup>(3)</sup> Equión production figures correspond to its equivalent daily productions since its month of acquisition in the year 2011.

The largest production of natural gas in Colombia is located in the Northeastern region, which we develop primarily under joint venture contracts. We developed the Guajira natural gas reserves with our partner Chevron. The Cusiana reserve is developed along with Equión and Sinochem Petroleum Exploration and Production (SPEP). Ecopetrol S.A. directly operates the reserves in the Cupiagua field, where the Cupiagua gas plant is located. This plant is connected with the Cusiana field through the Cupiagua-Cusiana gas pipeline. In 2013, we increased the use of the pipeline by 19,479 thousand bpd, from 652 to 20,131 thousand bpd, in order to supply the Cupiagua gas plant, which started operations on December 14, 2012.

Natural gas production in the Northeastern region averaged 648.7 mcfpd and 3.9 thousand bpd of liquids from the natural gas process in 2013. The natural gas produced from these fields is used to supply local demand and to meet our commitments to supply natural gas to Venezuela. See "Item 4. Information on the Company—Marketing and Supply—Natural Gas Distribution." In order to mantain the production of liquids, we continue re-injection of natural gas in the Cusiana field as part of our improved oil recovery strategy. This production outcome was boosted by production in the Chuchupa, Ballena and Riohacha fields operated by Chevron, which represented a production of 336.2 mcfpd in 2013 and 339.0 mcfpd in 2012.

#### Natural Gas Distribution

#### Summary

Development of natural gas reserves began in the 1970s with the discovery of the Guajira fields in the Northeastern region and subsequent discovery in the Piedemonte Llanero. In Colombia, we have been selling natural gas to local distribution companies, power generators and large customers. We have also been exporting natural gas to Venezuela.

As a result of the growth of natural gas demand from Venezuela and the increase in domestic consumption of gas-powered plants in recent years, the total demand for natural gas, including natural gas exports in 2013 was 1,228 gbtud, representing a 12.6% increase with respect to 1,090 gbtud demanded in 2012. In 2011, demand was 1,062 gbtud, while in 2010 demand was 1,061 gbtud. Ecopetrol in 2013 supplied 54.4% (668 gbtud) of the total natural gas demand in Colombia, with production used for our own consumption by refineries and for sale to natural gas distributors, for compressed natural gas for vehicles, to power plants, to the industrial sector and for export.

Today there are more than 30 natural gas distribution companies with operations in Colombia. We sell natural gas to distribution companies through firm, interruptible contracts and conditional contracts. Those distributors supply natural gas to the residential market, for compressed natural gas for vehicles and to industries in Colombia.

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# Compressed Natural Gas

According to our calculations, the demand for natural gas for vehicles in Colombia increased by 5.4% between 2013 and 2012, from 76.4 gbtud to 80.5 gbtud. This increase is mainly due to an increase in the number of vehicles running with compressed natural gas in response to incentives offered by companies engaged in marketing and delivery of compressed natural gas. According to industry sources, as of December 31, 2013, a total of 461,957 vehicles had been converted to natural gas, an increase of 44,546 vehicles over the total of 417,411 that had been converted in 2012. In 2013, we amended four of the agreements for the supply of compressed natural gas in the Colombian Atlantic Coast, Bucaramanga, Western region and Bogota in order to maintain the current incentives program that fosters conversions of motor vehicles in these regions from gasoline to natural gas. In addition, we began an early stage of planning and implementation of new incentives programs in the southern part of the country and in the Llanos region.

# Natural Gas Sales to the Power and Industrial Sector

We market and sell natural gas to the industrial sector and to gas-fired and combined cycle power plants. We have two long-term supply contracts with power generators under which such companies have entered into take-or-pay contracts and purchase-and-supply obligations for the supply of natural gas. During 2013, Ecopetrol sold 526.8 gbtud in the local market to clients from different sectors such as distributors, industries and power plants. Sales growth in 2013 is mainly explained by the increase of sales to power plants generators and distributors.

The following table sets forth our local deliveries of natural gas including deliveries to our refineries, during 2013, 2012 and 2011.

	For the year ended December 31,		
	2013	2012	2011
		(gbtud)	
Gas-fired power plants	103.1	86.1	95.1
Refineries	119.1	116.8	112.5
Petrochemical	3.2	1.6	3.8
Industrial	152.7	157.0	156.5
Distributors	102.8 <sup>(1)</sup>	78.1(1)	$101.7^{(1)}$
Compressed Natural Gas for vehicles	40.5	39.2	39.5
Producers	5.3	5.4	36.2
Total Deliveries	526.8	484.2	545.3

(1) Deliveries to distributors include deliveries to industrial clients that are required to purchase natural gas from distributors.

#### Natural Gas Exports

In 2007, we and Chevron entered into a long-term natural gas supply contract with PDVSA through the end of 2011. In 2011, we extended the natural gas export contract until June 2014. Pursuant to the terms of the agreement, we have agreed to deliver the following quantities of natural gas to Venezuela, for which Chevron assumed 43%, and Ecopetrol 57%, of the responsibility:

	For the	For the year ended December 31,		
	<b>2012</b> <sup>(3)</sup>	<b>2012</b> <sup>(3)</sup> <b>2013</b> <sup>(4)</sup>		
		(gbtud)		
Gas delivery commitments to PDVSA <sup>(1)</sup>	127.2	154.8	100	

(1) The quantities for each month are different, for that reason the volume per year is a weighted average.

(2) The quantity for 2014 is a weighted average from January to June 2014.

(3) Total gas delivery commitment to PDVSA.

(4) Through the amendment of its agreement with PDVSA signed on May 22, 2013, Ecopetrol S.A. agreed to sell larger fixed amounts of gas than the amount originally agreed for 2013, due to higher surplus of gas that was not sold in Colombia. The additional clause contemplated the sale of, on average, an additional 42 gbtud between May 27 and December 31, 2013.



In 2013, we and our partner Chevron delivered 204.0 gbtud to PDVSA, exceeding the quantity of natural gas we agreed to supply in our gas export contract. This represented a 9.4% increase in the natural gas sold to PDVSA as compared to 2012. Of the total volume of gas delivered in 2013, 68% came from us and 32% came from Chevron. In 2012 and 2011, we and Chevron delivered 186.4 gbtud and 204.4 gbtud respectively.

#### Natural Gas Delivery Commitments

In 2011, we participated with the Colombian Commission for Regulation of Energy and Gas (CREG) in the definition and implementation of new rules for marketing gas in the mid-term. In accordance with this new regulatory framework, we updated our committed natural gas volumes for the years 2012 and 2013. In August 2013 CREG issued new guidelines for the sale of natural gas through Resolution 089 of 2013. In accordance with the new guidelines, a marketing process for natural gas was held in which 38 contracts were signed with 23 companies. Through that process, we sold 100% of Ecopetrol's Guajira gas (120 gbtud for one year and 23 gbtud for five years) and 99% of the Ecopetrol's Cusiana and Cupiagua gas for one (280 gbtud) and 80% for five years (232 gbtud). These commitments are in addition to existing engagements (93 gbtud from Guajira and 45.8 gbtud from Cusiana/Cupiagua). The table below sets forth the commitments we have in firm contracts with local natural gas distribution companies, local industries, gas fired power generators, international companies, including PDVSA in Venezuela, and internal agreements with our refineries and fields.

	For the year ended December 31,				
	2014	2015	2016	2017	2018
			(gbtud)		
Volume for sales third parties	556	404	398	398	379
Volume for self-consumption	131	140	140	143	249
Total Commitments	687	544	539	541	628

Pursuant to long-term supply contracts and other agreements, we must supply natural gas to these parties, and failure to deliver the agreed amounts could result in fines under the contracts.

In order to meet our natural gas delivery commitments, we have three main natural gas production fields, the Guajira, the Cusiana and the Gibraltar fields. Of our total natural gas production as of December 31, 2013, 54.6% was supplied by the Guajira production, 17.3% from the Cusiana field, 7.8% from the Cupiagua field, 2.7% from the Gibraltar field and the remaining 17.6% from fields located in other regions. Our participation in the Colombian natural gas market in 2013, including export volumes, decreased to 54.4%; our participation in 2012 was 56.3% and in 2011 it was 62.0%.

During 2013, Ecopetrol did not have to pay any penalties for the non-delivery of natural gas. In 2012, we paid Ps\$9.2 billion mainly in compensation for the non-delivery of natural gas. The penalties resulted from delays in the beginning of new projects, mainly the Planta de Gas Cupiagua and the expansion project of the Guajira fields.

## Lifting and Production Costs

Our consolidated average production costs on a Peso basis increased to Ps\$23,601 during 2013 from Ps\$23,088 during 2012. This was mainly due to: (1) increased costs from joint ventures, related to higher volumes of water production and related disposal costs, (2) high-price clauses in our joint venture agreements, which assign additional production to us when oil prices are higher than a reference price, (3) increase in maintenance costs for improved integrity of surface equipment (4) a 5.37% increase in production volumes of oil (not including production tests and discovered undeveloped fields), and (5) an increase in direct operation costs. Our consolidated average lifting costs on a dollar basis decreased to US\$11.57 in 2013 from US\$11.93 in 2012, as a result of the above-mentioned factors and a 3.9% depreciation of the average exchange rate of the Peso against the U.S. dollar.

Our consolidated average production costs on a Peso basis increased to Ps\$23,088 during 2012 from Ps\$21,605 during 2011. This was mainly due to: (1) increased costs from joint ventures, related to higher volumes of water production and related disposal costs, (2) high-price clauses in our joint venture agreements, which assign additional production to us when oil prices are higher than a reference price, (3) a 2.62% increase in production volumes and (4) an increase in direct operation costs. Our consolidated average lifting costs on a dollar basis increased from US\$10.43 in 2011 to US\$11.93 in 2012 as a result of the above-mentioned factors, partially offset by a 2.7% appreciation of the average exchange rate of the Peso against the U.S. dollar. Our consolidated average lifting costs do not include costs related to consumption of hydrocarbons by Ecopetrol included in the production process and our small refineries and natural gas liquid plants.

The following table sets forth our crude oil and natural gas average sales price, aggregate average lifting costs and aggregate average unit production costs for the years ended December 31, 2013, 2012 and 2011.

	For the	For the year ended December 31,		
	2013	2012	2011	
Crude oil average sales price				
(U.S. dollars per barrel) <sup>(1)</sup>	98.85	103.11	99.30	
Crude oil average sales price				
(Ps\$ per barrel) <sup>(1)</sup>	184,768	186,004	183,514	
Natural gas average sales price				
(U.S. dollars per barrel equivalent)	26.99	27.80	29.31	
Natural gas average sales price				
(Ps\$ per barrel equivalent)	50,448	49,983	54,179	
Aggregate average unit production costs				
$(U.S. \text{ dollars per boe})^{(2)}$	12.63	12.84	11.70	
Aggregate average unit production cost				
$(Ps\$ per boe)^{(2)}$	23,601	23,088	21,605	
Aggregate average lifting costs				
(U.S. dollars per boe) $^{(3)(4)}$	11.57	11.93	10.43	
Aggregate average lifting costs				
$(Ps\$ per boe)^{(3)(4)}$	21,624	21,441	19,266	

(1) Corresponds to our average sales price on a consolidated basis.

(2) Unit production costs correspond to consolidated average costs on total production volumes net of royalties. Production costs do not include costs related to transport, commercialization and administrative expenses.

(3) Lifting costs per barrel are calculated based on total production (excluding production tests and discovered undeveloped fields), which are net of royalties, and correspond to our lifting costs on a consolidated basis.

(4) Aggregate average lifting costs is calculated by using the cost of production (excluding costs related to hydrocarbons consumption by Ecopetrol included in the production process, such as by our small refineries and natural gas liquid plants) and dividing by the net produced volume (excluding royalties).

#### Reserves

The estimated reserve amounts presented in this report, as of December 31, 2013, are related to hydrocarbon prices, which are based on the average prices during the 12-month period prior to the ending date of the period covered in this report, determined as the unweighted arithmetic averages of the prices in effect on the first-day-of-the-month for each month within such period, unless prices were defined by contractual arrangements, as required by the SEC regulations. See "Item 5. Operating and Financial Review and Prospects—Critical Accounting Policies and Estimates—Oil and Gas Reserves" and Note 35 to our consolidated financial statements.

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Our proved reserves of crude oil and natural gas, net of royalties to the Nation, as of December 31, 2013, totaled 1,971.9 million boe, which represents a 5.1% increase from the 1,876.7 million boe registered in 2012. Our crude oil proved reserves in 2013 were 1,433.6 million barrels of crude oil and, in 2012, 1,370.3 million barrels of crude oil. Our natural gas proved reserves increased to 3,068.4 billion bcf from 2,886 bcf of reserves in 2012. In 2012, our proved reserves increased 1.1% from the 1,856.7 million boe registered in 2011. The increase in our reserves in 2013 is mainly due to (1) a 231.9 million boe increase corresponding to revisions of previous estimates, (2) a 26.7 million boe increase corresponding to improved recovery, (3) a 9.4 million boe increase corresponding to purchases of minerals, (4) a 74.9 million boe increase corresponding to extensions and discoveries, (5) a 2.8 million boe decrease corresponding to sales of minerals, and (6) a 244.9 million boe decrease corresponding to production.

Hydrocarbon reserves were calculated in accordance with SEC regulations and the requirements of the Financial Accounting Standards Board, or FASB. Ecopetrol's reserves process is supervised and coordinated by the Reserves Director, who reports to the Chief Financial Officer. The Reserves Director is a petroleum engineer, with a Master's degree in petroleum engineering and who has 40 years of experience in reservoir engineering, integrated reservoir studies, field development, reservoir management and estimation and reporting of reserves at several companies. The reserves audit group is comprised of reserves coordinators who are petroleum engineers, each with more than 10 years of experience in reservoir characterization, field development, estimation and reporting of reserves and who have supervision and supporting responsibilities over the professionals involved in the estimation and reporting process.

Our crude oil and natural gas net proved reserves include reserves from our subsidiaries located in the United States (Gulf of Mexico) and Peru, and Equión and Hocol's assets in Colombia. Reserves are first estimated internally. The estimation process is supervised and coordinated by the Corporate Manager of Reservoirs, a geologist who holds a Master's degree in geology and has more than 20 years of experience in projects associated with reservoir characterization and development, estimation, and reporting of reserves. The employees involved in the reserves process meet the Society of Petroleum Engineers' qualifications for reserves estimators. Internally estimated reserves are submitted to an external audit process, which was conducted by the external engineers (Ryder Scott, DeGolyer and MacNaughton and Gaffney, Cline & Associates). These firms have audited 99% of our total net proved reserves for 2013, 2012 and 2011. According to our corporate policy, we report the reserves values obtained from the external engineers.

Ecopetrol uses deterministic methods that are commonly used internationally to estimate reserves. These methods have some uncertainty with respect to degradation, and thus, the estimates should not be interpreted as being exact amounts. However, the technology used to estimate reserves is considered reliable.

Estimates of reserves were prepared by geological and engineering standard methods commonly used in the oil and gas industry. The method or combination of methods used in the analysis of each reserve was adopted from experience analogy reserves, including information on the stage of development, quality and completeness of basic data and production history.

The majority of the producing proved reserves were estimated by applying appropriate decline curves or other performance relationships. In analyzing decline curves, reserves were estimated by calculating economic limits that are based on current economic conditions. In certain cases, where the methods previously employed could not be used, reserves were estimated by analogy with similar reserves for which more complete data was available.

The reserves estimation process ends when the Director of Reserves consolidates the results and presents them to the Reserves Committee, whose members are the Chief Financial Officer, the Exploration and Production Executive Vice-President and the Vice-President of Strategy. Results are presented to the Audit Committee of the Board of Directors and finally approved by the Board of Directors.

The reserves audit process was conducted in accordance with SEC definitions and rules set forth in Rule 4-10(a) of Regulation S-X and the disclosure guidelines contained in the SEC's Modernization of Oil and Gas Reporting final rule dated December 31, 2008 and effective as of January 1, 2010.

The following table sets forth our estimated net proved reserves (developed and undeveloped) of crude oil and gas by region for the years ended December 31, 2013, 2012 and 2011.

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	As of December 31,							
	2013		2012	2	2011			
	Crude Oil (million barrels)	Gas (bcf)	Crude Oil (million barrels)	Gas (bcf)	Crude Oil (million barrels)	Gas (bcf)		
PROVED DEVELOPED RESERVES					<u>,</u>			
Total (Colombia)	921.31	2,653.96	922.4	2,523.6	840.4	2,206.1		
Total (International)	11.67	9.38	10.9	12.3	15.4	23.4		
North America	1.45	2.34	1.1	2.0	3.7	2.3		
South America	10.22	7.05	9.8	10.3	11.7	21.1		
TOTAL PROVED DEVELOPED								
RESERVES	933.0	2,663.3	933.3	2,535.9	855.8	2,229.5		
PROVED UNDEVELOPED RESERVES								
Total (Colombia)	480.26	379.70	431.6	340.6	507.5	537.0		
Total (International)	20.38	25.31	5.4	10.0	7.7	1.9		
North America	11.42	23.55	2.9	12.0	0.0	0.0		
South America	8.96	1.76	2.5	(2.1)	7.7	1.9		
TOTAL PROVED UNDEVELOPED								
RESERVES	500.6	405.0	437.0	350.6	515.2	538.9		
TOTAL PROVED RESERVES (DEVELOPED AND UNDEVELOPED)	1,433.6	3,068.4	1,370.3	2,886.5	1,371.0	2,768.4		
(DETELOTED AND UNDETELOTED)	1,433.0	5,000.4	1,570.5	2,000.5	1,571.0	2,700.4		

The following table describes the changes to our proved developed and undeveloped reserves estimates through the past three fiscal years.

Net proved developed and undeveloped reserves

	Crude Oil (million barrels)	Gas (bcf)	Total (million boe)
Reserves as of December 31, 2011	1,371.0	2,768.4	1,856.7
Revisions of previous estimates	42.7	8.8	44.2
Improved recovery	65.3	0.0	65.3
Purchases of minerals in place	0.0	0.0	0.0
Extensions and discoveries	90.4	298.6	142.8
Production	(199.2)	(189.3)	(232.4)
Reserves as of December 31, 2012	1,370.3	2,886.5	1,876.7
Revisions of previous estimates	172.7	337.5	231.9
Improved recovery	23.2	19.9	26.7
Purchases of minerals in place	7.5	11.0	9.4
Extensions and discoveries	66.2	49.3	74.9
Sales of minerals in place	(0.6)	(12.3)	(2.8)
Production	(205.7)	(223.5)	(244.9)
Reserves as of December 31, 2013	1,433.6	3,068.4	1,971.9
Net proved developed reserves			
As of December 31, 2011	855.8	2,229.5	1,246.9
As of December 31, 2012	933.3	2,535.9	1,378.2
As of December 31, 2013	933.0	2,663.3	1,400.2

The above-referenced reserve amounts, net of royalty payments to the Nation, are the same amounts used to reconcile Note 35 to our consolidated financial statements under FASB ASC 932.

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#### Revisions

In 2013, net revisions increased reserves by 231.9 million boe. The main revisions are in Colombian fields. Our most important heavy crude oil projects in Castilla, Chichimene, Rubiales and Quifa Fields drove a 91.7 million boe increase in reserves. New development projects in Castilla Field units K1 and K2 caused a 68.2 million boe increase in reserves and development activities and improved reservoir performance in Chichimene, Rubiales and Quifa Fields accounted for a 23.4 million boe increase.

Increases in sales of natural gas in Cupiagua Field and in Pauto field accounted for a 45.5 million boe and a 9.7 million boe increase in reserves, respectively. Revisions in Yarigui, Tisquirama, Provincia, Galan, San Roque and Cusiana fields as a result of drilling activities and better production performance accounted for a 32.4 million boe increase in reserves.

The revisions described above accounted for 77% of the increase in reserves due to revisions in 2013. The remaining 23% (52.6 million boe) were due to varying increases and decreases from other fields.

# Improved Recovery

In 2013, improved recovery increased reserves by 26.7 million boe. The additions were associated with the continued development of waterflood projects through existing wells, though additional drilling may be required to fully optimize the development configuration. The main additions were in Yarigui field, representing a 6.7 million boe increase, Tibu field, representing a 5.4 million boe increase and Peñas Blancas field, representing a 4.9 million boe increase.

# Extensions and Discoveries

The Company's extensions and discoveries during 2013 amounted to 74.9 million boe, which corresponded to 39.8 million boe of newly discovered fields and 35.1 million boe of extensions of proved acreage. The newly discovered fields corresponded to our Akacias, Caño Sur and Vigia Sur fields.

In terms of the extensions of proved acreage, which amounted to 35.1 million boe, 68% was associated with activities in the followings fields: 7.7 million boe related to new proved areas in the Hocol's Mamey field; 8.8 million boe related to new proved areas in the Rubiales and Quifa fields; and 7.4 million boe related to new proved areas in La Cira and Infantas fields. The remaining 32% corresponds to smaller changes in several other Company fields.

#### Purchases

In 2013, purchases of participation interests increased liquid volumes by 9.4 million boe, as a result of our acquisition of a 31.5% participation in Gunflint field through our subsidiary Ecopetrol America Inc. See Item 4 "Information on the Company – Overview by Business Segment - Exploration Activities Outside of Colombia"

#### Sales

In 2013, sales of participation interests decreased reserves by 2.8 million boe, as a result of a sale of part our equity interest in the Dificil and Entrerrios fields in Colombia.

# Proved Undeveloped Reserves

In terms of proved undeveloped reserves, during 2013 the Company added approximately 220 million boe and converted 147 million boe. Total proved undeveloped reserves increased by 73 million boe to 572 million boe at December 31, 2013 when compared with 498 million boe at December 31, 2012. On December 31, 2013, 88% of our total proved undeveloped reserves corresponded to crude oil.

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The company's year-end development plans are consistent with SEC guidelines for the development of proved undeveloped reserves within five years.

Of the total amount of proved undeveloped reserves that we had at the end of 2012 (498 million boe), we converted approximately 147 million boe, or 29%, to proved developed reserves during 2013, primarily associated with the development of crude oil projects through drilling and workovers in Castilla, Rubiales, Pidemonte, La Cira Infantas, Quifa Suroeste, Apiay, Casabe, Suria and Palagua fields. These projects accounted for approximately 81% of the total conversion. The conversion of the remaining 19% is associated with development execution in other fields such as the Ocelote, Suria Sur, Yarigui-Cantagallo and Gala fields, among others. The amount of investments made during 2013 to convert proved undeveloped reserves to proved developed reserves was US\$2,352 million.

Of the total amount of proved undeveloped reserves that we had at the end of 2011 (610 million boe), we converted approximately 212 million boe, or 35%, to proved developed reserves during 2012, which resulted mainly from (1) crude oil projects, primarily associated with the development of heavy crude oil fields in Castilla, Rubiales, Chichimene and Quifa in the Central region, which represented approximately 59% of the total conversion, and (2) availability of a new compression facilities for gas processing in the Chuchupa field, which represented 18% of the total conversion. The conversion of the remaining 23% was associated with development execution in other fields such as the Casabe, Cira Infantas, Apiay fields, among others. The amount of investment made during 2012 to convert proved undeveloped reserves to proved developed reserves was US\$2,155 million.

Of the total amount of proved undeveloped reserves that we had at the end of 2010 (517 million boe), we converted approximately 181 million boe, or 35%, to proved developed reserves during 2011. This was mainly the result of (i) crude oil projects primarily associated with the development of heavy crude oil in Rubiales, Castilla and Chichimene located in the Central region, which represented 58% of the total conversion and (ii) new gas sales agreements in the Cupiagua Field and the availability of a new gas processing plant, which accounted for 11% of the total conversion. The conversion of the remaining 31% was associated with development execution in other fields, such as Tibu and Cira Infantas, among others. The amount invested during 2011 to convert the proved undeveloped reserves to proved developed reserves was US\$2,328 million.

# Present Activities

Ecopetrol America Inc. placed the most competitive bids for 11 blocks in the "Central Planning Area Lease Sale 231" round held in New Orleans on March 19, 2014, as disclosed by the Bureau of Ocean Energy Management (BOEM), the governmental authority in charge of the process in the United States. In this lease sale, Ecopetrol America Inc. partnered with Murphy Exploration and Production-USA in 7 blocks and with Murphy Exploration and Production-USA and Venari Offshore LLC in 4 blocks. The official awarding of the blocks will be conducted by BOEM in the coming months after it checks the bids and ascertains that the companies fulfill the conditions required for the round. The value of the bids placed by Ecopetrol America and its partners in the 11 blocks add up to approximately US\$73.2 million with Ecopetrol America's share consisting of approximately US\$33.7 million. If granted, these blocks would allow deep sea hydrocarbon exploration in water depths of over 221 meters for a 10-year period. Further, Ecopetrol America would increase its participation in the U.S. Gulf Coast basin to 149 blocks. The results obtained strengthen Ecopetrol's position in the U.S. Gulf of Mexico, which it considers a focus area in its internationalization process.

As a result of drilling in San Martin, Meta province (Colombia), in February 2014, Ecopetrol S.A. discovered the presence of hydrocarbons in the Tirbirita-1A well. This discovery on the Caño Sur Western block, coupled with the Trasgo discovery in August of 2011, as well as other finds in neighboring blocks CPO-10 and CPO-11, have helped strengthen Ecopetrol's position in the development of heavy crude in this area of the country where last year the Caño Sur Este block was declared commercially viable. Ecopetrol S.A. will continue the evaluation and scale activities of the Tibirita discovery, based on the results obtained from the exploratory drilling.



# Contractual Arrangements with the Government of Colombia for the Exploration and Production of Crude Oil and Natural Gas in Colombia

To address the country's exploration and production needs, Colombia has modified the contractual regime governing the exploration, development and production of hydrocarbons on a number of occasions since its introduction in 1970. The exploration and production contracts entered into with our business partners set forth the production split, the length of the exploration and production terms, and royalty payments.

Under Colombian law, an existing contract cannot be modified because of a change to the contractual regime, unless the change is made through public order regulations. As a result, contracts that were executed prior to the issuance of a new contractual regime remain in full force and are not affected by the subsequent regime. As of December 31, 2013, we were party to one hundred and seven (107) agreements with partners and twenty seven (27) exploration and production agreements (E&P's and TEA's) with the ANH in which we do not have any partners.

Under joint venture contracts entered into before March 1994, which include contracts regarding the Cusiana and Cupiagua crude oil fields, among others, the private investor explored a previously agreed upon area at its own risk and expense. Thereafter, we had the option to become a joint venture partner by reimbursing the investor 50% of the exploration costs of oil wells within commercially viable fields and 50% interest of all future development costs related to those fields. Once we became a partner, we had a 50% interest in the production of the field. If we decided not to become a joint venture partner within a certain period of time, the private investor had the right to enter into a sole risk contract for the field's crude oil production until it had recovered 200% of its investment and 100% of its total costs. Thereafter, we could participate in the development of the field and all future costs and expenses would be automatically shared with our partner.

Beginning in 1994, modifications were made to standard joint venture contracts to maintain the private investor's share of production at 50% until aggregate production exceeded 60 million barrels. Thereafter, our share increased gradually, up to a maximum of 70% of production. In 1995, further modifications to the standard joint venture contracts required us to pay for half of the exploration costs, not only for wells that ultimately proved to be productive, but also for dry wells, stratigraphic wells and seismic exploration in fields that became commercially viable. The modifications also provided for competitive bidding for the right to explore and develop marginal fields (defined according to certain technical, financial and operational criteria). In the bidding process, private companies presented bids based on percentages of production they would pay us in exchange for the rights to develop these fields. Winning bidders were responsible for all future investment and operating costs related to the field.

The standard joint venture contract was once again modified in 1997 in order to promote private sector activity in the development of inactive areas and small fields and in the exploration for natural gas. These modifications extended the exploration periods, increased the levels of reimbursement for private companies' exploration costs and provided for the reimbursement of exploration costs in real terms and denominated in U.S. dollars.

In 1999, Colombia adopted two additional modifications to the standard terms, applicable to new joint venture contracts:

- *Reduction of Our Initial Participation.* Our initial participation under the joint venture contracts signed after this reform was reduced from 50% for contracts signed before this reform to 30%. As of December 31, 2013, we had 37 joint venture contracts outstanding in which our participation was greater than or equal to 50%, and 16 joint venture agreements where our participation was less than 50%.
- Modified R Factor. The Government modified the formula used to determine the increase in our share of total production, or the R Factor. The R
  Factor is calculated by dividing accumulated revenues in cash by investments and costs. If the R Factor increases above a certain profitability
  threshold, then our share of production increases above the initial 30%. Pursuant to the 1999 modifications, we raised the profitability threshold at
  which the R Factor triggers an increase in our share from 1.0 to 1.5. Additionally, prior to the 1999 modifications, the R Factor was calculated in
  constant U.S. dollars. The new calculation method was designed to prevent inflation from causing an increase in the R Factor and a corresponding
  increase in our share.

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In 2004, the authority to enter into exploration and production contracts was assigned to the ANH and since then we have had to compete with all other regional and international oil companies in Colombia for exploration and production opportunities pursuant to the same conditions and without any special rights. Decree Law 1760 of 2003 gave us the option to retain or terminate contracts we had entered into prior to January 1, 2004, and absolute discretion to extend such contracts after their stated termination date. If we decide not to extend a contract, the production rights and assets related to the relevant block will revert to us and we would have the right, at no additional cost, to exploit the associated reserves indefinitely. Contracts entered into by us after January 1, 2004 that are not extended by the ANH will revert to the ANH and not to us.

In 2004, the ANH introduced two new model contracts to replace the previously used joint venture contracts: the exploration and production contract and the technical evaluation agreement.

- *Exploration and Production Contracts.* Under exploration and production contracts the contractor, such as us or another operator, assumes all exploration and production activities. The contractor also assumes all risks and costs of exploration and is the sole owner of all production and assets involved in the exploration and production activities for the term of the contract. There is no partnership or joint venture between the contractor and the ANH.
- Technical Evaluation Agreements. The scope of technical evaluation agreements is limited to exploration activities. Under this type of agreement, the contractor can evaluate a specific area and decide whether or not it will enter into an exploration and production contract. The contractor assumes all risks and costs of the activities and operations.

We have entered into several agreements, or "Convenios," with the ANH in areas directly operated by Ecopetrol S.A., where Ecopetrol S.A. holds total exploration and production rights up to the point when revenue from the well falls below the costs of operations set by the company (the "economic limit").

When joint venture contracts agreed before December 31, 2003 expire, Ecopetrol S.A. is required to enter into agreements with the ANH pursuant to Article 2 of Decree 2288 of 2004. The purpose of these agreements is to define the terms and conditions under which Ecopetrol S.A. can exercise its exclusive right of exploration and production of hydrocarbons—granted by Decree Law 1760 of 2003—in the agreement area until the economic limit of the area covered by the contract).

# Joint venture and other contractual arrangements with third parties

We have entered into a number of joint venture and other contractual arrangements for exploration and production with regional and international oil companies in connection with our own crude oil and natural gas exploration and production projects. These arrangements include: risk participation contracts, incremental production agreements, shared risk production contracts, risk services production contracts and discovered undeveloped fields contracts.

- *Risk-Participation Contracts.* Under these contracts, we assume 20% of the exploration costs and risks at the beginning of the second year in exchange for a larger participation in the future production and equal representation on the executive committee of the joint venture. As of December 31, 2013, we had four risk participation contracts in effect.
- Incremental Production Agreements. We currently have two types of incremental production agreements: the standard incremental production agreements, or SIPAs, and the development of incremental production project agreements, or DIPAs.
- *SIPAs.* Under SIPAs, we calculate the total number of proved developed reserves available in a specific field or well and then establish a base production curve for the reserves. Any future production exceeding the curve, which we refer to as incremental production, results from extracting proved undeveloped reserves or probable reserves which require additional investments funded by our partners under the SIPA. We have the right to a previously specified percentage of the incremental production. Our percentage participation varies depending on the total amount invested by our partners and on the R Factor, which cannot be lower than 1.5. The volume produced under the production curve is not shared with our partners. As of December 31, 2013, we had five SIPAs in effect.



- *DIPAs*. Under DIPAs, we file a request with the Ministry of Mines and Energy for approval of an incremental production project for a field that we directly operate. If the project is approved, we agree with our partners to develop the field and we determine mandatory investment thresholds for our partners. We are not required to fund any investment. The production from the field is distributed to us and our partners receive a percentage of the total production from the field that varies depending on the invested amount. Once the mandatory investment stage expires, we agree with our partners on the percentage of production, total costs and additional investments to be paid by each party. We pay 20% royalties to the Nation on the base production curve and variable royalties on any incremental production. Additionally, in the event of higher prices and large volumes, we have adjustment clauses to increase our share in the production. As of December 31, 2013, we had one DIPA in effect.
- Shared-Risk Production Contracts. Under these contracts, we remain operators of the field and assume responsibility for 50% of all investments and costs. Private oil companies submit bids to enter into agreements with us based upon the production percentage they will assign to us. The successful bidder has the right to enter into the shared risk contract with us. As of December 31, 2013, we had two shared risk production contracts outstanding.
- *Risk Service Production Contracts.* We began using risk service production contracts in January 1998 to increase production through the use of new technologies in crude oil fields then operated by our partners. All investments in new technologies were made by our partners who received a previously specified fee per barrel. As of December 31, 2013, we had one risk service contract outstanding for the development of the Rancho Hermoso field located in the Mirador formation.
- Discovered Undeveloped Fields Contracts. We have entered into discovered undeveloped fields contracts to promote exploration by private companies of both undeveloped and inactive fields. Under these contracts, the contracting party assumes all costs and expenses for the development and operation of a field in exchange for a certain amount of production. As of December 31, 2013, we had nine discovered undeveloped fields contracts.
- As of December 31, 2013 we also had one Technical Alliance Agreement with a service company to support the operation of Casabe field in which we maintain operations and ownership of 100% reserves.
- During 2013 the Service and Technical Cooperation Contract with the Universidad Industrial de Santander (UIS) for research and development of the Colorado field, was terminated as provided under the contract.

Our joint venture contracts with third parties include Sole Risk Operation options. If the parties to such ventures decide not to continue with an operation, each party to the contract has the right to exercise the Sole Risk Operation option and take the sole risk and profit in the operation for the crude oil production until it has recovered a specified percentage of its investment and of its total costs. Thereafter, the parties that did not participate in the development of the field will share all the future costs and expenses as if such parties had elected to become a joint venture partner in the agreement. As of December 31, 2013, we had 16 contracts where sole risk operations are being carried out.

# Management of Crude Oil and Natural Gas Joint Ventures

Every crude oil and natural gas joint venture has an executive committee that makes all technical, financial and operational decisions. All major decisions must be made unanimously. Although we do not operate some of these joint ventures, we have an active role in the decision-making process and development of the projects. As a result, we exert significant control over the development of joint ventures, even for those joint ventures in which we have less than a majority economic interest.

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# **Refining and Petrochemicals**

#### Summary

Our main refineries are the Barrancabermeja refinery, which we directly own and operate, and Reficar, a wholly owned subsidiary, which we also operate. We also own and operate two other minor refineries — Orito and Apiay. Our refineries produce a full range of refined products, including gasoline, diesel, jet fuel, liquefied petroleum gas (LPG), and heavy fuel oils, among others.

The following table sets forth our daily average installed and actual refinery capacity for each of the last three years.

				For the	year ended December	31,			
		2013			2012			2011	
		Through-			Through-			Through-	
	Capacity	put	% Use	Capacity	put	% Use	Capacity	put	% Use
	(bpd)	(bpd)		(bpd)	(bpd)		(bpd)	(bpd)	
Barrancabermeja	250,000	214,845	86%	250,000	219,385	88%	250,000	225,990	90%
Reficar	80,000	66,314	83%	80,000	74,545	93%	80,000	76,770	96%
Apiay	2,500	1,303	52%	2,500	1,617	65%	2,500	1,768	71%
Orito	2,500	900	36%	2,500	793	32%	2,500	1,103	44%
Total	335,000	283,362	85%	335,000	296,340	88%	335,000	305,631	<u>91</u> %

## Barrancabermeja

At Barrancabermeja, we produce a variety of fuels, such as regular and premium unleaded gasoline, diesel fuel, kerosene, jet fuel, aviation fuel, LPG, fuel oil and sulfur. We also produce petrochemicals and industrial products, including paraffin waxes, lube base oils, low-density polyethylene, aromatics, asphalts, alkylates, cyclohexane and aliphatic solvents, as well as refinery grade propylene. The Barrancabermeja refinery supplies approximately 72% of the fuels consumed in Colombia.

The gross refining margin increased from US\$10.87 per barrel in 2012 to US\$10.95 per barrel in 2013, mainly due to the lower cost of the mix of processed crude, which is composed of a higher proportion of heavy crudes. The average conversion ratio for Barrancabermeja was 72.5% in 2013 and 76.5% in 2012. This decrease in conversion and in the throughput were due primarily to the heavier crude processed into the refinery: 25.4° API gravity in 2013 vs. 27.6° in 2012.

We are currently evaluating the potential implementation of a modernization process to convert Barrancabermeja into a deep-conversion refinery, which would allow it to process more extra-heavy and heavy crudes produced at local fields and increase production of mid-distillates for the local market. The modernized refinery would be expected to produce fuels of higher quality, which would help reduce pollution and lead to better air quality in Colombia. This project, if undertaken, would be expected to be in operation by 2020. After the completion of the Reficar project, described below, and, if undertaken, the Barrancabermeja project, we would expect to be able to supply the entire Colombian market without the need for imports of refined products.

The following table sets forth the production of refined products of Barrancabermeja for the years ended December 31, 2013, 2012 and 2011.

	For the y	For the year ended December 31,			
	2013	2013 2012			
		(bpd)			
LPG, Propylene and Butane	13,572	14,546	13,116		
Gasoline Fuels and Naphtha	67,592	71,552	74,196		
Diesel	45,179	52,486	53,319		
Jet Fuel and Kerosene	19,546	19,043	18,562		
Fuel Oil	58,852	51,618	52,179		
Lube Base Oils and Waxes	1,468	2,011	2,001		
Aromatics and Solvents	2,632	2,953	3,293		
Asphalts and Aromatic Tar	6,174	5,892	7,495		
Polyethylene, Sulfur and Sulfuric Acid	1,118	1,149	957		
Total	216,133	221,250	225,118 <sup>(1)</sup>		
Difference between Inventory of Intermediate Products	538	208	386 <sup>(1)</sup>		
Total Production	216,671	221,458	225,504 <sup>(1)</sup>		

(1) Amounts adjusted upwards based on updated measurements.

During 2013, we delivered 61.59 thousand bpd of low sulfur gasoline (less than 300 parts per million sulfur content) and 77.84 thousand bpd of low sulfur diesel (less than 50 parts per million sulfur content) to meet existing fuel quality standards.

#### Reficar

As part of our Strategic Plan, we expect to increase the competitiveness and profitability of Reficar through the modernization of its facilities and processes, and the improvement of its reliability. The project is approximately 90% complete. We currently expect to complete the modernization process and resume operations during the first half of 2015. Once complete, the refinery's nominal production capacity is expected to be 165 thousand bpd. We expect to improve refining margins by processing lower cost heavy crude oils, raising the conversion ratio, and producing a higher quality slate of products. We also expect to reduce the sulfur content in gasoline and diesel fuel, thus complying with current national and international fuel standards without the need to blend imported Ultra Low Sulfur Diesel.

On December 30, 2011, with approval from the Ministry of Finance, Reficar executed the project finance agreements for the expansion and modernization of the Reficar refinery in the amount of US\$3.5 billion with a repayment term of 14 years. See "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources." As of December 2013, Reficar had drawn US\$3.3 billion under these financial agreements.

During 2013, under the Construction Support Agreement Reficar requested an additional US\$1 billion for the project, which was funded as follows: (1) US\$750 million from a share capitalization process and (2) US\$252 million from a subordinated loan from an Ecopetrol affiliate.

In 2014, under the Construction Support Agreement, Reficar has requested US\$1.35 billion as part of the total project cost, which is currently estimated at US\$6.5 billion. The requested amount for 2014 is being contributed by means of a capital injection and by a subordinated loan from an Ecopetrol affiliate. Any increase in the project's capital expenditures is expected to be funded under the Construction Support Agreement between Reficar and Ecopetrol S.A.

As the Project continues in the construction phase, Reficar has requested US\$249 million against the Debt Service Guarantee Agreement. The purpose is to cover the first and second debt service payments due to third party lenders under the project finance on June and in December 2014. It is expected that this amount will be contributed by means of a subordinated loan to be granted by an Ecopetrol affiliate.

The following table sets forth the production of refined products of Reficar for the years ended December 31, 2013, 2012 and 2011.

	For the year ended December 31, <sup>(1)</sup>			
	2013	2012	2011	
		(bpd)		
LPG, Propylene and Butane	3,264	3,447	5,526	
Motor Fuels	19,679	21,602	25,515	
Diesel	15,669	17,982	20,533	
Jet Fuel and Kerosene	6,090	6,776	6,730	
Fuel Oil	15,468	18,110	17,469	
Aromatic Tar	691	729	1,225	
Other Products	27	29	44	
Total	60,888	68,676	77,042	
Difference between Inventory of Intermediate Products	6,613	6,521	1,130	
Total Production	67,502	75,197	78,172	

a. (1)

# (1) The table shows the entire production of Reficar.

During 2013, Reficar's production decreased to 67.5 thousand bpd, from 75.2 thousand bpd in 2012, primarily due to a cracking unit shutdown in September 2013, followed by a shutdown of the visbraker unit in October 2013. The cracking unit shutdown was necessary in order to move forward with the expansion project requirements, as this unit will continue operating under the new refinery structure. The visbraker shutdown occurred as a result of the cracking unit shutdown, because the visbraker provides products to the cracker unit. The refinery was shut down completely in March 2014 to permit completion of the expansion project and will remain shut down for the rest of 2014. Reficar is currently evaluating the viability of integrating these assets along with the new refinery.

The average conversion ratio for Reficar during 2013 was 67.31%. The gross refining margin decreased from US\$5.36 per barrel in 2012, to US\$3.06 per barrel in 2013, mainly due to higher costs of refined products such as gasoline, diesel and jet fuel, mainly because of the cracking and visbraker shutdowns.

In 2011 we started to purchase low-sulfur gasoline and continued purchasing low-sulfur diesel and biodiesel to improve the quality of the diesel and gasoline produced at Reficar. Reficar is currently purchasing biodiesel in the local market and mixing it with its production of diesel to reduce sulfur content to meet local specifications. We expect to terminate these purchases once the modernization process is completed.

# Contracts with other members of the Corporate Group

In December 2011, Ecopetrol S.A. entered into a construction support agreement and a debt service guarantee agreement to guarantee certain obligations of Reficar under the US\$3.5 billion project finance for the expansion and modernization of its facilities. Pursuant to the terms of the construction support agreement, Ecopetrol S.A. agreed to support Reficar's costs and expenses related to cost overruns and delays in construction. Pursuant to the terms of the debt service guarantee agreement, Ecopetrol S.A. provided Reficar with a liquidity mechanism to pay its debt service shortfalls and a mechanism to exit the project financing by transferring its debt to Ecopetrol S.A. See "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources."

### Petrochemicals and Other Products

We own and operate four petrochemical plants and one paraffin and lube plant located within Barrancabermeja, producing a variety of products, including aromatics, cyclohexane, paraffin waxes, lube base oils, polyethylene and solvents. In 2013, we produced 35,184 tons per year of low-density polyethylene and 659.7 thousand barrels of aromatics (benzene, toluene, xylene, orthoxylene, heavy aromatics and cyclohexane), a 4.6% and 14% decrease compared with a production of 36,882 tons of low-density polyethylene and 774.5 thousand barrels of aromatics in 2012, respectively. This decrease was due primarily to heavier crude feed to the refinery, as was mentioned above. Typically, heavier crudes produce less feed material and, as a consequence, less products in the petrochemical and paraffin units.

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### Propilco

During 2013, Propilco's production totaled 396 thousand tons of petrochemical products, a 3% decrease compared to the 409 thousand tons produced in 2012. The contribution margin in 2013 was 26% lower than in 2012, a decrease from US\$287 per ton in 2012 to US\$212 per ton in 2013. The decrease in production and in contribution margin was primarily due to higher raw material costs associated with higher quantities of polypropylene imports and the importation of 42,000 tons of propylene-grade polymer (PGP) that Ecopetrol could not deliver due to operating problems. The following table sets forth Propilco's average capacity and throughput for each of the last three years.

Furthermore, the company's performance was challenged by shifts in the petrochemical markets, as a result of new shale gas discoveries in the US and low costs products coming from Asia. In 2013, Ecopetrol performed an impairment test on its investments' goodwill, resulting in a deterioration in Propilco's investment of Ps\$280.4 billion.

	For the ye	For the year ended December 31, <sup>(1)</sup>			
	2013	2012	2011		
		(Metric Tons)			
Average capacity	475,000	475,000	475,000		
Throughput	395,869	408,933	374,838		
% Use	83%	86%	79%		

 The current figures were revised from the 2012 20-F version in order to reflect the same information that is published on the financial reports of the company, which only includes the polypropylene that was produced, packed and stored.

# Import of Ultra-Low Sulfur Diesel

We are reducing sulfur emissions of fuels produced at our refineries and importing ultra-low sulfur diesel. Since January 2013, we supply diesel with sulfur levels under 50 ppm (parts per million) in Colombia. In 2013 we increased imports of ultra-low sulfur diesel by 15.1 thousand bpd as compared to 2012 due to rising local demand, according to the quality standards of sulfur content effective in 2013.

#### Marketing and Supply of Refined Products

We market a full range of refined and feed-stock products locally including regular and high octane gasoline, diesel fuel, jet fuel, natural gas and petrochemical products, among others. Local sales of regular gasoline, LPG, jet fuel and diesel fuel are subject to government price regulation with reference to international benchmarks. We are the main producer and supplier of refined products in Colombia. For regulated products, the Ministry of Mines and Energy establishes maximum prices producers can charge and retail prices for these products pursuant to resolutions. The Ministry also establishes maximum wholesale and retail margins. For LPG, the Energy and Gas Regulatory Commission establishes maximum prices as well as wholesale and retail margins.

#### Transportation and Logistics

# Summary

# Cenit

In 2012, we incorporated Cenit as a wholly owned subsidiary specializing in logistics and transportation of hydrocarbons within Colombia. Cenit aims to enhance the strategic and logistical framework of Colombia's oil industry in response to the increase in hydrocarbon production and higher sales of crudes and refined products, both within Colombia and in international markets. Furthermore, it aims to strengthen and expand the transportation network while maintaining high standards of industrial safety and reliability, as well as contributing to environmental preservation.

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Cenit is currently developing its transportation infrastructure in order to meet the increased transportation needs of its current and potential customers in Colombia, which may result from new discoveries or an increase in oil production.

Cenit represents a clear separation of Ecopetrol's roles as owner, planner, operator and user of transportation systems. Cenit operates with an open model, in which all interested parties have the opportunity of accessing its transportation infrastructure. On the other hand, we have also ensured that Cenit will provide the capacity to meet the transportation needs of our customers.

This new hydrocarbon transportation framework is expected to produce significant advantages to Ecopetrol S.A. It allows Ecopetrol S.A. to focus on its strategic business segments while Cenit can take the lead in finding and exploiting profitable transportation and logistics opportunities.

Cenit's authorized and outstanding capital is Ps\$1.3 billion and Ps\$10 million, respectively. In October 2012, Ecopetrol transferred the direct interests in Ocensa, ODC, Oleoducto Bicentenario, ODL and Serviport to Cenit. On April 1, 2013, Ecopetrol completed the transfer of hydrocarbon transport and logistics assets to Cenit.

Ecopetrol S.A. entered into a transportation agreement with Cenit, pursuant to which Cenit will provide hydrocarbon transportation and logistics services through the transportation assets transferred to it as an in-kind capitalization. Ecopetrol S.A. also entered into an operation and maintenance agreement with Cenit pursuant to which Ecopetrol S.A. will be in charge of the operation and maintenance of the transportation assets. In return, Cenit will pay Ecopetrol S.A. a variable monthly payment for the services rendered. On April 1, 2013, Cenit started its operations as owner of the transportation and logistics infrastructure. Cenit's responsibilities will focus on commercial management, system planning and development, new businesses, and third-party liability. The main pillars on which Cenit will rely to achieve infrastructure growth will be the alignment of interests and objectives, the utilization of proactive response, and implementation of the country's vision. See "Item 4. Information on the Company—Transportation and Logistics— Contracts with Ecopetrol S.A."

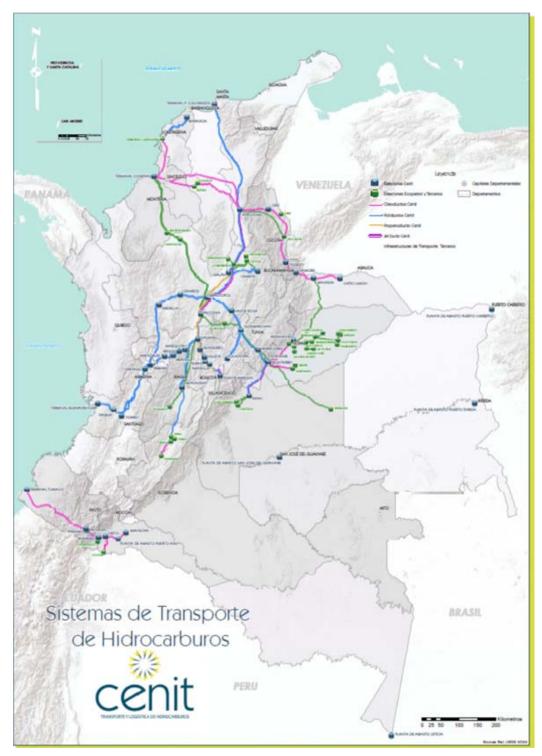
The transportation and logistics segment includes the transportation of crude oil, motor fuels, fuel oil and other refined products including diesel and biofuels.

As of December 31, 2013, we, directly or indirectly with private sector participants, owned, operated and maintained an extensive network of crude oil and refined products pipelines connecting our own and third-party production centers and terminals to refineries, major distribution points and export facilities. Cenit directly owns 36% of the total crude oil pipeline shipping capacity, and 99% of the total product pipeline shipping capacity in Colombia. When aggregated with the crude oil pipelines in which Cenit owns an interest, Cenit owns 79% of the oil pipeline shipping capacity in Colombia. By December 31, 2013, our network of crude oil and multi-purpose pipelines was approximately 6,746 kilometers in length. The transportation network we own directly, in partnership with other companies, and in joint venture partnerships, consists of approximately 4,857 kilometers of main crude oil pipeline and an additional 1,828 kilometers of crude oil pipeline with our business partners. We also own 3,717 kilometers of multi-purpose pipelines for transportation of refined products from the Barrancabermeja refinery and from Reficar to wholesale distribution points.

The map below shows the main transportation networks owned by our business partners and us.



# TRANSPORTATION INFRASTRUCTURE



# Organizational Restructuring

### Vice-Presidency of Transportation and Logistics

After the creation of Cenit and the transfer of the transportation assets to it during 2013, the Vice-Presidency of Transportation and Logistics consolidated its strategy, which is focused on strengthening our operations and maintenance services, comprehensive logistics solutions and risk management, in order to ensure customer satisfaction while adding value.

The Vice-Presidency now comprises four main areas: Operations and Maintenance, Comprehensive Transportation and Logistics Solutions, Asset Management, and Commercial and Customer Service. The Integrity and Contingency programs were integrated into the Asset Management and Operations and Maintenance offices, respectively. All four of these areas aim to accomplish their obligations to their customers: Cenit, ODL, ODC, Ocensa and Oleoducto Bicentenario de Colombia.

The Vice-Presidency assures the processes related to maintain the integrity of the infrastructure in order to improve our operational risk model for transportation infrastructure with respect to weather conditions and damage caused by third parties and the deployment of new technologies to monitor transportation infrastructure and its environment, as well as the intervention of the infrastructure in areas susceptible to incidents that could have severe consequences. In 2013, we spent Ps\$218 billion on the integrity activities, a 52% increase from 2012, primarily due to the execution of activities addressed to decrease the valuation of the levels in our operational risk model from very high and high risk infrastructure to medium and low risk.

During 2013, we met our customer satisfaction index goal, and we maintained our ISO 9001:2008, ISO 14001 and OHSAS 18001 certifications for all of our transportation processes. We also attained the certification by the Oil Companies International Marine Forum (OCIMF), which provides standards for hydrocarbons reception, storage, dispatch by pipes and pipelines and the import and export facilities of our docks.

# Pipelines

In 2013, pipelines in which we own an interest transported a total of 954 thousand bpd of crude oil and 237 bpd of refined products for a total of 1.19 million bpd in 2013. The transportation of crude oil increased mainly because Oleoducto de Colombia (ODC) increased its capacity by 20 thousand bpd and achieved its volumetric goal of 230 thousand bpd, and because Ocensa Segment 3 exceeded its target capacity, reaching a capacity of 410 thousand bpd. In 2012, pipelines transported a total of 1.22 million bpd of crude oil and refined products compared with 1.20 million bpd in 2011. For 2013 we do not include the refinery charge and pipeline Pozos Colorados when compared to 2012 and 2011. The following table sets forth our main pipelines in which we own an interest as of December 31, 2013.

		Capacity Thousand	Product			Ownership
Pipeline	Kilometers	bpd	Transported	Origin	Destination	Percentage
Caño Limón-Coveñas	770.6	220	Crude Oil	Caño Limón	Coveñas	100.00
Oleoducto del Alto Magdalena (OAM)	396.5	110	Crude Oil	Tenay	Vasconia	85.12
Oleoducto de Colombia (ODC)	480.8	240	Crude Oil	Vasconia	Coveñas	73.00
Oleoducto Central (Ocensa)	834.5	590	Crude Oil	Cupiagua	Coveñas	72.65
Oleoducto Transandino	306.9	85	Crude Oil	Southern fields	Tumaco Port	100.00
Oleoducto de los Llanos (ODL)	262.0	340	Crude Oil	East fields	Monterrey Cusiana	65.00
Oleoducto Bicentenario de Colombia S.A.S	230.0	110 <sup>(1)</sup>	Crude Oil	Araguaney	Banadia	55.97

(1) Represents the crude oil transportation capacity for the project currently in operation.

Oleoducto Bicentenario is finalizing the construction of the pipeline and its related pumping facilities connecting the Araguaney and Banadía locations; however, some pending minor activities are scheduled to be carried out during 2014. The estimated total investment of US\$2,035 million was financed by equity injections from the shareholders amounting to 30% of the total cash requirements and the remaining 70% through a syndicated local loan for Ps\$2.1 trillion (approximately US\$1.09 billion) which was disbursed during 2012 and 2013.

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The first phase of the construction is expected to allow the transportation of at least 110 thousand bpd, through a pipeline of 230 kilometers in length and a diameter of 42 inches, connecting the Araguaney and Banadía stations. Delays in the completion of the first phase of this project were due in part to events such as lockouts from communities in the areas of project construction demanding more social investment from the government, security issues, attacks by guerrilla groups, and unfavorable weather conditions. As a result, the construction process was impacted and prevented us from transporting crude oil through this pipeline until November 2013. During 2013, we completed the construction of 88.77% of the first phase and expect to complete this phase during first half of 2014.

In addition to the construction of the first phase of the Araguaney-Banadía pipeline, the process of enhancing and revamping the Araguaney and Banadía stations reached 81.12% and 72.25% of completion by 2013 year-end, respectively. The Coveñas port storage facilities project reached 85.98% of completion. The Coveñas storages facilities are expected to start operations in the first quarter of 2014. The next phases of the Oleoducto Bicentenario are awaiting internal approvals from shareholders. The studies aimed at obtaining environmental licenses from governmental authorities are underway.

The table below sets forth the volumes of crude oil and refined products transported through the crude oil pipelines and multipurpose pipelines owned by us.

	For the	For the year ended December 31,			
	<b>2013</b> <sup>(3)</sup>	2012	2011		
		(thousand bpd)			
Crude oil transport <sup>(1)</sup>	954.0	916.2	915.6		
Refined products transport <sup>(2)</sup>	237.2	302.7	288.9		
Total	1,191,2	1,218.9	1,204.5		

(1) The pipelines transporting crude oil for Cenit in 2013 include the following: Ocensa Segment 3, ODC, Vasconia-Galan L20", Ayacucho-Galan L8", Ayacucho-Coveñas L16", Ayacucho-Coveñas L24", Trasandino Pipeline. Not included among this list is the Refinery charge.

(2) The pipelines transporting refined products include the following: Galan-Sebastopol L12" and 16", Galan-Salgar L8", Galan-Bucaramanga, Buenaventura-Yumbo and Cartagena-Baranoa. The figures do not include Pozos Colorados-Galan.

As of December 31, 2013, we owned 57 stations, 24 of them located in crude oil pipelines, 25 of them in refined products pipelines, six supply plants and two in the ports and riversides (not including those associated with the transportation network that belong to third parties and are operated by us). In addition, we have a nominal storage capacity associated with the transportation network of 19 million barrels of crude oil and 6 million barrels of refined products. We also sell storage capacity to third parties in our Pozos Colorados and Mansilla facilities and in the Coveñas port. We do not own any tankers.

# Theft of Hydrocarbons

In 2013, we continued to work towards reducing thefts of hydrocarbons. Theft of refined products, which reached a peak of 7,270 bpd in 2002, was reduced to 23.1 bpd in 2013 from 27 bdp in 2012, a decrease of 14%, mainly due to the efforts in the detection of illicit valves, the development of technology and cooperation with the Colombian Army and law enforcement agencies. The theft of crude oil increased from 413 bpd in 2012 to 541 bpd in 2013, mainly due to the security situation in southern Colombia due to and the presence of illegal groups that impede interdiction.



#### Terrorism

Terrorist acts by guerrillas increased during 2013, including 225 attacks against pipeline infrastructure in Colombia, which is a 49% increase when compared with 2012. These terrorist attacks resulted in interruptions and slowdowns in our transport system and different production facilities. The most significant impacts occurred in the operation of six of our pipelines: Oleoducto Caño Limón - Coveñas, Oleoducto Bicentenario, Oleoducto Transandino, Oleoducto San Miguel - Orito, Oleoducto Churuyaco - Orito, Oleoducto Mansoya - Orito. The affected areas by those attacks were: Arauca, Norte de Santander, Putumayo, and Nariño. In addition, these attacks affected the production fields in Putumayo and Caño Limón Coveñas, where the operation was restricted. The direct cost of repairs to our pipeline infrastructure due to terrorist attacks in 2013 was approximately Ps\$60.2 billion (approximately US\$32 million)

#### **Other Transportation Facilities**

We have entered into transportation agreements with tanker-truck and barge companies in order to transport crude oil from locations that do not have pipeline connections to refineries and export facilities. The volume of refined products that cannot be transported in pipelines or in tanker trucks because of capacity limitation is transported by barges. During 2013, 37.2 million barrels of crude oil and refined products were transported by tanker trucks and 6.9 million barrels of crude oil and refined products were transported by tanker trucks and 6.9 million barrels of crude oil and refined products were transported by barges.

#### **Export and Import Facilities**

We currently have concessions granted by the Nation for four export docks for crude oil and refined products: Colorados, Coveñas, Tumaco and Buenaventura. Our export capacity reached 1,456 million bpd for crude oil and 1,027 million bpd for refined products. Our import capacity reached 1,223 million bpd.

Our crude oil loading facilities can load tankers of up to 350 thousand deadweight tonnage, or DWT. Adjacent to these loading facilities we also have crude oil storage facilities that are capable of storing 7.5 million barrels. Our docks used for import and export of refined products can load tankers of 85 thousand DWT up to 350,000 DWT. Additionally, these facilities have storage capacity of up to 1.2 million barrels.

#### New Transportation Projects

# Projects to Increase Transportation Capacity

During 2013, we increased capacity in our primary and secondary oil pipelines, loading facilities due to several projects carried out by Cenit and its subsidiaries.

The nominal capacity of the main systems increased as follows: our main oil pipeline systems increased from 1,200 thousand bpd in 2012 to 1,306 thousand bpd in 2013.

#### Main Accomplishments During 2013

#### Primary Oil Pipeline Network:

- Increase of 40 thousand bdp in the nominal capacity of the Vasconia-GRB-Galan system, from 180 to 220 thousand bpd.
- Increase of 25 thousand bpd in the nominal capacity of the Transandino Oil Pipeline, from 60 to 85 thousand bpd.
- Increase from 340 to 405 thousand bpd in the nominal capacity of Ocensa Segment 3 pipeline.
- Optimization of Caño Limón-Coveñas oil pipeline capacity from 200 to 220 thousand bpd.

# Secondary Oil Pipelines:

- Commencement of operations at Oleoducto Bicentenario de Colombia pipeline with 110 thousand bpd.
- Increase of capacity from 240 thousand bpd to 280 thousand bpd in the Apiay-Monterrey System.

- Increase of capacity in Castilla-Apiay from 180 thousand bpd to 190 thousand bpd.
- Completion of the bi-directionality of the Monterrey-Araguaney oil pipeline with a capacity of 53 thousand bpd.

# Loading Facilities:

• Fourth loading arm in Castilla loading bay, increasing its capacity by 8 thousand bpd to 30 thousand bdp.

# New Business Developments

During the first year of Cenit's creation as a new company and working under a common carrier scheme, Cenit, directly or through its subsidiaries, has been working to meet the growing needs in transport and logistics within the hydrocarbon oil business in Colombia.

According to this strategic goal, in 2013 Cenit signed (i) a cooperation agreement to participate with other companies in the Oleoducto al Pacífico SAS to advance in the environmental process for a future potential pipeline to the Colombian Pacific Coast, (ii) a bilateral agreement with Ecuador's National Oil Company, Petroecuador, and Colombian southern oil producers companies for the connection to facilitate national crude export from the Putumayo basin through an Ecuadorian port, and sanctioned an expansion of Vasconia downloading trucking facilities to increase the entrance capacity of crude oil to Ocensa.

The strategic goal was also pursued by the business development efforts of Cenit's subsidiaries, particularly with market launch of Ocensa's expansion of the pipeline to increase capacity by 135 thousand bpd and the start of operations of the Bicentenario pipeline.

# Contracts with Ecopetrol S.A.

- On October 1, 2012, Ecopetrol S.A. entered into an Asset Contribution Agreement, establishing the terms and conditions under which Ecopetrol S.A. contributed to Cenit its shares in companies engaged in oil transport, and on April 1, 2013, under this agreement, Ecopetrol S.A. contributed to Cenit its assets for the transportation of hydrocarbons and derivatives. On April 1, 2013, Ecopetrol S.A. entered into the following agreements with Cenit:
- Projects and Transport Logistic Solutions Service Agreement, under which Ecopetrol S.A. will provide management services on market terms to Cenit for a term of 15 years.
- Operation and Maintenance Agreement for the operation, maintenance, emergency and disaster risk management, among other services, which Ecopetrol S.A. will provide on market terms for a term of 15 years.
- Service Agreement for the provision of comprehensive services on market terms by Cenit to Ecopetrol S.A. for the transport, storage loading and unloading of hydrocarbons for a term of 30 years.
- Service Agreement for the provision of comprehensive services on market terms by Cenit to Ecopetrol S.A. for the transport, storage loading and unloading of refined products for a term of 30 years.

### Incidents at Transportation Facilities

### Salgar-Cartago Multipurpose Pipeline Spill

On December 23, 2011 our Salgar-Cartago pipeline ruptured. Internal and external experts believe this incident occurred as a result of creep movement caused by severe weather conditions in the area, causing the surrounding soil to exert strong pressure on the pipeline and rupturing it. Due to the rupture, approximately 59,976 U.S. gallons of gasoline spilled into the surrounding area in La Divisa and Villa Carola in the Municipality of Dosquebradas, Risaralda. The spilled gasoline from the pipeline subsequently came into contact with a heat source which ignited it, causing several explosions that tragically resulted in 33 fatalities and 35 injuries, as well as damage to the neighboring houses and buildings.

Colombia's National Authority on Environmental Licensing (ANLA) started conducting an investigation in connection with this incident, and CARDER (Risaralda's Region Environmental Autonomous Public Office), as a public authority with residual jurisdiction, commenced inquiries into Ecopetrol's fulfillment of its obligations regarding forest conservation and subterranean-waters and soils monitoring.

We performed our own internal investigation of the incident, and hired a local engineering firm as well as a highly renowned international consultant to investigate the causes of the incident. Our internal investigation, the investigation conducted by the Colombian engineering firm and the one conducted by the international consultant concurred that the origin of the rupture of the pipeline was the result of a creep movement caused by severe weather conditions in the area, causing the surrounding soil to exert strong pressure on the pipeline.

Notwithstanding that the causes of such incident cannot be attributed to Ecopetrol, based on objective responsibility criteria established by Colombian Law, and based on principles of solidarity and social responsibility, during 2012 and 2013, Ecopetrol agreed to compensate the affected families for their injuries and losses. This compensation does not imply the admission to any guilt as to the incident or the damages caused. For these purposes, Ecopetrol and the affected families agreed on the out-of-court settlement of the damages and executed conciliation contracts, which were further reviewed and approved by judges in the city of Pereira. Settlements with 97% of the victims cover all injuries and losses for an approximate aggregate amount of Ps\$22 billion.

Furthermore, during 2012 and 2013, Ecopetrol developed several social programs agreed with, and for the benefit of, the affected communities. These programs have represented as of December 31, 2013 contributions of approximately Ps\$20 billion to assist those affected by the incident and to restore the environment and social infrastructure.

As of January 4, 2012, we had cleaned the affected water bodies and completed the majority of our remediation activities in connection with the spill. In addition, as of December 31, 2013, we had planted 3,900 trees in the Aguazul Creek basin, in accordance with the guidelines provided by CARDER.

In January 2012, we launched the Dosquebradas Project, and throughout 2013, we have made progress in the execution of its various components, as follows:

- *Health*: 76% of cases involving people injured in the Dosquebradas incident were satisfactorily closed. Once costs related to patients' medical care in the future were settled and paid, such patients became registered in the Public General Health System. In compliance with recommendations issued by ICBF (Colombian Family Welfare Institute), we signed an agreement with legal representatives for the eight (8) male and female children affected in the incident, with the purpose of placing Ecopetrol in charge of their medical care service. Such service is only to cover those diseases related to the aforementioned incident.
- Legal: The scheme of out-of-court settlements with the affected families, covering the passing of their relatives as well as injuries sustained and loss of material assets was completed, for an approximate total amount of Ps\$26 billion. From such settlement agreements, nearly 535 people became benefited, and a final settlement was reached with 97% of the victims.
- *Environmental*: Those zones affected by the abovementioned fuel leak, in terms of surface and subterranean waters, are currently recovered; the preview result of the last technical monitoring showed a 100% mending of subterranean waters and 97% on soils.
- *Social*: We carried out a wide range of activities involving the local community throughout 2013, thus promoting social development in this region, as well as the stabilization of the social tissue of a community affected by the 2011 event. Investments related thereto amounted to approximately Ps\$7.225 billion.



## Caño Limón-Coveñas Crude Oil Pipeline Spill

Due to natural causes and as a result of unusual movement of soil and the tensioning of the pipeline, resulting from severe weather conditions, on December 11, 2011, the Caño Limón-Coveñas oil pipeline ruptured and caused the spill of approximately 3,267 barrels of crude oil into the Iscala creek, which connects with the Pamplonita River that provides water to the city of Cúcuta. The incident did not cause any fatalities or injuries.

We launched our own internal investigation and hired a highly renowned international consultant to investigate the causes of this incident. The conclusions of the investigations support that the rupture occurred as a result of an unusual movement of soil and the tensioning of the pipeline. We believe investigations will continue for the foreseeable future, and we cannot provide any indication as to their outcome, including whether we will be found liable or subject to enforcement actions. This incident has been subject to investigations by the relevant authorities.

A class action lawsuit has been filed against Ecopetrol and against employees of the company. In 2013 there were no developments in the probatory stage of this lawsuit because Administrative Judges in Cúcuta had to spend a considerable amount of time studying the impediment invoked that could eventually prevent them from adjudicating this lawsuit, since a conflict of interest could arise. An official decision on the aforesaid impediment was finally issued on December 5th, 2013 by the Administrative Tribunal in Cúcuta, ruling off the proposed impediment and thus vesting the First Administrative Court of Cucuta with jurisdiction to conduct the case.

The Regional Environmental Authority of Norte de Santander, or *Corporación Autónoma Regional de la Frontera Nororiental* – CORPONOR, initiated an investigation into the causes of the incident and also initiated enforcement actions against us for the allegedly wrongful implementation of the contingency plan. As of January 14, 2012, such proceedings were suspended due to the initiation of a conflict of jurisdiction proceeding by the National Authority on Environmental Licensing – ANLA.

In December 2013, CORPONOR issued an administrative act to initiate the probatory stage of the case. Nonetheless, this procedure was suspended upon the request of the Environment Ministry, which is currently in charge of determining which public authority is competent to carry out these proceedings.

The Colombian General Comptroller's Office initiated an investigation to determine whether Ecopetrol's President, the Vice-president of Transportation, and two other employees of the company should be held financially liable for the Caño Limón-Coveñas pipeline spill and consequently for having caused a decrease in the assets of Ecopetrol. The advisors to the employees of Ecopetrol representing them in front of the Colombian General Comptroller's Office are optimistic regarding the final results of the proceedings; in their opinion, the worst case scenario entails such employees being held civilly liable and the termination of their labor contracts. No developments occurred in this investigation in 2013, as the expected first hearing remains suspended.

As of the date of this annual report, no judgment or sanction against Ecopetrol or any of its employees has been issued. The different lawsuits and proceedings are being handled by in-house lawyers and by the employees' counselors.

The legal counselors are optimistic as to the possible results of the proceedings, particularly due to the fact that there is technical evidence that the causes of the incident are not attributable to Ecopetrol and that Ecopetrol timely responded to the incident in an efficient manner.

At the time of the incident, the pipeline was not in operation. We activated the corresponding contingency plan and called for the support of the CREPAD, which is the regional committee for attention and prevention of disasters. Five hundred workers were assigned to the decontamination of the Iscala creek and the Pamplonita River. In addition, the authorities decided to close Cúcuta's aqueduct gates as a preventive measure, while certified laboratories performed tests to determine its water quality.



Ecopetrol and national and local authorities are developing a project that Ecopetrol has lead for the development of an alternative to the water supply in the intake of the aqueduct in Cúcuta, which project was approved by the Company's Board of Directors in December 2011 as part of the strengthening of the contingency plans and the relationship with its stakeholders. In order to meet this commitment, after basic engineering studies performed during 2012, Ecopetrol set aside a provision of Ps\$189 billion. As of December 31, 2013 the provision was updated to Ps\$194.4 billion.

In addition to those amounts paid by Ecopetrol in 2012 (Ps\$9.2 billion) for the decontamination of the Iscala creek and Pamplonita river and additional remediation activities, we paid Ps\$1.3 billion in 2013.

Given the uncertainty of the outcome of current investigations and of potential future claims regarding these two incidents, we recorded in our financial statements a provision for future payments and disbursements as if we had been found liable for all damages caused by the incidents. Nevertheless, this provision is only a reasonable estimate of the costs related to the incident and not a definitive amount. We will continue to review the amount of any necessary accruals, potential asset impairments, or other related expenses and will record the charges in the period in which the determination is made and an adjustment is required.

#### Regulation

The main authorities that regulate our activities in Colombia are: the Ministry of Mines and Energy, the National Hydrocarbons Agency (ANH), the Energy and Gas Regulatory Commission (CREG), the Ministry of Environment and Sustainable Development, and the National Authority on Environmental Licensing (ANLA).

#### Ministry of Mines and Energy

The Ministry of Mines and Energy is responsible for managing and regulating Colombia's non-renewable natural resources, ensuring their optimal use by defining and adopting national policies regarding exploration, production, transportation, refining, distribution and export of minerals and hydrocarbons.

Decree 714 of 2012 established that certain functions previously held by the Ministry of Mines and Energy would be reassigned to the ANH. Among such functions we could cite the following: establishment of procedures for the liquidation of royalties for hydrocarbons, giving assistance to the Ministry of Mines and Energy on preparing governmental policies regarding hydrocarbons and sectorial plans, and the fulfillment of the relevant goals.

# National Hydrocarbons Agency – ANH

The ANH was created in 2003 and is responsible for the administration of Colombia's hydrocarbon reserves. The ANH's purpose is to manage the hydrocarbon reserves owned by the Nation through the design, promotion and negotiation of the exploration and production agreements in areas where hydrocarbons may be found that are not subject to joint ventures executed before December 31, 2003 and still in force, that are directly operated by Ecopetrol. The ANH is also responsible for creating and maintaining attractive conditions for investments in the hydrocarbon sector and for designing bidding rounds for exploration blocks. Furthermore, the ANH is responsible for managing all the royalties paid by oil and gas producers in Colombia. Decree 4137 of 2011 changed ANH's legal nature and defined new functions for it. Additionally, with this decree, the ANH no longer has the function of approving any amendment or modification made by Ecopetrol to the exploration and production contracts entered into by Ecopetrol prior to January 1, 2004.

# Energy and Gas Regulatory Commission – CREG

Laws 142 and 143 of 1994 created CREG, a special administrative unit of the Ministry of Mines and Energy, responsible for establishing the standards for the exploitation and use of energy, regulating the domestic utilities of electricity and fuel gas (liquefied petroleum gas and natural gas). CREG is also responsible for fostering the development of the energy services industry, promoting competition and responding to consumer and industry needs. Decree 4130 of 2011 assigned CREG new functions previously fulfilled by the Ministry of Mines and Energy, such as to set prices of petroleum products along the entire chain of production and distribution, except for regular motor gasoline, diesel and biofuels; to determine criteria and methodology for calculating the price of fuel, considering the trading margin, the percentage of evaporation loss or any other factor that affects volume thereof; to carry out the studies required for the determination and pricing of natural gas destined for use as automotive fuel and other purposes inherent in the commercialization of the same; to regulate the rates in Pesos per kilometer/gallon for transportation through the pipeline system; to regulate the activities of refining, import, storage, distribution and transportation of liquid fuels derived from petroleum.

# Ministry of Environment and Sustainable Development

The Ministry of Environment and Sustainable Development has among its main functions the issuance of public policies regarding the use and exploitation of natural resources and the regulation of national environmental laws.

The ministry defines the procedures and structures that regulate the issuance of environmental licenses and permits necessary for the development of the following activities: seismic, the construction of roads or highways, production, exploration, extraction, transportation and refining.

#### National Authority on Environmental Licensing

Created by Decree 3573 of 2011, the National Authority on Environmental Licensing has among its functions the issuance of licenses and environmental permits required for projects related to oil activities. Additionally, the National Authority on Environmental Licensing constantly monitors license compliance, handles complaints and grievances presented by local communities, and, in general, is in charge of regulating the procedures by which the environmental permits needed for Ecopetrol's operation are issued and enforced.

### **Control Entities**

#### Superintendency of Public Utilities

Under Colombian regulations, the distribution and marketing of natural gas is considered a public utility. As such, this activity is regulated by Law 142 of 1994 and supervised by the Superintendency of Public Utilities (*Superintendencia de Servicios Públicos Domiciliarios*).

#### Superintendency of Corporations

We are subject to the supervision of the Superintendency of Corporations (Superintendencia de Sociedades), the governmental body responsible for supervising companies domiciled in Colombia.

#### Superintendency of Finance

The Superintendency of Finance (*Superintendencia Financiera*) is responsible for monitoring, promoting and regulating the publicly traded securities market, registered issuers, broker-dealers, mutual funds and any other participants in the public market including the BVC.

Ecopetrol is a registered issuer (a listed corporation) in the Colombian stock market, and our debt and equity securities are publicly traded. The Superintendency of Finance is therefore responsible for the supervision of any activity we undertake that may affect the market for our securities. We are required to inform the Superintendency of Finance of any event material to us and to provide periodic reports of our financial condition.

# Superintendency of Ports and Transportation

The Superintendency of Ports and Transportation (Superintendencia de Puertos y Transporte) has exclusive control over and regulates us in matters related to ports concession contracts.



# National Superintendency of Health Care

Because we provide health care benefits to our employees and their families, the National Superintendency of Health Care (*Superintendencia Nacional de Salud*) has exclusive control over and regulates us in matters related to the inspection, supervision and control of the Social Security Health Care System.

## Superintendency of Industry and Commerce

Ecopetrol has databases with personal information on natural persons. That makes us responsible for information management in accordance with Decree 1377 of 2013 and Law 1581 of 2012, as implemented through the decree. Accordingly, the Superintendency of Industry and Commerce can regulate us in respect of personal data management.

# Hydrocarbon Resources Administrator

## National Hydrocarbons Agency – ANH

Any oil company selected by the ANH to explore a specific block must sign an exploration and production contract with the ANH. All royalty payments in connection with the production of hydrocarbons are made to the ANH in-kind unless the ANH grants a specific waiver to make royalty payments in cash. Any oil company working in Colombia must file periodic reports on the development of its exploratory and production activities with the ANH.

## Authorities Related to Environmental Matters

## Regional Autonomous Corporations

Regulated by Law 99 of 1993, the Regional Autonomous Corporations are responsible for the administration of natural resources located in their jurisdiction and, although they do not have legal jurisdiction over issues related to the oil industry, they are responsible for granting permission in certain cases to issue permits for the use of certain natural resources, such as water, air or soil necessary for the development of our activities.

# Ministry of Internal Affairs

The Ministry of Internal Affairs is responsible for certifying the existence of ethnic communities (such as Aboriginal, Afro Colombian and "Raizales," a Colombian legal term that refers to the people born in the San Andrés Island archipelago), including in areas in which seismic, exploration, extraction, transportation and refining activities are being developed, and issuing general guidelines which are developed through consultation procedures necessary for the viability of any work, project or activity intended to be done in the territories of those communities.

## **Regulatory Framework**

## Regulation of Exploration and Production Activities

Pursuant to Colombian law, the Nation is the exclusive owner of all hydrocarbon resources located in Colombia and has full authority to determine the rights to be held and royalties or compensation to be paid by investors for the exploration or production of any hydrocarbon reserves. The Ministry of Mines and Energy and the ANH are the authorities responsible for regulating all activities related to the exploration and production of hydrocarbons in Colombia.

Decree Law 1056 of 1953, or the Petroleum Code (*Código de Petróleos*), establishes the general procedures and requirements that must be completed by investors prior to commencing hydrocarbon exploration or production activities. The Petroleum Code sets forth general guidelines, obligations and disclosure procedures that ought to be followed during the performance of these activities.



Prior to 2003, all activities regarding the exploration and production of hydrocarbons were governed by Decree 2310 of 1974, which entitled Ecopetrol to explore and exploit hydrocarbons either directly or through agreements entered into with third parties. Pursuant to such Decree Law, Ecopetrol acted both as the Nation's hydrocarbons resources administrator, as well as an industrial and commercial operator of fields.

Decree 2310 of 1974 was replaced by Decree-Law 1760 of 2003, but all agreements entered into by us prior to 2003 with other oil companies are still governed by the provisions of Decree 2310 of 1974.

Decree Law 1760 of 2003 created the ANH to regulate and oversee the exploration and production of hydrocarbon reserves. Pursuant to its exclusive legal authority, the ANH developed a new contractual regime for hydrocarbons. Decree Law 1760 of 2003 was complemented by Decree 2288 of 2004, which regulates all aspects related to the extension and termination of contracts executed by us before 2004.

Accord 008 of 2004 (applicable to agreements entered into by us prior to May 2012) and Accord 004 of 2012 (applicable to agreements entered into by on, or after, May 2012) issued by the Directive Council of the ANH set forth the necessary steps for entering into exploration and production contracts with the ANH.

Ministry of Mines and Energy Resolution 18-1495 of 2009 establishes a series of regulations regarding hydrocarbon exploration and production.

Ministry of Mines and Energy Resolution 180742 of 2012 included a series of technical regulations for unconventional hydrocarbon resources. This Resolution covers technical and operational matters related to unconventional hydrocarbon resources, including the procedures for advancing the exploration and exploitation of unconventional reserves. It also provides the types of wells and their classification as well as the fulfillment of those minimum (drilling and abandoning) conditions, necessary to initiate or perform E&P activities. Furthermore, it contemplates the applicable procedure to resolve disputes between Mining Sector and the Oil and Gas one, regarding the coexistence of their rights in some specific projects. Nevertheless, Colombia has not issued any exploration licenses and permits for the exploration of unconventional hydrocarbons. ANLA has promulgated regulations regarding environmental licenses.

Ministry of Mines and Energy Resolution 90341 of 2014 sets forth technical requirements and procedures for unconventional reservoirs exploration and exploitation, particularly for the use of hydraulic fracturing and the construction of wells. As a complement to this technical regulation, the Colombian national environmental authority is preparing a terms of reference for environmental impact assessment for unconventional reservoirs exploration.

Pursuant to Colombian law we must pay a percentage of our production to the ANH as royalties. Each production contract has its applicable royalty arrangement in accordance with applicable law. In 1999, a modification to the royalty system established a sliding scale for royalty payments, linking them to the production level of crude oil and natural gas fields discovered after July 29, 1999 and to the quality of the crude oil produced. Since 2002, the royalties system has ranged from 8% for fields producing up to 5 thousand bpd to 25% for fields producing in excess of 600 thousand bpd. Changes in royalty programs only apply to new discoveries and do not alter fields already in their production stage. Producing fields pay royalties in accordance with the applicable royalty law at the time of the discovery.

# Regulation of Refining and Petrochemical Activities

Article 58 of the Petroleum Code establishes that oil refining activities can be developed throughout the Colombian territory and are not reserved to the State. However, Article 4 establishes that such activities are considered public utility activities subject to governmental regulation, the development of those activities must comply with technical requirements established by regulation.

The Ministry of Mines and Energy and the ANH are the State Public Offices responsible for regulating, supervising and overseeing all activities related to the refining of crude oil, including but not limited to aspects such as import of refined products, prices, storage, transportation and distribution. Under those powers, these Offices have issued several regulations.

In 2008, Law 1205 of 2008 was issued with the main purpose of contributing to a healthier environment. It established the minimum quality specifications for fuels in Colombia. Since August 2010, Ecopetrol has been selling diesel and gasoline that complies with the requirements of the aforementioned law at its refinery in Barrancabermeja.

The Ministry of Mines and Energy establishes the safety standards for LPG, storage equipment, maintenance and distribution of LPG. Regulations issued in 1992 established that every local, commercial and industrial facility with a storage capacity of LPG greater than 420 pounds must receive an authorization for operations from the Ministry of Mines and Energy.

## Regulation Concerning Production and Prices

Decree 2119 of 1992 restructured the Ministry of Mines and Energy and gave it the responsibility to study industry problems and implement short- and long-term refining planning policies. The Ministry is also responsible for evaluating, reviewing and approving all new refining projects and expansions of existing infrastructure. Prior to approving a new project, the Ministry has to take into account, among other factors, the significance of the project, its economic impact, sources of financing, profitability, social contribution, its effect on Colombia's balance of payments, and the price structure of the refined products.

Pursuant to Resolution 18-0966 of 2006 issued by the Ministry of Mines and Energy and Article 58 of the Petroleum Code, any refining company operating in Colombia must provide a portion or, if needed, the total of its production to supply local demand prior to exporting any production. If local demand increases, and imported crudes are needed, the refining company may charge the State additional transportation costs in proportion to the imported crudes delivered to the refinery.

Pursuant to the same Resolution, if the regulated production income, the main item in the price formula, is lower than the export parity price, the price paid by the Government for the refined products to the producer has to be the equivalent to the price for those products in the U.S. Gulf Coast market. To make such payments, the Government uses its "Fuel Price Stabilization Fund." On the other hand, when the regulated production income is higher than the export parity price, the producer and refiner has to pay the Government the difference between those two prices.

As of May 2012, under the powers granted by Decree 4130 of 2011 for currency and tax matters, the ANH determines the crude oil price reference.

A recent court ruling has eliminated one source of income for the "Fuel Price Stabilization Fund" (established by Law 1450 of 2011) which consists of the payments that refiners have to give the Government, calculated as the difference between the International Parity Price and the Reference Price set by the Ministry of Mines and Energy. That decision found that the legal nature of that payment is the same as taxes and as such, can only be set by the Legislative Branch (or by the Executive only if it complies to a method, system or parameter previously set by the Legislative Branch). Given that there is no law that establishes that payment or determines a method, system or parameter set to establish its elements, Congress would have legislate on the matter in order to reinstate the source of income for the aforementioned fund. The Stabilization Fund still pays producers for the difference between the International Parity Price and the Reference Price. If the Reference Price is greater than the International Parity Price, we would record a contingent liability for the amount of the differential, pending Congressional action to determine a new funding source for the Fuel Price Stabilization Fund.

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# Regulation of Transportation Activities

Hydrocarbon transportation activity is considered a public utility activity in Colombia and therefore is under governmental supervision and control. Transportation and distribution of crude oil, natural gas and refined products must comply with the Petroleum Code, the Commerce Code (*Código de Comercio*) and with all governmental decrees and resolutions, including Resolutions 181258 and 124386 of 2010 issued by the Ministry of Mines and Energy concerning Crude Oil Pipeline Transportation, and Resolutions 122 of 2008 and 092 of 2009 issued by CREG concerning LPG Pipeline Transportation.

Notwithstanding the general rules for hydrocarbon transportation in Colombia, natural gas transportation is subject to regulations specific to the natural gas industry as issued by CREG, due to the categorization of natural gas distribution as a public utility activity under Colombian laws.

Transportation systems, classified as crude oil pipelines and multipurpose pipelines, can be owned by private parties. The construction, operation and maintenance of pipelines must comply with environmental, social, technical and economic requirements under national and international standards. Transportation networks must follow specific conditions regarding design and specifications, while complying with the quality standards demanded by the oil and gas industry.

According to Law 681 of 2001, multipurpose pipelines owned by Ecopetrol (currently by Cenit) must be open to third-party use on the basis of equal access to all.

Hydrocarbon transport activity may be developed by third parties and must meet all requirements established by law.

The Ministry of Mines and Energy is responsible for:

- studying and approving the design and blueprints of all pipelines;
- mediation of rates between parties or, in case of disagreement, establishing the hydrocarbon transport rates based on information furnished by the service provider;
- liquidation, distribution and verification of payment of transport-related taxes; and
- managing the information system for the oil product distribution chain.

The construction of transportation systems requires government licenses and local permits awarded by the Ministry of the Environment as well as other requirements from regional environmental authorities.

## Regulation on Selling, Distributing, Transporting and Marketing of Natural Gas

Decree 2100 of 2011 issued by the Ministry of Energy and Mines established that all producers have to make a production statement that includes the volumes available for sale. The following table sets forth the total production statement for 2013-2017 published by the Ministry of Energy and Mines for the fields in which we hold a stake.

	For the year ended December 31,						
	2013	2014	2015	2016	2017		
			(gbtud)				
Guajira Fields	586	539	476	408	354		
Cusiana and Cupiagua Fields	462	541	541	541	541		
Other Fields	170	163	157	151	145		
Imports <sup>(1)</sup>	0	39 <sup>(2)</sup>	85	127	144		
Total	1,218	1,283	1,260	1,228	1,185		

(1) Imports were moved from 2012 to 2014 due to the extension of the export contract with PDVSA.

(2) The quantity in 2014 is from September to December.

Decree 2100 of 2011 also introduced a new regime for the selling and marketing of natural gas in Colombia, including specific procedures that regulate the Colombian market in order to manage the remaining natural gas reserves owned by the Nation, and to protect domestic consumers, especially residential consumers.

Decree 2100 of 2011 divided marketing procedures depending on the production capacity of each production field in Colombia. The producers that operate fields with capacity of more than 30 million cfpd (Large Fields) of natural gas must follow a specific procedure for selling natural gas. The producers that operate fields producing under 30 million cfpd must follow a different procedure. Both marketing procedures are regulated by CREG.

CREG issued Resolutions 088 of 2013 and 089 of 2013 that established the procedures for marketing of natural gas in Colombia. The aforementioned resolutions excluded the application of the marketing procedures to the following activities: a) natural gas exportation; b) natural gas as raw material for petrochemical procedures; and c) self-consumption from natural gas producers.

Resolution 088 of 2013, established that Guajira price will no longer be regulated. CREG provided that parties will be free to determine the prices for the new natural gas supply agreements, and to determine whether the prices of executed agreements shall be changed.

Resolution 089 of 2013, issued by CREG established that the Colombian natural gas market will be divided into a primary and a secondary market.

# Priorities for Delivery of Natural Gas

The Ministry of Mines and Energy established distribution priorities in the event of a shortfall of reserves or production of natural gas. Residential consumers with existing supply contracts, small businesses and distributors of compressed natural gas have the first priority for delivery. Contracts for export of natural gas have the same priority under the firm commitments as other users such as industrial consumers and power generators. The agreements that are not firm commitments and contemplate delivery of natural gas "as available" have priority over customers on the spot market. Ecopetrol may enter into natural gas export contracts if the ratio of proved reserves to production exceeds seven years determined by the Colombian Energy Planning Authority (UPME for its Colombian acronym).

The Ministry of Mines and Energy also establishes distribution priorities in the event of a natural gas shortfall derived from supply or infrastructure issues. This order of priority is based on the type of contract, with firm supply contracts having priority over interruptible supply contracts.

# Primary market.

Initially, the CREG established which agents can participate in each market. Ecopetrol is able to participate as a seller in the primary market as a natural gas producer.

For Large Fields, Decree 2100 of 2011 and CREG Resolutions 089 of 2013 and 204 of 2013 provide a specific procedure to sell natural gas in the Colombian market. According to the aforementioned resolutions, the Mineral and Energetic Planning Unit (UPME) must analyze the production potential of Colombia's productive large fields and compare it with the expected demand of natural gas in Colombia (such analysis must be made under a low-occurrence probability scenario). If such comparison shows that in three of the next five years, Colombia shows a lack of available natural gas to supply national demand, the producers must follow an auction procedure in order to market the available natural gas. If the comparison shows there will be a surplus of natural gas in Colombia, natural gas producers and consumers can negotiate directly the natural gas agreements.

If an auction must be performed, the conditions of the auction must be clear to the whole market and there must be equal rules and opportunities for the buyers. The natural gas available for the auction is based on the declaration established by Decree 2100 of 2011.

CREG, under Resolution 089 of 2013, established a limited list of agreements that may be entered into for natural gas marketing:

- *Firm Supply Agreement.* The buyer agrees to purchase a specific volume of production of natural gas and the producer guarantees the availability of 100% of the agreed volume. If the buyer does not accept the agreed natural gas volume, the buyer still must pay the producer the agreed price.
- *Conditional Firm Purchase Agreements.* The buyer agrees to purchase a specific volume of production of natural gas and the producer guarantees the availability of 100% of the agreed volume unless a specific condition takes place. If the condition takes place, the producer can interrupt the natural gas supply.
- Optional Purchase Agreements. The buyer agrees to pay a premium for its right to take a fixed amount of natural gas if certain previously agreed conditions are met, and the buyer agrees to pay an exercise price for the amount of natural gas effectively delivered. The producer guarantees to maintain available 100% of the agreed volume of natural gas. The producer's obligations will be met using natural gas that was committed to a foreign client, as provided for under our contracts with foreign suppliers.
- Interruptible Supply Agreements. The parties determine on a daily basis whether the quantity of natural gas specified in the agreement is requested and will be supplied. Such contracts only have a 30 day term.
- Contingency Supply Agreement. The parties determine on a daily basis whether the quantity of natural gas specified in the agreement is requested and will be supplied. Such contracts will only take place to supply natural gas when the producer is experiencing supply complications with the original natural gas source and can only be used for short periods of time.
- *Conditional Firm Supply Agreements*. The seller must supply the agreed natural gas volumes daily, unless certain stated conditions take place, in which case the producer is permitted to stop the supply of natural gas. If the producer supplies natural gas, the buyer must pay a fixed price.

CREG Resolution 089 of 2013 established the terms of certain clauses for the aforementioned agreements. It provides for scope, force majeure, penalties, price indexation, and contract term.

## Price Controls on the La Guajira Natural Gas Production

Under the regulatory regime in effect during the year 2013, CREG established the maximum price Ecopetrol was allowed to charge customers that consume natural gas from La Guajira field. Maximum prices we were able to charge to these "regulated customers" were determined with reference to the average export price for fuel oil for the previous six months. Pursuant to Resolution 088 of 2013, the price of natural gas from the La Guajira field was released beginning 2014.

On the other hand, Resolution 1704 of 2011 the Ministry of Mines and Energy established the methodology for determining the Natural Gas Supply Index in Colombia and decided that for the purpose of guaranteeing sufficient domestic natural gas supply, domestic fuel gas producers marketers can freely sell natural gas for export purposes when the potential production for one year is greater than or equal to the total expected domestic demand for the same year and the Natural Gas Supply Index for that year is greater than or equal to eight (8) years of domestic natural gas supply.

The export of natural gas is not considered a public utility activity under Colombian law and therefore is not subject to Law 142 of 1994. Nevertheless, the internal supply of natural gas is a priority for the Colombian government. This policy is included in Decree 2100 of 2011, providing that in the event the supply of natural gas is reduced or halted as a result of a shortage, the Colombian government has the right to suspend the supply of natural gas to foreign customers. Notwithstanding the foregoing, Decree 2100 of 2011 establishes freedom to export natural gas under normal gas-reserve conditions.

#### Secondary market.

Initially, CREG determined which agents could participate in each market. Ecopetrol is able to participate as a non-regulated user in the secondary market as a transportation reseller.

CREG has determined that the available transportation capacity of non-regulated users can be sold through two procedures depending on whether the available transportation capacity is for a long-term agreement or if the capacity is to be sold on daily basis.

For a long-term capacity transportation seller, such non-regulated user must publicly declare how much capacity is available for sale in the secondary market. Then the administrator of the market matches the offer with an agent in the secondary market that has offered to acquire natural gas transportation services for the same volumes offered by the non-regulated user.

On a daily basis, unused transportation capacity will be offered on the secondary market for the non-regulated users that require transportation services for specific needs, so that they can enter into spot market transportation agreements.



# Regulation of Selling, Distributing, Transporting and Marketing of Liquefied Petroleum Gas (LPG)

Wholesale marketing, transport, distribution and retail marketing of LPG are mainly regulated by CREG Resolution 74 of 1996, and subsequent resolutions. LPG in Colombia is primarily obtained through Ecopetrol's refineries, field production and imports. The LPG must meet minimum quality standards to be marketed. Our wholesale marketing and transport activities are regulated by Resolutions 53 of 2011 and 92 of 2009. The LPG price is regulated by CREG Resolutions 66 of 2007 and 59 of 2008.

# Regulation of Sales of Liquid Fuels

According to Article 212 of the Petroleum Code and Law 39 of 1987, the distribution of liquid fuels and their derivatives is considered a public utility activity. Consequently, individuals or entities engaged in these activities are subject to regulations issued by the Colombian government. The Government has the power to determine quality standards, measurement and control of liquid fuels, and establish penalties that may apply to dealers who do not operate in compliance therewith.

The Ministry of Mines and Energy is the entity that controls and exercises technical supervision over the distribution of liquid fuels derived from petroleum, including the refining, import, storage, transportation and distribution in the country. Law 812 of 2003 identified the agents of the supply chain of petroleum-derivated liquid fuels.

The distribution of liquid fuels, except LPG, is ruled by Decree 4299 of 2005, as modified by Decrees 1333 and 1717 of 2007 and 2008, respectively, which establishes the requirements, obligations and penalties applicable to supply agents in the distribution, refining, import, storage, wholesale, transportation, retail sale and consumption of liquid fuels.

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Decrees 283 of 1990 and 1521 of 1998, and their modifications, establish minimum technical requirements for the construction of storage plants and service stations. The Decrees also regulate the distribution of liquid fuels, establishing the minimum requirements for distributors and the activities and types of agreements permitted for these agents. The Ministry of Mines and Energy also regulates the types of liquid fuels that can be sold and purchased and the penalties for noncompliance with governmental regulations.

As of May 2012, CREG determines the prices for regulated crude oil by-products, except for gasoline, diesel and biofuels (all of which are determined by the Ministry of Mines and Energy). The ANH determines the price for crude oil corresponding to royalty payments. Jet fuel prices are determined according to Law 1450 of 2011.

The distribution of fuels in areas near Colombian borders is subject to specific regulations that impose strong control procedures and requirements. Ecopetrol is not responsible for fuel distribution in these areas. That responsibility was transferred to the Ministry of Mines and Energy, pursuant to Law 1430 of 2010.

# Regulation of Biofuel and Related Activities

The sale and distribution of biofuels is regulated by the Ministry of Mines and Energy. Regulations establish the quality and pricing standards for biofuels and impose minimum requirements for mixing ethanol with gasoline and biodiesel with diesel.

## **Environmental Matters**

## Regulation

The Ministry of Environment and Sustainable Development is the highest environmental authority in Colombia and is in charge of issuing nationwide environmental regulations, policies, and programs. At the regional and local levels, regional environmental authorities, such as the Regional Autonomous Corporations (Corporaciones Autónomas Regionales), are the highest environmental authorities of the region and are in charge of executing and overseeing the enforcement of all regulations, policies and programs issued by the Ministry of Environment within their area of jurisdiction, related to the environment and renewable natural resources, as well as overseeing any activity from a sustainable development perspective.

Law 99 of 1993 and other environmental regulations impose on companies, including oil and gas companies, the obligation to obtain an environmental license prior to undertaking any activity that could negatively impact the environment or produce serious damage to the environment and natural renewable resources. The National Authority on Environmental Licensing (ANLA), established by Decree 3573 of 2011, is responsible for evaluating license applications, overseeing all hydrocarbons projects and monitoring compliance.

If projects or activities may impact indigenous, Afro-Colombian or Raizal communities, the Colombian Constitution provides that the companies developing such projects or activities must consult with those communities before initiating the project or activities or the environmental licensing process. The communities or the relevant public oversight entities may request that a public hearing take place for this purpose. In addition, the Colombian Constitution and laws establish that in order to comply with public participation mechanisms, the communities may demand information regarding the activities of the project and their potential impacts.

The environmental licensing process begins when the company files an environmental plan with the National Authority on Environmental Licensing. The licensing process includes the application for the use of natural renewable resources (water, soil and air), the filing of an environmental impact assessment, and a plan to prevent, mitigate, correct and compensate for any activity that may harm the environment. According to recently issued regulations, obtaining a license may take between 165 and 265 business days, depending on whether the authority requires the applicant to file additional information and whether it is necessary to establish a governmental committee to determine the viability of the project.

The Ministry of Environment and Sustainable Development is also responsible for establishing guidelines regarding climate change policies for the hydrocarbon sector in Colombia. We are in compliance with those guidelines. At present, the Ministry of Environment has not proposed any specific steps for the implementation of the Kyoto Protocol as it relates to our operations. We are continuously monitoring climate change requirements that could be applicable to us.

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A company that does not comply with applicable environmental law and regulations, does not execute the environmental plan approved by the environmental authority or ignores the requirements imposed by an environmental license may be subject to an administrative proceeding initiated by the National Authority on Environmental Licensing or the regional environmental authorities established by Law 1333 of 2009. The proceeding may result in oral or written warnings, monetary penalties, fines, license revocation or the temporary or permanent suspension of the activity being undertaken.

As of December 2013, we were party to 154 environmental administrative proceedings, of which 131 were initiated before 2013, and 23 during 2013. During 2013, 12 proceedings were concluded, in two of them we were subject to monetary fines. The largest fine imposed in 2013 amounted to Ps\$76,114,350, being confirmed by the authority after an appeal filed by the Company. It is not possible for us to determine whether the pending proceedings could have a material effect on Ecopetrol.

# **Environmental Practices**

During 2013, we continued the implementation of our environmental strategy in order to meet the company's environmental challenges, ensure high environmental standards in operations and projects and continue contributing to corporate sustainability in environmental management. Our environmental strategy has four strategic focuses: environmental viability, operational excellence, environmental water management and proactive environmental management. During 2013, we invested Ps\$1,312 billion in environmental programs in order to strengthen environmental management and optimize environmental compliance. These investments include those made through contracts with our business partners in the amount of Ps\$105.6 billion. Such programs include:

- Environmental Viability. This program aims to coordinate the social and environmental aspects of the company's projects and operations. During 2013 the environmental licensing and permitting process was defined and the implementation phase started; this process aims to guarantee the environmental and social viability strategy for the execution of projects and for the company's operation. In 2013, we also continued to strengthen our relationships with the national and regional authorities in order to obtain the environmental permits and licenses required for our projects and operations.
- Environmental Legal Compliance. The purpose of this program is to guarantee knowledge of, assessment of, disclosure pursuant to and compliance with all laws, regulations and requirements imposed by the Ministry of Environmental and Sustainable Development, by the National Authority of Environmental Licenses and other environmental authorities.
- Contingency Planning. In 2013 we implemented new guidelines for emergency management, which detailed preparations and responses to emergencies arising from loss of stored hydrocarbons and hazardous substances, for events caused by natural causes and for operational emergencies. Every organization's area follows an emergency preparedness plan according to these new requirements, which was implemented during the year by reviewing the already-implemented plans and available resources, socialization, communication outreach, training and development exercises. Regular meetings have been established to track the implementation of control preparedness activities in those areas.
- *Eco-Efficiency*. This program is designed to minimize the environmental impacts resulting from our (1) use of natural resources through activities such as water uptake and forest exploitation and (2) waste generation through liquid emissions and the creation of hazardous waste. In 2013, nine incentives were implemented for conservation and efficient use of water in the operational areas in order to reduce consumption and the amount of water discharged. The Paramo facility of Transport and Logistic Vice presidency reached zero liquid discharge. Also in this year, the amount of reinjected water increased by 26% compared to 2012. Regarding solid waste, recycling activities increased by 15% from the past year, decreasing the amounts of waste going to landfills.



- *Biodiversity*. This program implements initiatives to preserve endangered species and ecosystems in areas where our activities have strong influence. In 2013, we invested Ps\$19.9 billion to develop projects related to biodiversity.
- *Climate Change.* We have designed a climate change strategy to guide, plan, define and execute our actions towards mitigating the effects of climate change and our participation in the elaboration of local and international climate change policies. In this context, we have entered into technical cooperation agreements with different parties, such as the U.S. Environmental Protection Agency under the Global Methane Initiative, and the Petroleum Technology Alliance of Canada under the energy efficiency program. The principal objectives of the strategy are: (1) a low carbon emission operation, and (2) the reduction of operations and facilities' vulnerability to climate change effects through the implementation of 11 action lines, grouped into four strategic areas (mitigation, vulnerability and adaptation, research and technology and involvement in policy drafting). In 2013, 11 projects of processes optimization, energy efficiency and gas exploitation were implemented, representing a decrease during one operational year of 215,314 tons of carbon dioxide, and seven reforestation and avoided deforestation projects that will be executed during the next three years were co-financed in several Colombian regions.

# **Energy Projects**

We have been undertaking significant efforts to make efficient and rational use of energy resources in our production processes, reducing consumption, costs and carbon dioxide emissions. In line with the 2012 update of our Strategic Plan, energy issues have taken on special relevance. These issues include energy use, which encompasses the concept of integral energy solutions focused on efficiency, reliability and optimization, and the energy diversification. Our 2013 energy efficiency program Integral System of Energy Management was completed for the pipeline Puerto Salgar-Mansilla. The approximate energy savings totaled 337,464 kwh per month, equivalent to US\$40,000 and 52.9 tons of  $CO_2$  per month. In 2014, we will continue our efforts in these matters to develop the production business baseline measurement in energy efficiency, which we expect will result in a 10% reduction in energy consumption. Additionally, we finished the feasibility studies of potential pipeline energy recovery at our pumping stations in Vasconia and La Belleza. We expect to develop this idea through CENIT in 2014.

In line with our initiatives to diversify the energy resources we use, we finished two studies during 2013 on the use of water, solar and wind resources. The first one, regarding Small Hydraulic Plants (PCH - Pequeñas Centrales Hidráulicas) attempts to identify water resources with enough generation potential to supply the demand of our operations in the South Region. The second aims to measure 13 operation areas to determine which of them have adequate conditions to implement applications of solar and eolic resources that could (1) have a positive impact on emissions reduction, (2) provide energy solutions to reduce consumption and (3) have economic feasibility.

- Potential Pipeline Energy Recovery. The project is currently under analysis. Our analyses of energy-use optimization, carbon footprint reduction, and system-reliability improvement analysis in the Vasconia pumping station were concluded in April 2013.
- Solar Wind Energy Potential. We achieved two important goals in 2013. We completed the collection of measures of 12 months' radiation and wind speed, relevant information to identify six locations potentially well suited for the development of solar-energy projects. In November 2013, the refinery of Barrancabermeja began to develop the stages of a solar generation project.
- Small Hydroelectric Plant (SHP). We have developed two studies in the southern region of Colombia in order to determine the economic and technical feasibility of pursuing hydroelectric projects near identified water resources.



# Contingency Plans and Environmental Remediation

All of Ecopetrol's areas have preparedness and emergency response plans for emergencies caused by loss of contained hydrocarbons, in accordance with legal requirements and following the new internal guidelines for emergency management. In addition, we comply with Decree 321 of 1999 and the National Contingency Plan, which are a set of guidelines that must be followed by oil and gas companies in Colombia to prevent, and react in case of, operational events that could impact the environment.

These plans incorporate management measures for oil spills and harmful substances, and have been developed based on the identification of risk scenarios, the estimated consequences of these events and the definition of strategies to follow in each type of scenario.

The procedures for emergency plans define actions to be taken in areas of process, human settlements, protected areas, water catchment sites, aquifers and environmental areas according to the type of environment involved.

Response measures include procedures for oil spill control and procedures for the safety of personnel involved in the control actions and communities. The procedures define response actions in order to protect health, safety and the environment, prevent oil spills and to mitigate environmental impacts.

The plans have procedures for process areas beyond the facilities. In external areas spill response procedures apply for marine and inland areas. These control procedures involve actions for containment and recovery of spilled product, and cleaning and recovery of affected areas. Plans call for mechanical recovery techniques using containment equipment, recovery, temporary storage and waste transport. The plans also call for equipment and supplies to treat spillage with dispersant products, sorbents, adsorbents and resources required for the washing, cleaning and treatment of contaminated soils.

For offshore joint ventures, the operator partner has the responsibility of designing and implementing remediation plans and procedures to deal with operational emergencies in accordance with best practices and local environmental regulations. These plans cover emergency tier 1 and in some cases tier 2, depending on the distance from the coast, and if the emergency happens at tiers 2 and 3 or in any way exceeds its response capacity, the response would have the support of the foundation ground response.

Emergency plans include recovery procedures for the affected areas, which are defined in a remediation plan agreed with the environmental and territorial authority. This agreement includes recovery actions for soils affected by spills, and monitoring of these areas to ensure that the affected areas are returned to their initial state.

Emergency plans cover post-emergency activities should they become necessary, such as extracting infiltrated product from soils, cleaning the affected area, recovery of soils and water bodies, monitoring, and compensation.

The post-emergency activities will be based in part on the findings of a damage assessment of the area that includes the participation of stakeholders, other organizations and the community. This interdisciplinary group defines the actions necessary for recovery of the affected area in the short, medium and long term.

The techniques consider the particular requirements of the environmentally sensitive area, using pre-established procedures in the emergency plan. All plans have identified environmentally sensitive areas. These areas also classified by type and criticality levels to establish the parameters and also define the specific control technique for each one. In the process of identifying environmental areas, the recommended techniques for treatment of spills in each of these areas are also identified. The ranking of environmental areas is done by identifying the type of soil, vegetation, systems interaction, the local species, interaction with other ecosystems, and the local and regional importance of the area in terms of political and social relevance. The identification of these areas aims to cause the least impact resulting from recovery activities. Such recovery activities include the extraction of the product under the soil, the soil washing, and treatment of hydrocarbon, water and plant residues. These operating procedures are separate from the legal environmental requirements, techniques, technologies and practices recognized globally.



# Health, Safety and the Environment

We are devoted to improving our health, safety and environmental (HSE) practices. We have several programs in place to increase our industrial and process safety, minimize the number of accidents and minimize catastrophic incidents. The frequency of accidents taking place at our premises has declined significantly to 0.7 accidents per million hours worked in 2013 from 5.77 accidents per million hours worked in 2005. Additionally, since 2009 we have been working on a "Process Safety Management" (PSM) system aimed at the minimization of operational incidents, such as fire, explosion, loss of primary containment and multiple fatalities. Our PSM Strategy is to: first, define high-risk processes; second, prioritize intervention in high-risk processes; and third, apply all PSM elements in the prioritized high-risk processes.

We have made the following improvements in six main areas:

(1) culture and leadership: we have created online committees and established a management control structure for the control of HSE and PSM.

(2) HSE competency in our employees and contractors: we have focused on closing competency gaps for critical process safety positions and performed assessments of PSM factors during the planning and selection of contractors.

(3) safe design: we have taken an inventory of available documentation and have a plan to update documentation for all of our facilities, and we have created a risk analysis program for all facilities and priorities on critical ones.

(4) safe operation: we have implemented an operational discipline cycle for critical procedures and have identified critical equipment and spare parts for PSM.

(5) prevention of and response to emergencies: we have made available emergency plans in accordance with the major scenarios for critical facilities and processes, and performed emergency drills.

(6) performance and audits: we have changed from studying lagging indicators to including leading indicators with a focus on process safety.

In 2013, we recorded 34 environmental incidents; 27 were recorded in 2012 and 41 in 2011. Oil spills increased from 4,050 barrels in 2012 to 6,843 barrels in 2013. This increase was primarily due to a fuel spill in the Caño Limón Coveñas pipeline of 2,620 barrels, an oil spill in the Ayacucho Coveñas pipeline of 1,289 barrels and a fuel spill in the Salgar Mancilla pipeline of 950 barrels.

# Human Rights Initiatives

Ecopetrol has a strong commitment to the respect and promotion of human rights. During 2013 we updated our Human Rights Policy, adopting new international standards for business and human rights. This change was based on the adoption of an integrated and systemic management approach through the implementation of a human rights management system, which is based on the due diligence principle.

The updated document has two objectives:

(1) to ensure the congruence between the company performance and national and international human rights laws and also with voluntary international standards, and

(2) to generate value to the company and to society through the promotion of human rights.

The international standards adopted by Ecopetrol are the following: Guiding Principles on Business and Human Rights (the United Nations "Protect, Respect and Remedy" Framework), the Voluntary Principles on Security and Human Rights and the UN Global Compact's ten principles.

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Considering the due diligence principle and also the international standards, Ecopetrol has carried out a human rights risks assessment in order to prioritize certain actions to prevent and mitigate human rights impacts. Due to this assessment, Ecopetrol has focused its efforts on the following rights:

- right to life, liberty and personal security;
- right of association and collective bargaining;
- abolition of forced or compulsory labor;
- abolition of child labor;
- equality and non-discrimination at work;
- just, equitable, and satisfactory conditions of work;
- rights of ethnic groups; and
- collective rights and the environment.

Today, Ecopetrol maintains mechanisms to secure human rights (Human Rights Committee, Tactical Plan on Human Rights). One outstanding initiative in 2013 was the implementation of the Human Rights Monitoring System, which is in charge of monitoring the behavior of the human rights risks, in order to identify potential impacts that can be prevented or mitigated.

Ecopetrol's implementation of the Voluntary Principles in 2013 led us to conduct nine workshops that covered the seven regions where we operate. All of our security professionals and analysts assisted in reviewing fundamental notions of human rights and standards of care and strengthened their skills in implementing due diligence processes to identify, prevent, mitigate and address negative impacts on human rights while conducting security-related activities.

In addition, under the framework of our joint project with the Presidential Program on Integral Action Against Landmines to provide knowledge on risk assessment and management, safe practices and basic life support skills to company personnel and communities, we reached 509 people who actively participated in nine workshops around the country. This project was distinguished as a good practice at the First Regional Forum on Business and Human Rights in Latin America and the Caribbean, held in August of 2013 in Medellin, Colombia.

## Dow Jones Sustainability Index (DJSI)

In 2013, we continued to be listed on the Dow Jones Sustainability Index–World. This index tracks the financial performance of the leading sustainabilitydriven companies worldwide and is a reference used to assess corporate sustainability.

## Insurance

We have a clear and defined corporate policy based on risk financing guidelines that summarizes the Company's risk transference and retention alternatives and provides support and guidance for all the insurance-related issues of all of our affiliated and subsidiary companies.

There are two corporate insurance programs according to our core business operations, insured values, limits and other aspects.

In the text and tables below, we set forth our insurance programs and the companies covered, along with limits and coverage details.



*World-Wide Umbrella Program.* This insurance program provides coverage for downstream (assets and operations) of Ecopetrol S.A. and all of its affiliates and subsidiaries in excess of their local insurance programs, and also in excess of the "Global Energy Package" program, when applicable. Coverage includes all physical damage, sabotage and terrorism, general liability, directors and officers, crime and marine cargo. Physical damage and sabotage and terrorism coverages were designed to cover downstream operations, while general liability, directors and officers, crime and marine cargo coverages were designed to cover downstream operations.

	Limit (ee	l/agg(1))	Deduct	tible										
Policies	Onshore	Offshore	Onshore	Offshore	Ecopetrol			Ecopetrol						
		(US\$ ii	n million)		Downstream	Reficar	Proplico	Upstream	Equión	Hocol	America	Brazil(2)	ODL	Cenit
Property all risk	2,000	NA	5 - 10	N/A	x	x	x	NA	NA	NA	NA	NA	NA	NA
Sabotage and terrorism	600	NA	0.5	N/A	Х	х	х	NA	NA	NA	NA	NA	NA	NA
Third-party Liability	500	NA	1 – 5 (3)	NA	х	х	х	х	Х	Х	NA	NA	Х	х
Crime	50	NA	Various	NA	Х	Х	Х	Х	Х	Х	NA	NA	NA	Х
Directors and Officers	250	NA	Various	NA	Х	Х	х	х	Х	Х	Х	Х	NA	х
Cargo	250	NA	3% Dispatch	NA	х	Х	NA	Х	NA	х	NA	NA	NA	NA

(1) Eel: each and every loss. Agg: Aggregate.

(2) There are no insurable assets in Brazil

(3) US\$5M deductible for pollution liability only

*Global Energy Package.* This program provides coverage for upstream and midstream (assets and operations) of Ecopetrol's interests and all of its upstream affiliate and subsidiary companies, including all physical damage, sabotage and terrorism, general liability and control of wells.

	Limit (eel/agg(1)) Deductible		ictible								
Policies	Onshore	Offshore	Onshore	Offshore	Ecopetrol						
		(US\$ in m	uillion)		Upstream	Equión	Hocol	America	Brazil	ODL	Cenit
Property All Risk	400	400	.025	0.5	X	X	X	X	NA	X	X
Sabotage and terrorism	50	50	0.5	N/A	Х	Х	Х	NA	NA	Х	Х
Third-party Liability	NA	500	N/A	0.15	Х	NA	NA	Х	Х	NA	NA
Control of wells	25-250(2)	400	0.25	5	Х	Х	Х	Х	Х	NA	NA

(1) Eel: each and every loss. Agg: Aggregate.

(2) Drilling US\$250M / Production US\$25m

Our third-party liability insurance policies cover Ecopetrol, our subsidiaries and affiliates in excess of local underlying policy limits for claims made against them by third parties. Our commercial general liability, umbrella liability, and excess liability coverages will pay on behalf of or indemnify amounts for which an insured becomes legally obligated to pay, including damages in respect of bodily injury, property, pollution and product liability. Coverage of bodily injury and property damage is subject to coverage territory during the policy period.

We do not currently act as an operator in any offshore production operation, although we are involved in certain offshore joint ventures in Colombia, the U.S. Gulf Coast and Brazil, and we have exploration operations offshore of the Colombian Caribbean coast, which are operated by Ecopetrol. In Colombia, currently offshore production operations are carried out by Chevron. There are two platforms that produce liquefied petroleum gas. The Global Energy Package programs cover all of our interests.

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With respect to offshore operations in the U.S. Gulf Coast, Ecopetrol America Inc. is party to Operating Agreements, or OA, that include customary conditions and which contain similar terms and provisions to those in the Model Form of Offshore Deepwater Operating Agreement of the American Association of Professional Landmen (AAPL). In general, pursuant to these OAs, the obligations, duties, and liabilities of the contract parties are several, and not joint or collective, for all operations covered by the OAs. Liability for losses, damages, costs, expenses, or claims involving activities or operations under the OAs which are not covered by or in excess of the insurance carried for the joint account are borne by each contract party in proportion to its participating interest in the activity or operation out of which that liability arises, except when any damages result from a party's gross negligence or willful misconduct, in which case, such party is solely liable for such damages. The operators supervise the handling, conduct, and prosecution of all claims involving activities or operations under the respective OA or affecting the leases or the contract area covered thereunder. Finally, operators must obtain insurance as required by the OA which costs are charged to the joint account and must have HSE practices in place and comply with locally applicable HSE-related statutory requirements.

Ecopetrol Óleo e Gás do Brasil Ltda. and Ecopetrol del Perú are parties to Joint Operating Agreements (JOA) based on the Association of International Petroleum Negotiators (AIPN) model. Liability is generally the same as described for the OA above, with the following variations: if claims arise from third parties as part of a claim not involving an operator's gross negligence or willful misconduct, and the operator pays such claims, all parties must concur and reimburse such claim amounts. In certain contracts, all environmental damages are distributed according to the parties' participation interest, regardless of whether the damages were caused by an operator's gross negligence or willful misconduct. In certain cases, non-operators may intervene and directly verify compliance of the operator's HSE programs. Ecopetrol uses the same liability clauses in JOAs for offshore operations in Colombia, when Colombian laws do not govern such agreements.

# PROPERTY, PLANT AND EQUIPMENT

Under Colombian law, the Nation owns all crude oil and natural gas reserves within Colombia and we have certain rights to explore and produce those reserves in areas awarded by the ANH after public bidding. Most of our property, consisting of refineries and storage, production and transportation facilities, is located in Colombia. Our main assets consist of our wells, refining facilities and our pipelines. See "Item 4. Information on the Company—Overview by Business Segment—Reserves" for a description of our reserves, sources of crude oil and natural gas, main tangible assets and material plans for expansion and improvements in our facilities. See "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Use of Funds—Capital Expenditures" and "Item 4. Information on the Company—Transportation and Logistics."

# ITEM 4.A. Unresolved Staff Comments

None.

# ITEM 5. Operating and Financial Review and Prospects

The following discussion considers our financial results and prospects as well as factors that affect our consolidated results of operation under Colombian Government Entity GAAP, unless otherwise indicated.

## **Effects of Acquisitions**

Our most significant recent acquisitions are listed below, together with the effective date as of which each has been reflected in our financial statements. The following acquisition was funded mainly through cash on hand and cash flow from our operations.

• Offshore International Group Inc., or OIG (February 2009) – 50% ownership. OIG is incorporated in the United States and its main asset is Savía Perú, which carries out offshore exploration and production activities in Peru and has 7.6 million hectares of exploration and production areas. Savía Perú contributed with a gross production of approximately 6.1 thousand boepd in 2013.

- Ocensa (March 2009) 72.65% ownership. In January 2011, as a result of our acquisition of BP Exploration Company Limited, we indirectly acquired 51% of its interest in Ocensa, increasing our share in the company to 72.65%. With this acquisition we increased our participation in a key crude oil transport system in Colombia, which transports approximately 57.5% of total crude oil production that reaches the Coveñas export facilities. Prior to the acquisition of BP Exploration, in March 2009, we entered into an agreement with Enbridge Inc., a Canadian company, pursuant to which we acquired 100% of its stake in Ocensa, thereby increasing our interest in Ocensa from 35.3% to 60%. During 2013, we used, on average, approximately 98% of the total capacity of this system.
- Reficar (May 2009) 100% ownership. After increasing our participation in Reficar from 49 % to 100% in May 2009, we have continued to expand and modernize the Cartagena refinery, a process that we expect to complete in 2015. We believe this project, which is currently expected to involve US\$6.5 billion in total project cost, will allow us to transform heavy crude oil into more valuable products by increasing our conversion ratios, thereby improving our profitability.
- Hocol Petroleum Limited (May 2009) 100% ownership. The principal asset is Hocol, which has exploration and production activities in Colombia. This operation contributed to an increase in our hydrocarbon reserves and production in Colombia. In 2013, Hocol contributed a gross production of 21.4 thousand boepd.
- Equión Energía Limited (January 2011) 51% ownership. BP Exploration Company Limited sold its interests in Colombia, which we acquired together with Talisman Colombia Holdco Limited. The company was later renamed Equión Energía Limited. During 2013, Equión contributed gross production before royalties of 9.6 thousand bpd of crude oil and 42 mcfpd of natural gas.

For more information on our acquisitions, see "Item 4. Information on the Company."

#### **Factors Affecting our Operating Results**

Our operating results are affected mainly by international prices of crude oil, refined products and natural gas, sales volumes and product mix. Lower crude oil volumes can impact our operating results negatively, particularly with respect to the exploration and production segments of our business. This is because as export volumes of crude oil decrease so do revenues. Results from our refining activities are also affected by conversion ratios, utilization rates, refining capacity and operating costs, all of which affect our refining margins. Finally, changes in the value of foreign currencies, particularly the U.S. dollar against the Peso, have a significant effect on our financial statements.

# Sales Volumes and Prices

The results from the exploration and production segment depend on production levels and average local and international prices for crude oil and natural gas that we bring to market. Additionally, sales volumes are affected by the purchase of crude oil and natural gas that we make from our business partners, third parties and the ANH.

We sell crude oil mainly in the international market as exports. We also both process crude oil at the Barrancabermeja and Reficar refineries and sell refined products in local and international markets.

#### Local Sales and Prices

We have a number of crude oil and natural gas long-term supply contracts with local customers, including Reficar, gas-fired power plants and local natural gas distribution companies. Local sale prices are determined in accordance with existing regulations, contractual arrangements and the spot market linked to international benchmarks.



## **International Sales and Prices**

We export surpluses of crude oil and refined products only after our supply commitments with our refineries and local customers have been fulfilled.

During the past three years, we have significantly increased our international sales on a "delivered" basis to the Caribbean, Central America, United States and Asian markets, achieving an average growth that exceeds 10% per year. In 2013 our delivered sales reached 94 thousand bpd. The latter gives us more flexibility both in operational and commercial terms.

Our commercial strategy, which includes market diversification, focuses on placing our products in countries other than the U.S., such as China, India, Singapore and Spain. This diversification enlarges the number of international benchmarks that we use as a reference in our negotiations. We seek to use as benchmark reference prices in each region the prices the markets for which there is the most liquidity. In addition, we have started to replace volume from the Colombian supply chain by purchasing refined products from international suppliers and selling such products to clients in the foreign market.

# Gasoline and Diesel Price Differentials

For domestic sales of gasoline and diesel, we charge wholesalers of gasoline and diesel the domestic prices established by the Government. As part of revenues from the sales, we accrue the amount of any fuel price differential due pursuant to Law 1151 of 2007 as revenues and record an account receivable from the Government for the amount of the differential. See "Item 3. Key Information—Risk Factors—Risks related to our business."

The fuel price differential payment from the Ministry of Mines and Energy corresponding to the first three quarters of 2011 was paid in December 2011. The fuel price differential payment from the Ministry of Mines and Energy corresponding to the fourth quarter of 2011 was Ps\$571.8 billion and for the year ended of 2012 was Ps\$1,381.5 billion. In April 2013, the Ministry of Mines and Energy paid the corresponding amounts due to us for the fourth quarter of 2011 and first three quarters of 2012, amounting to Ps\$1,271.9 billion. The amount due to us, corresponding to the fourth quarter of 2012 and to the full year 2013, is equivalent to Ps\$1058.7 billion.

#### Exploration Costs

We account for exploratory drilling costs using the successful effort method whereby all costs associated with the exploration and drilling of productive wells are capitalized, while costs incurred in exploring and drilling of dry wells are expensed in the period in which the well is determined to be a dry well and accounted for under "operating expenses—studies and projects." Consequently, the number of exploratory wells we declared as dry negatively affects our results. As such, the significant expansion of our drilling program, which we are currently undertaking, will likely result in higher dry well expenses and may lead to material changes or volatility in our operating expenses.

## Royalties

We used to be required by law to pay in-kind a percentage of our production (crude oil and natural gas) to the ANH as royalties. Each production contract has its own royalty arrangement. In 1999, a modification to the royalty system established a sliding scale for royalty payments linked to the production level of crude oil and natural gas fields discovered after July 29, 1999, depending on whether the production is crude oil or natural gas, and on the quality of the crude oil produced. Since 2002, the royalty percentage has ranged from 8% for fields producing up to 5,000 bpd to 25% for fields producing in excess of 600 thousand bpd. Producing fields pay royalties in accordance with the applicable royalty rate at the time of the discovery.

Regarding gas royalties, that during 2013 ranged from 6.4% to 32%, pursuant to Decree 2100 of 2011, we entered into an agreement with the ANH under which we would no longer purchase natural gas received in-kind by the ANH as royalties and instead would commercialize the natural gas of those fields in which the producer did not decide to directly commercialize the royalties. The agreement with the ANH established that we would sell to third parties, on behalf of the ANH, the natural gas belonging to the government between 2012 and 2013. This agreement became effective in July 2012 and reduced the natural gas we purchased from the ANH and sold to third parties by approximately 100 gbtud during 2012.

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Beginning on January 1, 2014, the method of marketing the gas of royalties changed once again, pursuant to ANH Resolution 877 of 2013. Royalties generated by natural gas exploitation will be collected in cash by the ANH from natural gas producers, regardless of whether the producer has sold the gas, based on a formula linked to the applicable royalty rate. Therefore, we will no longer market this gas on behalf of the ANH.

# Purchases of Hydrocarbons from the ANH

We continue purchasing all crude oil delivered to the ANH by us and from third parties. We also purchase natural gas from minor fields not covered by the agreement with ANH described above. Prices are set forth in a contract between the ANH and us dated December 28, 2012, and a natural gas offer letter from ANH dated June 17, 2009. For crude oil, the purchase price is calculated according to a formula that includes our export sales prices (crudes and products), a quality adjustment for API gravity and sulfur content, the transportation rates from the wellhead to the Coveñas and Tumaco ports, the refining process cost and a marketing fee. We sell the physical product purchased from the ANH as part of our ordinary business. On December 31, 2013, this contract between the ANH and us as well as the natural gas offer letter was extended until December 31, 2014.

#### Import of Products for Transportation and Blending

We use naphtha to facilitate the transportation of crude oil through pipelines. During 2013, we increased the volume of imported naphtha to 18.5 million barrels from 14.5 million barrels in 2012. This growth reflects higher demand of the product, which represented a higher proportion of our production in 2013 compared with 2012.

In addition, in 2013 in order to meet local demand for diesel, we imported 17.0 million barrels of Ultra Low Sulfur Diesel, an increase of 5.5 million barrels from 2012 numbers. This increase reflects, in part, a reduction of Low Sulfur Diesel imports, in favor of imports of ultra low sulfur diesels, growth in local demand for diesel and lower domestic production of this product related to scheduled maintenance of topping plants in Barrancabermeja. Our variable costs are affected by available volumes of these products and their prices, which affects our operating results. We expect the modernization of the Reficar refinery to allow us to significantly reduce our imports of Ultra Low Sulfur Diesel.

## Purchases of Hydrocarbons

Our purchases of hydrocarbons are made in the ordinary course of business, and on terms comparable to those offered to private parties. We have established procurement policies and approval processes for purchases of products and services, which do not depend on whether the counterparties are stateowned entities.

# Effect of Taxes and Exchange Rate Variation on our Income

## Income Taxes

The Colombian Congress adopted Law 1607 of 2012, which introduces significant reforms to the Colombian tax system. In particular, the income tax rate was reduced from 33% to 25% starting in 2013 and the Equality Income Tax (*Impuesto de Renta para la Equidad* - CREE) was created with a rate of 9% from 2013 to 2015 and 8% starting in 2016. There are some differences between the treatment used to determine this tax and the one used to determine ordinary income tax. As a result, as of January 2013, our income is taxed at a rate of 34%. From 2008 until December 2012, the standard corporate rate in Colombia was 33%.

The tax effect of Law 1607 of 2012 on the Company is mainly reflected in the increase of 1% in the combined tax rate on income tax and CREE (33% - 2013 and 34% - 2014), equivalent to US\$105 million. The discount in payroll taxes resulting from the establishment of the CREE is only US\$2 million because the income of the majority of employees in the company exceeds the threshold established in order to obtain the benefit.

# **Exchange Rate Variation**

In compliance with Colombian regulations, our results are reported in Pesos, and we maintain our financial books and records in Pesos. 99% of our revenues for local sales and exports of crude oil, natural gas and refined products are sold at prices referenced to benchmarks quoted in U.S. dollars.

During 2012 and 2011, the Peso appreciated on average 2.7%, and 2.6%, respectively, against the U.S. dollar. During 2013, in contrast, the Peso depreciated against the U.S. dollar on average by 3.9%. An appreciation of the Peso has a negative impact on our income statements because our revenues from exports of crude oil, natural gas and refined products are reduced in Pesos. Imported goods and contracted services expressed in U.S. dollars will also be lower than those expressed in Pesos, but on balance, our net income in Pesos tends to decline when the Peso appreciates, other factors being equal. Conversely, when the Peso depreciates against the U.S. dollar, our reported revenues, costs related to imported goods and services, interest costs, and net income, all tend to increase. In 2013 Ecopetrol S.A. raised US\$2,500 million through bond issuance and US\$288 million through US Eximbank facilities. Reficar raised US\$616 million through Export Credit Agencies facilities. In 2012, we did not incur any U.S. dollar-denominated debt. In 2011, we raised US\$3,500 million and US\$80 million through our subsidiaries Reficar and Propilco, respectively.

## **New Accounting Policies**

# Colombian Government Entity GAAP

There were no significant new accounting standards effective in the year 2013 impacting the Company pursuant to Colombian Government Entity GAAP.

# U.S. GAAP

In February 2013, FASB issued ASU No. 2013-02 Other Comprehensive Income (ASC 220), effective prospectively for reporting periods beginning after December 15, 2012. The ASU requires an entity to disclose any reclassifications out of other comprehensive income if the amount is required under U.S. GAAP to be reclassified in their entirety in the same reporting period. For other amounts that are not required to be reclassified in their entirety to net income in the same reporting period an entity is required to cross-reference other disclosures that provide additional detail about those amounts. Ecopetrol adopted this ASU from this reporting period; see Note 3 to our consolidated financial statements. No material effects arose from the adoption. See Note 3 to our consolidated financial statements.

## Transition to IFRS

For more information on our transition to IFRS, please see Note 1 to our consolidated financial statements.

## **Critical Accounting Policies and Estimates**

The following discussion sets forth our critical accounting policies. Critical accounting policies are those policies that require us to exercise judgment or involve a higher degree of complexity in the application of the accounting policies that currently affect our financial condition and results of operations. The accounting estimates we make in these contexts require us to calculate variables and make assumptions about matters that are highly uncertain. In each case, if we had made other estimates, or if changes in the estimates occur from period to period, our financial condition and results of operations could be materially affected. This information should be read together with Note 1 to our consolidated financial statements for a summary of the principal accounting policies and practices applicable to us. 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.

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# Oil and Gas Reserves

When accounting for our reserves we use the internationally recognized "successful efforts" method of accounting for investments in exploration and production areas. These investments are amortized using the technical units of production method on the basis of proved developed reserves by field. The reserves are based on technical studies prepared internally. Internally estimated reserves are then submitted to an external audit process, which is carried out by our External Engineers. According to our corporate policy, we report the reserves values obtained from the External Engineers. The Reserves Director consolidates the results and presents them to the Reserves Committee, whose members are the Chief Financial Officer, the Exploration and Production Executive Vice-President and the Vice-President of Strategy. Results are presented to the Audit Committee of the Board of Directors and finally approved by the Board of Directors.

Reserves classifications used in this report are in accordance with the reserves definitions of Rules 4-10(a) (1)–(32) of Regulation S–X of the SEC. Reserves are judged to be economically viable in future years from known reservoirs if, under existing economic and operating conditions and assuming the continuation of current regulatory practices using conventional production methods and equipment, there is reasonable certainty that they will be recoverable.

The Company's proved reserves as of December 31, 2013 are based on the SEC average price methodology for U.S. GAAP purposes, which mirrors the average price methodology used by the Company in Colombia during this period.

The estimation of hydrocarbon reserves is subject to several uncertainties inherent to the determination of proved reserves, production recovery rates, the timelines with which investments are made to develop the reservoirs and the degree of maturity of the fields.

Crude oil prices have traditionally fluctuated as a result of a variety of factors such as changes in international prices of natural gas and refined products, long-term changes in the demand for crude oil, natural gas and refined products, regulatory changes, inventory levels, increase in the cost of capital, economic conditions, development of new technologies, economic and political events, and local and global demand and supply. Revisions to proved reserves estimates of crude oil and gas and the effect of such price variations are presented in Note 35 to our consolidated financial statements. Changes in the crude oil price may affect our estimates in the future. A decrease in our estimated proved reserves due to pricing may result in the impairment of oil and gas properties.

The calculation of units-of-production depreciation and depletion is a critical accounting estimate that measures the depreciation and depletion of upstream assets. The units of production are equal to the ratio of actual volumes produced to total proved developed reserves (those proved reserves recoverable through existing wells with existing equipment and operating methods) and applied to our asset cost.

Proved oil and gas properties held and used by us are reviewed for impairment whenever events or circumstances indicate that the carrying amounts may not be recoverable. Impairments are measured by the amount by which the carrying value exceeds its fair value. Any impairment tests that we perform make use of our long-term price assumptions for the crude oil and natural gas markets and petroleum products.

Volumes produced and asset costs are known, while proved reserves have a reasonable certainty of recoverability and are based on estimates that are subject to some variability. The impact of changes in estimated proved reserves is treated prospectively by depreciating the remaining book value of the assets over the future expected production, affecting the following year's net income.

# Suspended Exploratory Well Costs

We capitalize exploratory well costs when the well has found a sufficient quantity of reserves to justify its completion as a producing well and the Company is making sufficient progress assessing the reserves and the economic and operating viability of the project. Exploratory well costs that do not meet these criteria are charged as an expense. The facts and circumstances that support continued capitalization of suspended wells as of year-end 2013 are disclosed in Note 35 to our consolidated financial statements.

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# Impairment of Long-Lived Assets

During impairment testing under U.S. GAAP, our management must make reasonable and supportable assumptions and estimates with respect to, among other factors, (1) the market value of reserves, (2) oil fields' production profiles and future production of refined and chemical products, (3) future investments, taxes and costs, (4) future capital expenditures and useful life for properties and (5) future prices. As such, any change in the variables used to prepare such assumptions and estimates may have a significant effect on the impairment tests.

## Financial Derivative Instruments

We may enter into hedging agreements to reduce our exposure to the fluctuations of international crude oil and products prices. Under Colombian Government Entity GAAP, amounts paid and income received under hedging operations is recognized as financial income/expense. We are not permitted to enter into hedging contracts for speculative purposes according to the internal hedging guidelines issued by our Board of Directors.

Under Colombian Government Entity GAAP, our estimates of the value of hedges made throughout the year are based on the spot prices for the date the hedge was entered into, subject to market variations according to the regulation and methodology established by the Superintendency of Finance.

As of December 31, 2013, we did not have any such derivatives.

## Pension Plans and Other Benefits

By virtue of Legislative Act 01 of 2005, enacted by Congress, the pension regimes excluded from the General Social Security System in Colombia expired on July 31, 2010. In accordance with provisions therein, the workers entitled to pensions were those workers who met the age and continuous or discontinuous service time requirements of the law, the Collective Bargaining Agreement in force and/or Agreement 01 of 1977, prior to August 1, 2010. Other workers who were not covered by those agreements must mandatorily be affiliated with the General Pension System. The agency responsible for paying each worker's pension is the pension administrator chosen by the worker (either the governmental institution Colpensiones—formerly the Social Security Institute—or a private pension fund).

The determination of the expense, liability and adjustments in memorandum accounts relating to our pension and other retirement benefits requires us to use judgment in the determination of actuarial assumptions. These include the number of active employees with indefinite term contracts, retirees and their heirs, pension benefits, healthcare and education expenses, the number of temporary employees who will remain with us until retirement, voluntary retirement plans and pension bonuses. The calculation of retirement bonds posted by us to meet our pension obligations is regulated by Decrees 1748 of 1995, 1474 of 1997 and 876 of 1998, as well as Law 100 of 1993 and its regulatory decree. See Note 1 to our consolidated financial statements.

These actuarial assumptions include estimates of future mortality, withdrawal, changes in compensation and discount rate to reflect the time value of money as well as the rate of return on pension bonds and other plan assets. These assumptions are reviewed annually and may differ materially from actual results due to changing market and economic conditions, regulatory events, judicial rulings, higher or lower withdrawal rates or longer or shorter life spans of participants.

Actuarial gains and losses, a result of differences between estimates and actual calculations and differences between Colombian Government Entity GAAP and U.S. GAAP are disclosed in Note 35 to our consolidated financial statements. Changes in interest rates and amendments to plan conditions have affected prior estimates. We believe that the assumptions used in recording our obligations under the plans are reasonable based on our experience and market conditions. See Note 35 of our consolidated financial statements for a sensitivity analysis.

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# Litigation and Tax Assessments

We are subject to claims for substantial amounts, regulatory and arbitration proceedings, tax assessments and other claims arising in the normal course of business. Management and legal counsel evaluate these situations based on their nature, the likelihood that they materialize, and the amounts involved, to decide on any changes to the amounts accrued and/or disclosed. This analysis includes current legal proceedings brought against us and claims not yet initiated. In accordance with management's evaluation and guidance provided by Colombian Government Entity GAAP, we created provisions to meet these costs when liability is probable and reasonable estimates of the liability can be made. As of December 31, 2013, we had a provision of Ps\$541,847 million for litigation contingencies. We also maintain insurance policies to cover specific operational risks and asset protection.

Estimates are based on legal counsel's evaluation of the cases and management's judgment. In the past, our estimates have been accurate and have not varied substantially compared with final judgments. We believe that payments required to settle the amounts related to the claims, in case of loss, will not vary significantly from the estimated costs, and thus will not have a material adverse effect on our financial statements taken as a whole. Litigation and tax assessment differences between Colombian Government Entity GAAP and U.S. GAAP are disclosed in Note 35 to our consolidated financial statements.

Income taxes are accounted for under the assets and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the carrying amounts of existing assets and liabilities in our financial statements and their respective tax base. Deferred taxes on assets and liabilities are calculated based on statutory tax rates that we believe will be applied to our taxable income during the years in which temporary differences between the carrying amounts are expected to be recovered.

#### Abandonment of Fields

Upon completion of our work at a production site, we are required by law to remove equipment and restore disturbed land or seabeds. To estimate the cost of this obligation, we include plugging costs and the costs of abandonment of wells, dismantling of facilities and environmental recovery of the areas and wells. Changes resulting from new estimates of the liability for abandonment can occur as a result of changes in economic conditions. We accrue the estimated discounted costs of dismantling and removing these facilities at the time of installation of the assets.

We use economic factors from different sources and develop our own internal estimates of future inflation rates and discount rates. There have not been significant disparities between estimates and asset retirement costs paid. We believe that the assumptions used in recording our asset retirement costs and obligations are reasonable based on our experience and market conditions. The related liability is estimated in local currency and does not require adjustment for a difference in exchange rates at the end of each year as a greater or lesser value of assets.

Differences between Colombian Government Entity GAAP and U.S. GAAP in the accounting for costs of abandoning fields are disclosed in Note 35 to our consolidated financial statements.

## Recognition and Measurement of Assets Recognized and Liabilities Assumed upon Business Combinations

Under U.S. GAAP, we account for businesses acquired using the purchase method of accounting, which requires that the assets acquired and liabilities assumed be recorded at the date of acquisition at their respective fair values. Under Colombian Government Entity GAAP, by contrast, the assets acquired and liabilities assumed are recognized at book value. The application of the purchase method requires certain estimates and assumptions of the fair values of the acquired intangible assets, property, plant and equipment as well as the liabilities assumed at the date of the acquisition. The same is true of the useful lives of the acquired intangible assets, property, plant and equipment. The judgments made in the context of the purchase price allocation can materially impact our future results of operations. Accordingly, for significant acquisitions, we obtain assistance from third-party valuation specialists. The valuations are based on information available at the acquisition date and different methodologies are used for the calculation of intangibles.

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## Goodwill

Under U.S. GAAP, we test goodwill for impairment at least annually using a two-step process that begins with an estimate of the fair value of a reporting unit. The first step is a screen for potential impairment and the second step measures the amount of impairment, if any. However, if certain criteria are met, the requirement to test goodwill for impairment annually can be satisfied without a remeasurement of the fair value of a reporting unit. Fair value is determined by reference to market value, if available, or by a qualified evaluator or pricing model. Determination of a fair value by a qualified evaluator or pricing model requires management to make assumptions and use estimates. Management believes that the assumptions and estimates used are reasonable and supportable in the existing market environment and commensurate with the risk profile of the assets valued. However, different assumptions and estimates could be used which would lead to different results. The valuation models used to determine the fair value of these companies are sensitive to changes in the underlying assumptions. For example, the prices and volumes of product sales to be achieved and the prices which will be paid for the purchase of raw materials are assumptions which may vary in the future. Adverse changes in any of these assumptions could lead us to record a goodwill impairment charge. See Notes 13 and 35 to our consolidated financial statements.

Under Colombian Government Entity GAAP, goodwill corresponds to the difference between the acquisition price and the book value of the acquired company. This amount is amortized during the period in which the Company expects to receive future benefits. In addition, it is subject to an annual impairment test, applying the fair value methodology established by U.S. GAAP.

# **OPERATING RESULTS**

The following discussion is based on information contained in our audited consolidated financial statements and should be read in conjunction therewith. Our consolidated financial statements have been prepared in accordance with Colombian Government Entity GAAP, which differs in certain significant respects from U.S. GAAP. See Note 35 to our consolidated financial statements for a description of the principal differences.

Certain line items from our consolidated financial statements as of December 31, 2012 and 2011 related to the presentation and the Consolidated Statement of Financial, Economic, Social and Environmental Activities have been reclassified in order to make the presentation of such financial statements comparable to that of our financial statements as of December 31, 2013. The principal reclassifications were under operational expenses, particularly (1) amounts for inventory, property, plant and equipment, litigation and accounts receivable and (2) equity tax.

# Results of Operations for the Year Ended December 31, 2013, Compared to the Year Ended December 31, 2012, and Compared to the Year Ended December 31, 2011

The following table sets forth components of our income statement for the years ended December 31, 2013, 2012 and 2011.

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	For the Year ended December 31,		2013/2012 % change	For the Year ended December 31, 2011	2012/2011 % change
	2013 (Pesos in n	2012 nillions)		(Pesos in millions)	
Revenues	, , , , , , , , , , , , , , , , , , ,	,			
Total Revenue	70,428,714	68,852,002	2%	65,967,514	4%
Cost of Sales	42,554,282	40,535,508	5%	36,704,584	10%
Gross Profit	27,874,432	28,316,494	(2)%	29,262,930	(3)%
Operating Expenses	6,039,703	4,973,590	21%	4,218,914	18%
Operating Income	21,834,729	23,342,904	(6)%	25,044,016	(7)%
Non-operating income (expenses)	47,478	(1,011,203)	n.m.%	(1,402,584)	(28)%
Income before income tax	21,882,207	22,331,701	(2)%	23,641,432	(6)%
Income tax	8,088,838	7,133,395	13%	7,955,721	(10)%
Non-controlling interest	686,866	419,359	64%	233,377	80%
Net Income	13,106,503	14,778,947	(11)%	15,452,334	(4)%

## Total Revenues — Consolidated

## Methodology

In this section, including the table below, all of our financial information is presented by segment as follows:

- *Exploration and Production* includes our crude oil and natural gas exploration and production and natural gas transportation activities. Revenue is derived from inter-company, exports, local and third-party sales. Costs and expenses for this segment include those costs incurred by us from the production field to the end customer. This segment also includes purchase of crude oil and gas from ANH and other third parties for resale. Operating expenses include all exploration costs that are not capitalized.
- *Refining and Petrochemicals* includes our refining activities. Revenue is derived from inter-company, exports, local and third-party sales and corresponds to sales of products processed in our refineries and our downstream subsidiaries such as motor fuels, fuel oils and petrochemicals at market prices. This segment also includes other services sold to third-parties.
- Transportation and Logistics includes our sales and costs associated with our crude oil pipelines and other transportation activities in relation to crude oil and refined products.

Our reporting segments have changed since the first quarter of 2013, when we eliminated the marketing and supply segment. This change was made because of the marginal role of the segment with respect to our core business and the support role of marketing and supply to other segments, making it possible to attribute marketing and supply to the other segments. Therefore, the activities of marketing and supply have been reclassified to exploration and production, refining and transportation segments for the years 2012 and 2011.

We use the following criteria to analyze our financial information by business segment: (1) third party sales are made at market prices by each segment according to their ownership of the products or services sold; (2) each segment bears costs and expenses incurred for production and marketing of its products, the corresponding administrative expenses and those expenses related to non-operational transactions related to its activity; (3) transactions between segments are accounted for as if each segment were a separate entity and prices between segments are determined by reference to those that could be obtained in transactions with third parties. See the income statement by segment in note 35 of our consolidated financial statements.



The following table sets forth our principal sources of revenue by business segment for the years ended December 31, 2013, 2012 and 2011.

	For the Yea December 2013 (Pesos in n	er 31, 2012	2013/2012% 	For the Year ended December 31, 2011 (Pesos in millions)	2012/2011 % change
Exploration and Production Segment:	(resos in i	mmons)			
Crude oil:					
Local sales	1,459,410	842,975	73.1%	460,591	83.0%
Export sales <sup>(1)</sup>	40,505,921	41,129,261	(1.5)%	38.830.368	5.9%
Total sales of crude oil	41,965,331	41,972,236	0.0%	39,290,959	6.8%
Natural gas:					
Local sales	1,263,192	1,114,876	13.3%	1,217,288	(8.4)%
Other income	274,144	278,013	(1.4)%	210,232	32.2%
Export sales	620,077	606,011	2.3%	554,540	9.3%
Total sales of natural gas	2,157,412	1,998,900	7.9%	1,982,060	0.8%
Other income from production segment <sup>(2)</sup>	254,471	488,743	(47.9)%	238,649	104.8%
Total exploration and production segment sales	44,377,215	44,459,879	(0.2)%	41,511,668	7.1%
Exploration and production segment eliminations in consolidation	(4,782,810)	(5,389,573)	(11.3)%	(5,524,481)	(2.4)%
Total exploration and production segment sales to third parties	39,594,405	39,070,306	1.3%	35,987,187	8.6%
Refining and Petrochemical segment:					
Refined Products:					
Local sales <sup>(3)</sup>	20,691,650	20,156,511	2.7%	19,928,999	1.1%
Sales of refined products allocated to our production segment <sup>(4)</sup>	(197,388)	(279,072)	(29.3)%	(152,016)	83.6%
Other income from local sales of services of Refining and Petrochemical Segment	202,323	52,584	284.8%	27,468	91.4%
Export sales	7,762,069	8,016,685	(3.2)%	8,582,545	(6.6)%
Total refining and Petrochemicals segment sales:	28,458,654	27,946,708	1.8%	28,386,996	(1.6)%
Refining segment eliminations in consolidation	(136,479)	(88,389)	54.4%	(114,922)	(23.1)%
Total Refining segment sales to third parties	28,322,175	27,858,319	1.7%	28,272,074	(1.5)%
Transportation and Logistics segment:					
Transportation sales <sup>(5)</sup>	5,573,107	2,431,938	129.2%	2,132,508	14.0%
Other income transportation services	229,509	461,029	(50.2)%	412,010	11.9%
Total transportation sales	5,802,616	2,892,967	100.6%	2,544,518	13.7%
Transportation and Logistics segment eliminations in consolidation <sup>(5)</sup>	(3,290,482)	(969,590)	239.4%	(836,265)	15.9%
Total Transportation and Logistics segment sales to third parties	2,512,134	1,923,377	30.6%	1,708,253	12.6%
Total sales <sup>(6)</sup>	70,428,714	68,852,002	2.3%	65,967,514	4.4%

n.m. = Not meaningful.

(2) Corresponds to sales of refined products and services allocated to our exploration and production segment.

(3) Includes entitlements to gasoline and diesel price differential reimbursements by the Nation amounting to Ps\$938.7 billion for 2013, Ps\$809.7 billion for 2012 and Ps\$2,251 billion for 2011.

(4) Corresponds to sales of refined products from our Apiay and Orito refineries allocated to our exploration and production segment.

- (5) The increase in sales in 2013 was due to the change from a cost- to profit-center model for Oleoducto Central (Ocensa) and Oleoducto de Colombia (ODC). Under the new model, the pipelines charge market tariffs to all customers, including our other segments, as required by regulations promulgated by the Ministry of Mines and Energy.
- (6) Because of the elimination of the marketing and supply segment, certain figures for the years ended December 31, 2012 and 2011 were reclassified so that they are comparable with those for the year ended December 31, 2013.

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<sup>(1)</sup> Crude oil sales to Reficar are accounted for as export sales because of Reficar's operations in the Free Trade Zone. These sales, which are inter company sales, are eliminated in consolidation.

In 2013, total revenues increased by 2.3% as compared with 2012, mainly due to (1) an increase of 1.3% in revenues from sales of crude and gas sales to third parties, which in turn resulted from higher local sales of crude oil and natural gas that more than offset a small decline in crude oil exports and lower average prices in U.S. dollars; (2) higher local sales of gasolines and medium distillates due to an increase in local demand for these products and (3) a 30.6% increase in the transportation segment sales to third parties due to the change in the business models of ODC and Ocensa from cost to profit centers. Revenues were also positively affected by the depreciation of Peso against U.S. dollar in a magnitude different than the 3.9% average depreciation of the Peso against the U.S. dollar in 2013 because our export sales were not evenly spread throughout the year. In 2012, total revenues increased by 4.4% when compared with 2011 mainly due to higher prices of the crude oil basket, supported primarily by the higher Brent and Maya benchmarks prices.

The following table sets forth our total export and local sales of crude oil, natural gas and refined products for the years ended December 31, 2013, 2012 and 2011.

	For the Year ended December 31,		2013/2012	For the Year ended December 31,	2012/2011
	2013	2012	% change	2011	% change
Crude oil:		<u> </u>	0		
Local sales (barrels)	9,925,751	4,621,107	114.8%	1,783,807	159.1%
Export sales (barrels)	190,106,364	192,216,579	(1.1)%	181,504,337	5.9%
Average price per local barrel (in U.S. dollars) <sup>(1)</sup>	61.73	68.95	(10.5)%	69.90	(1.4)%
Average price per export barrel (in U.S. dollars) <sup>(2)</sup>	100.79	103.93	(3.0)%	99.58	4.4%
Weighted average price per local and export barrel (in U.S. dollars)	98.85	103.11	(4.1)%	99.30	3.8%
Natural gas: <sup>(3)</sup>					
Local sales (barrels equivalent)	27,277,037	24,702,562	10.4%	25,981,990	(4.9)%
Export sales (barrels equivalent)	9,976,846	9,924,841	0.5%	10,136,937	$(2.1)^{\%}(4)$
Average local price (barrels) (in U.S. dollars) <sup>(1)</sup>	24.62	24.96	(1.4)%	25.25	(1.2)%
Average export price (barrels) (in U.S. dollars) <sup>(2)</sup>	33.55	34.51	(2.8)%	29.31	17.7%(4)
Refined products:					
Product local sales (barrels)	94,683,145	92,890,866	1.9%	90,900,442	2.2%
Export sales (barrels)	41,997,257	41,880,845	0.3%	40,775,850	2.7%
Average local price per barrel (U.S. dollars) <sup>(1)</sup>	116.92	118.83	(1.6)%	116.08	2.4%
Average export price per barrel (U.S. dollars) <sup>(2)</sup>	99.10	107.88	(8.1)%	112.37	(4.0)%

(1) Corresponds to average price per local barrel translated at an average exchange rate of Ps\$1,869.10 to US\$1.00 for 2013. Ps\$1,798.23 to US\$1.00 for 2012 and Ps\$1,848.17 to US\$1.00 for 2011.

(2) Corresponds to the average of the actual prices at which we sold our products in the international markets.

(3) As of the end of 2013, we began reporting the gas volume sales in barrels equivalent, in order to provide consistency within the different figures during the year that vary in terms of the relationship between thermal units and volumes in each field. For year 2013, conversion factors oscillated in the range of 5.6 and 7.0 mbtu per barrel. For years 2012 and 2011, the figures were converted using a conversion factor of 5.9 mbtu per barrel.

(4) The difference with respect to the variation reported in our Form 20-F for the 2012 fiscal year, relates to the inclusion of natural gas sales from the Free Trade Zone in 2012, which were not previously reflected in export sales.

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# Cost and Expenses — Consolidated

The following table sets forth elements of our cost of sales, operating expenses and operating income for the years ended December 31, 2013, 2012 and 2011.

	For the Yes Decemb		2013/2012	For the Year ended December 31,	2012/2011
	2013	2013 2012		2011	% change
	(Pesos in n	nillions)	(P		
Cost of sales	42,554,282	40,535,508	5%	36,704,584	10%
Operating expenses	6,039,703	4,973,590	21%	4,218,914	18%
Operating Income	21,834,729	23,342,904	(6)%	25,044,016	(7)%

# Cost of Sales — Consolidated

Our cost of sales was affected by the main factors that are decribed below. See Note 25 of our consolidated financial statements for more detail.

- Purchases of crude oil and gas from the ANH in 2013 decreased 9.7% to Ps\$7,808,844 million compared with 2012 as a result of (1) lower purchase prices which are indexed to our average export prices of both crude oil and gas and (2) a decrease in the volumes of gas purchased in line with the mandate signed with ANH in mid-2012. As a result of Decree 2100 of 2011, other companies are also able to purchase gas directly from the ANH. Since July 2012, in compliance with this Decree, and as a result of the agreement signed with ANH, Ecopetrol S.A. no longer purchases the total gas royalties from ANH, but only commercializes part of them. In 2012 purchases increased 7.4% to Ps\$8.646.762 million compared with 2011 mainly as a result of higher purchase prices and an increase in the volumes purchased, because of increased production of crude oil (and consequently royalties) in Colombia.
- Purchases of imported products in 2013 increased 25.6% to Ps\$11,862,265 million compared with 2012 and 6.9% in 2012 to Ps\$9,447,041 million compared with 2011, as a result of (1) higher volumes of naphtha purchased for blending with increasing heavy crude oil production, (2) higher volumes of products (mainly ultra low sulfur diesel) for blending with our local production to meet local environmental regulations regarding sulfur content in diesel and (3) higher purchases of performencials and industrial products, particularly polyethylene and lubricant bases, to fulfill our obligations under commercial agreements in the local market.
- Purchases of crude oil from third parties in 2013 decreased 19.4% to Ps\$5,805,854 million compared with 2012 mainly as a result of lower transportation availability for Ecopetrol S.A. in the Ocensa pipeline. In 2012 purchases increased 7.6% compared with 2011 to Ps\$7,207,707 million, mainly as a result of higher average prices and an increase in the volumes purchased.
- Services contracted with associations, which are pro rata expenses for our joint ventures, increased 13.0% in 2013 to Ps\$2,294,667 million compared with 2012, and 13.8% to Ps\$2,031,281 million in 2012 compared with 2011, mainly due to the growth in production. This increase resulted mainly from higher costs of subsoil maintenance and water treatment due to higher bottom sediment contained in crude oil.
- Maintenance costs increased 16.6% to Ps\$2,240,543 million compared with 2012, due to the integrity program for the reliability of transport infrastructure, which has been in the process of implementation since the second quarter of 2012 and will run until 2016. In addition, higher repair costs for pumping systems and higher maintenance costs for recovery of production after attacks on transportation infrastructure, also contributed to higher maintenance costs. Maintenance costs in 2012 increased 22.4% to Ps\$1,921,008 million compared with 2011, mainly due to the relocation and replacement of our transmission lines pursuant to our integrity program. Higher costs related to the repair and coating of pipes of existing wells as a result of the heavy rain season also contributed to the increase.

- Labor costs in 2013 increased 15.1% to Ps\$1,260,436 million from 2012, mainly due to a 10.2% growth in the number of employees, and an increase of 3.7% in their salaries. Labor costs increased by 9.4% to Ps\$1,095,495 million in 2012 as compared with 2011 as a result of a 10.6% increase in headcount of employees, due to an increase in our operations and projects.
- Depreciation costs decreased 3.1% to Ps\$1,828,228 million in 2013 as a result of a revised useful life of transportation assets. In 2012, depreciation costs increased 4.3% to Ps\$1,886,620 as compared with 2011, mainly due to additional investments in transportation systems.
- Services contracted with third parties in 2013 increased 20.3% to Ps\$1,356,452 million compared with 2012 and 30.6% in 2012 to Ps\$1,127,284 million as compared with 2011. Both increases were mainly the result of a rise in, particularly, leasing, professional, technological and, surveillance services due to increased exploration activity. In addition, in 2013, there was an increase in professional services for the pipeline integrity program that began in the second quarter of 2012.

# **Operating Expenses** — Consolidated

In 2013, our operating expenses increased by 21% as compared with 2012, mainly as a result of the following factors. See Note 26 of our consolidated financial statements for more detail.

- A net 104.2% growth in provision expenses to Ps\$650,660 million primarily due to an increase in the calculation of pension liabilities as well as the lower profitability of the portfolios of trust funds linked to the pension obligations of the company (PAP), and, on the other hand, a recovery in provisions for litigation.
- A total of Ps\$353,012 million recognized as impairment of goodwill for Offshore International Group and Polipropileno del Caribe S.A.
- An increase in overhead operational expenses of 34.4% to Ps\$1,143,615 million compared with 2012 due to (1) additional agreements signed with the national army and police force to guarantee the normal course of operation at pipelines and facilities, (2) higher freight and customs charges on foreign sales and (3) the execution of social investment agreements, which aim to improve the social conditions of the communities where we develop our operations.
- An increase of 3% in taxes to Ps\$988,447 million mainly due to: (1) the growth in payments of industry and trade tax (stemming from an increase in local sales), (2) an increase in payments of the financial transaction tax due to increased dividends and loan payments, and (3) the increase of 70.4% to Ps\$95,062 million in the fee charged by the General Comptroller Office, which it receives from all entities surveyed by its audit function.

In 2012, our operating expenses increased by 18% from 2011, mainly as a result of the following factors:

- An increase in net provisions of 126% to Ps\$318,629 million mainly due to the valuation of property, plant and equipment. As required by Colombian Government Entity GAAP, the valuation of assets must be performed every three years and 2012 was one such year. This process involves the comparison between the net book value and a technical value for a specific asset. The result of such exercise was a provision for the impairment of some assets, mainly for buildings and transportation equipment from the exploration and production segment and the transportation segments.
- Labor expenses for operating and projects increased by 46% to Ps\$277,430 million mainly due to lower capitalizations of expenses made because of the activation of some projects in 2012 compared to 2011.
- An increase in exploration expenses of 48%, to Ps\$1,419,530 million primarily as a result of seismic studies and dry well expenses from unsuccessful explorations.



• An increase in overhead operational expenses of 10% to Ps\$850,757 million, primarily as a consequence of additional agreements signed with the national police force as a strategy to ensure the normal course of operations at pipelines and facilities. This entry was also affected by higher freight and customs charges on foreign sales.

Each segment bears the costs and expenses incurred for product use and marketing and each segment assumes administrative expenses and all nonoperational transactions related to its activity. Discussion of operating expenses by business segment is included in the segment discussion below.

## **Exploration and Production Segment Results**

#### **Exploration and Production Segment Sales**

Crude Oil

# Local Sales

Our revenues from local sales of crude oil increased by 73.1% in 2013 compared with 2012 mainly due to a 114.8% increase in volumes sold as a consequence of limited crude export sales which shifted the sales mix toward local sales. The shift to increased local sales occurred because of lower transportation capacity for export, due to the shift by Ocensa and ODC to profit center models, and in consequence, less flexibility for Ecopetrol S.A to use additional capacity in Ocensa pipeline.

In 2012, our revenues from local sales of crude oil increased by 83% as compared with 2011, mainly due to a 159.1% increase in volumes sold, especially of the Rubiales blend as a consequence of higher demand of crude oil from shipping companies.

# Export Sales

Our revenues from exports of crude oil decreased by 1.5% in 2013 as compared with 2012, mainly due to a 3.0% decrease in the average export price per barrel explained primarily by the lower Brent and Maya benchmarks prices. In 2013, 95% of the crude basket was indexed to the Brent and Maya benchmarks. The decrease in prices, however, was mitigated somewhat by the increase of the average exchange rate of Peso against the U.S. dollar. Additionally, export volumes decreased by 1.1% primarily due to restrictions in pipeline transportation capacity, due to less flexibility of Ecopetrol S.A to use additional capacity in Ocensa pipeline.

In 2012, our revenues from exports of crude oil increased by 5.9% as compared with 2011 mainly due to a 4.4% increase in the average export price per barrel and a 5.9% increase in the volume of export sales which were partially offset by the 2.7% negative effect of the appreciation of the Peso against the U.S. dollar. Increased export sales resulted from improvements in our transportation capacity and higher production of Vasconia and Magdalena blends.

#### Natural Gas

# Local Sales

In 2013, revenues from local sales of natural gas increased by 13.3%, mainly due to an increase in natural gas production (mainly in the Cupiagua and Guajira fields), which led to an increase of 10.4% in the volume of local sales. Higher production was due to an increase in the demand of natural gas in 2013 from the thermoelectric sector. The local average price in Pesos (\$46,013 Pesos equivalent to US\$24.62/barrel in 2013) increased by 2.6% from 2012 to 2013, contributing to increased local sales revenue.

In 2012, our revenues from local sales of natural gas decreased by 8.4% from 2011. This revenue drop was caused principally by a 4.9% decrease in the volumes sold, in part due to lower gas purchases from the ANH, pursuant to Decree 2100 of 2011, according to which other companies are also able to purchase gas directly from ANH, as well as a 3.8% decrease in the average local prices in Pesos currency in 2012 (\$ 44,878 Pesos, equivalent to US\$24.96/barrel) compared with 2011.

# Export Sales

In 2013, export sales of natural gas increased by 2.3% as compared with 2012, despite a 2.8% decrease in average export prices in U.S. dollars. This was due principally to: (1) a 0.5% increase in volumes sold as a result of higher production of natural gas available for export sale (mainly from the Guajira Field) and increased volumes exported to Venezuela because of higher demand and (2) the positive effect of the 3.9% average depreciation of the Peso against the U.S. dollar.

In 2012, export sales of natural gas increased by 9.3% as compared with 2011, principally due to a 17.7% increase in our average export prices. However, the price increase was partially offset by a 2.1% decrease in volumes sold, mainly due to: (1) higher domestic thermal demand, and in consequence less availability for export sale, and (2) the delayed start of new projects related to natural gas production mainly in Guajira field. In addition, export sales were negatively impacted by the effect of the appreciation of the Peso against the U.S. dollar.

# Total Exploration and Production Segment Sales to Third Parties

In 2013 and 2012, our total exploration and production segment sales to third parties increased by 1.3% and 8.6%, respectively in each case as compared with the prior year principally due to an increase in volumes produced and sold. A positive impact was generated as well on export sales in 2013 due to the average depreciation of the exchange rate of the Peso against the U.S. dollar.

## Exploration and Production Segment's Cost of Sales

Cost of sales affecting our exploration and production segment is mainly related to: (1) the amortization and depletion of our production assets, (2) contracted services in association contracts, and (3) maintenance, project and labor costs related to this segment. In addition, this segment's costs were impacted by imported naphtha and transportation services.

In 2013, the cost of sales for this segment decreased by 2.8% compared with 2012, due to a 4.9% decrease in variable costs (which themselves represent 80% of the total cost). This decrease corresponds to (1) a lower volume of crude oil purchased from third parties due to transport capacity restrictions mainly on the pipelines located on the southern region and (2) lower prices on the crude purchased from ANH as consequence of negotiations. On the other hand, fixed costs increased by 5.3% mainly due to: (1) higher depreciation, depletion and amortization mainly in the Castilla and Chichimene fields and (2) increased costs of subsoil maintenance and water disposal as well as an increase in the usage of additional chemical products for the treatment of basic sediments and water principally at the Rubiales and Quifa fields.

In 2012, cost of sales for this segment increased by 25.8% mainly due to an increase in cost of imported and locally purchased naphtha necessary to dilute and transport heavy crude oil, and an increase in contracted services in association with contracts at the Rubiales and Quifa fields, resulting from higher subsoil activities and water treatment.

# Exploration and Production Segment's Operating Expenses

The operating expenses of our exploration and production segment are primarily for: (1) research studies and projects, (2) expenses as a result of dry wells and (3) the amortization of the goodwill from our acquisitions.

These expenses increased by 11.2% in 2013 as compared with 2012 mainly due to a higher provision for the payment of pensions by Ecopetrol S.A., as well as higher costs of research studies and projects due to an increase in exploration activities. In addition, in 2013 we recognized an impairment of goodwill for Offshore International Group. In 2012, these expenses increased by 26.3% compared with the prior year mainly due to the higher provisions for property, plant and equipment generated by revaluation of property, plant and equipment.



# **Refining and Petrochemicals Segment Results**

# Refining and Petrochemicals Segment Sales

# Local Sales

In 2013, local sales of refined products and petrochemicals increased by 2.7% as compared with 2012, as a result of: (1) a 1.9% increase in volumes sold due to higher demand for gasoline and middle distillates from the automotive, aviation and mining sectors and (2) a 0.7% increase in average prices in Pesos (to \$218,536 Pesos in 2013 equivalent to US\$116.92/barrel) due to the effect of the rise in the international prices to which the sale of our products is indexed.

Local sales of petrochemicals and refined products increased 1.1% in 2012 from 2011 as a result of a 2.2% increase in volumes sold resulting from higher demand for refined products from the automotive, aviation and mining sectors. The growth in volumes was partially offset by a decrease in the average prices in Pesos of 1.0%.

# Export Sales

In 2013 export sales of refined products and petrochemicals decreased by 3.2% from 2012 mainly due to a decrease in average export prices of 8.1% resulting mainly from: (1) a 7.3% decrease in the international price of fuel oil, to which our refining export products are indexed and (2) a change in the mix of the products exported. With respect to the latter factor, in 2013 exported products had a higher proportion of lower value products (*e.g.*, fuel oil) than the mix of product sold in 2012. The decrease was partially offset by a 0.3% increase in the volumes sold and the depreciation of the average exchange rate of Peso against the U.S. dollar.

Export sales of refined products and petrochemicals decreased by 6.6% in 2012 from 2011 due to a 4.0% decrease in the average export prices of our products basket in U.S. dollars in line with the behavior of international prices, which was partially offset by an increase of 2.7% in volumes sold. In addition export sales in 2012 were negatively impacted by the appreciation of the Peso against the U.S. dollar.

## Total Refining and Petrochemicals Segment Sales to Third Parties

In 2013 total refining and petrochemicals segment sales to third parties increased by 1.7% as compared with 2012 mainly as a result of the higher demand for gasoline and middle distillates from the automotive, aviation and mining sectors.

Total refining and petrochemicals segment sales to third parties decreased by 1.5% in 2012 as compared with 2011 mainly as a result of lower export sales of gasoline, diesel and fuel oil in line with the 4.0% decrease in average export prices of refined products in U.S. dollars due to the behavior of international prices.

## Refined Products and Petrochemicals Segment's Cost of Sales

The cost of sales for our refined products and petrochemicals segment is mainly related to the purchase of crude oil and natural gas for our refineries, imported products for the refining process, feed stock transportation services, services contracted for refinery maintenance and the amortization and depreciation of refining assets.

In 2013, the cost of sales for this segment decreased 0.7% compared with 2012 due to a 1.4% decrease in variable costs (93% of total costs), mainly due to the reduction in throughput of Barrancabermeja refinery as a result of crude unit U-250's scheduled shutdown and lower availability of light crudes. On the other hand, fixed costs increased by 9.6%, primarily as a consequence of the tax reform, which made us assume a higher burden of VAT.

In 2012, cost of sales for this segment increased 3.7% compared with 2011, principally due to an increase in the cost of imported products and crude oil purchased from the ANH and third parties, offset by a decrease in crude oil purchased from our Exploration and Production segment to upload to our refineries.

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# Refining and Petrochemicals Segment's Operating Expenses

The operating expenses of our refining and petrochemicals segment are projects and administrative expenses assigned to this segment. In 2013, operating expenses increased by 75.1% as compared with 2012 mainly due to a higher provision for the calculation of the pension liabilities in Ecopetrol SA. In 2012, operating expenses decreased by 7.2% compared with 2011, mainly due to the lower taxes and overhead assigned to this segment. In addition, in 2013 we recognized an impairment of goodwill for Propilco.

## **Transportation and Logistics Segment Results**

#### Transportation and Logistics Segment Sales

In 2013, our transportation and logistics segment sales increased by 100.6% compared with 2012 mainly due to the new profit-center model for the segment. Sales also increased as a result of an increase in the transported volume of crude oil associated with higher crude oil production in Colombia and the higher volume of products transported, mainly as a result of higher volumes of naphtha transported to dilute heavy crude oil.

Total transportation sales increased by 13.7% in 2012 as compared with 2011, mainly due to the higher volume of crude oil transported, which was associated with (1) higher crude oil production in Colombia and (2) higher volume of products, mainly as a result of higher volumes of naphtha transported to dilute heavy crude oil. The segment sales were positively impacted as well by the revision of applicable tariffs charged per transported barrel approved by the Ministry of Mines and Energy. which increased 3.7% compared with the 2011 tariff.

## Transportation and Logistics Segment Sales to Third Parties

Our transportation and logistics segment sales to third parties increased by 30.6% in 2013 compared with 2012 mainly due to the new profit-center model for Ocensa and ODC and the higher volume of crude oil produced by companies in Colombia that created additional demand for transportation services.

Likewise, in 2012, higher production in Colombia increased transported volumes, which, after accounting for the effects of consolidation, increased segment sales to third parties by 12.6% in 2012 compared with 2011.

# Transportation and Logistics Segment's Cost of Sales

The cost of sales for our transportation and logistics segment is mainly related to: (1) project costs which relate to costs associated with the maintenance of transportation networks and (2) the construction and conversion of existing pipelines for the transportation of heavy crude oil.

The cost of sales for this segment increased by 19.2% in 2013 as compared with 2012 principally due to a 58.5% change in variable costs as a result of an increase in transported volumes (especially of heavy crude oil). Fixed costs increased 13.7% mainly due to an increase in the costs associated with the development of our pipeline integrity program

The cost of sales for this segment increased by 25.6% in 2012 as compared with 2011 mainly due to the higher maintenance and contracted services costs associated with the development of our pipeline integrity program. See "Item 4. Information on the Company—Overview by Business Segment—Transportation and Logistics—Summary."

# Transportation and Logistics Segment's Operating Expenses

The operating expenses of our transportation and logistics segment result primarily from projects to improve our transportation system and the amortization of the goodwill from acquisitions assigned to this segment.



In 2013, operating expenses decreased by 20.3% compared with 2012 due to different capitalization criteria of Ecopetrol S.A. and Cenit for transportation assets when, as part of the transfer of assets to Cenit, Cenit recognized expenses as part of property, plant and equipment. In 2012, operating expenses increased by 23.2% compared with 2011, largely as a result of expenses related to transportation and logistics activity from the improved pipelines.

# Non-Operating Income (Expenses)

The following table sets forth our non-operating income (expenses) for the years ended December 31, 2013, 2012 and 2011.

	For the year December		2013/2012	For the year ended December 31,	2012/2011	
	2013 2012 (Pesos in millions)		% change 2011 (Pesos in millions)		% change	
Non-operating income (expenses) <sup>(1)</sup>	(1 0505 11 111	linoiis)		(i csos in initions)		
Financial income, net	45,653	(167,889)	n.m.%	(904,302)	(81)%	
Pension expenses	(478,737)	(948,455)	(50)%	(706,298)	34%	
Inflation gain	155	97,663	(100)%	21,836	347%	
Other income (expenses), net	480,407	7,478	6,324%	186,180	(96)%	

(1) We reclassified some non-operational expenses to operational expenses for years 2011 and 2012 to make figures comparable with year 2013. The most significant items reclassified included (i) provisions for inventory, property, plant and equipment, litigation and accounts receivable and (ii) equity tax.

*Net financial income.* Net financial income mainly includes exchange difference gains or losses and interest expenses, yields and interest from our investments, and results from our hedging operations. During 2013, our results reflected a net financial income primarily due to an increase on the cumulative exchange rate as a result of the depreciation of the Peso against the U.S. dollar. This net financial income was partially offset by an increase in interest expenses due primarily to the local and international bond issuance of Ecopetrol S.A. During 2012, our results reflected a net financial expense due to the cumulative exchange rate loss resulting from the appreciation of the Peso against the U.S. dollar.

*Pension expenses.* Pension expenses fell by 50% in 2013 compared with 2012, principally as a result of (1) a decrease in amortization of the actuarial calculation and pensions due to an actuarial calculation update of the health reserve which yielded a decrease of approximately 5.8% in the average health services costs per beneficiary and (2) a 0.2% decrease in the education reserve. In 2012, pension expenses increased by 34% when compared with 2011, mostly as a result of (1) an actuarial calculation update of the health reserve due to an increase of approximately 23% in the average health services costs per beneficiary and an increase of approximately 3.5% in the population covered (retirees and their beneficiaries) and (2) an increase of approximately 9% in the education reserve.

Other net income (expenses). Other net income includes recovery of expenses, other revenues and other recoveries. Other net expenses include legal and contribution expenses unrelated to income. Other net income (expenses) increased significantly in 2013 compared with 2012, mainly due to: (1) an increase in recovery of expenses (owing mostly to our success in the Quifa field arbitration) and (2) the sale of certain fixed assets. Other income (expenses) decreased 96% in 2012 compared with 2011, principally due to a decrease of 37% in other income, mostly related to (1) the punctual recovery of expenses in 2011 (the contract was no longer in effect in 2012) and (2) the recovery of expenses in 2011 which had no longer effect in 2012.



# Income before Income Tax

Income before income tax decreased by 2.0% in 2013 compared with 2012 mainly due to an effect of lower operating income, because of higher operating expenses. Income before income tax decreased by 5.5% in 2012, compared with 2011, principally as a result of higher unexpected costs of water treatment and higher prices of hydrocarbons that we purchased.

## Net Income

As a result of the foregoing, in 2013 our net income decreased by 11% as compared with 2012. In 2012, it decreased by 4% compared with 2011.

# Principal Differences between Colombian Government Entity GAAP and U.S. GAAP

We prepare our financial statements in accordance with Colombian Government Entity GAAP. The accounting principles and regulations under Colombian Government Entity GAAP differ in certain significant respects from U.S. GAAP. The following is a description of the most relevant differences between Colombian Government Entity GAAP and U.S. GAAP. Note 35 to our consolidated financial statements presents reconciliations of net income and shareholders' equity determined under Colombian Government Entity GAAP to these same amounts as determined according to U.S. GAAP, as well as a complete description of the differences between the two accounting standards. The principal differences between Colombian Government Entity GAAP and U.S. GAAP are as follows:

## Advances Received from Ecogas for Build, Operate, Maintain and Transfer Contracts

Under Colombian Government Entity GAAP, payment obligations under Build, Operate, Maintain and Transfer, or BOMT, contracts were treated as equivalent to an operating lease. Under U.S. GAAP, the obligations were treated as capital leases, and an asset and liability were recognized. Payments under the BOMT contracts serve to reduce liability and the asset is depreciated. Subsequently, we subleased the same asset to Ecogas, with the corresponding treatment of the payments receivable from Ecogas as direct financing leases for U.S. GAAP purposes.

## Reversal of Concessions

Under Colombian Government Entity GAAP, we recorded an asset for the contributions of the Nation of crude oil and natural gas reserves derived from the return of oil field concessions to the Nation, which took place before the effectiveness of Decree 1760 of 2003 came into effect. Reserves were valued by means of the technical-economic model according to which the value per barrel resulted from the relation of the net present value obtained at a discount rate and the total proved reserves on the contribution date. For U.S. GAAP purposes, these reversions were considered a transfer of assets between entities under common control. Ecopetrol S.A as the entity that received the net assets, should have initially recognized the assets transferred at their carrying amounts in the accounts of the transferring entity at the date of transfer, which in this case would be zero because the transferring entity did not recognize a carrying value.

## Effects of Inflation on Financial Information

The accompanying consolidated financial statements have been prepared from the accounting records, which are maintained under the historical cost convention, modified since 1992 to comply with the legal provisions of the CGN to recognize the effect of inflation on non-monetary balance sheet accounts until December 31, 2001, including equity. The CGN eliminated the use of inflation adjustments for accounting purposes for state-owned companies starting on January 1, 2002. However, our consolidated financial statements recognize the effect of inflation on non-monetary balance sheet accounts for an extended period from January 1, 1992 until December 31, 2006 for Propilco S.A., COMAI – Compounding and Masterbatching Industry Ltda, Hocol, Oleoducto de Colombia S.A., and Ocensa because prior to our acquisition of these companies, they were subject to the accounting rules applicable to Colombian privately owned entities. Under such rules, the effect of inflation on non-monetary balance sheet accounts was required to be recognized until December 31, 2006. The accumulated inflation adjustments were eliminated in the process of reconciling our financial statements to U.S. GAAP.



# Valuation Surplus

Under Colombian Government Entity GAAP, property, plant and equipment are revalued every three years in accordance with market value and the investments in unconsolidated investees are revalued by using the equity intrinsic value (percentage of ownership of the Company in the equity of the investee). The excess of these amounts over the carrying amount is treated as valuation surplus with a corresponding amount in equity (valuation surplus). Revaluation of these assets is not done for purposes of U.S. GAAP.

#### Variable Interest Entity

Under Colombian Government Entity GAAP, consolidation with significant subsidiaries is required when there is control by having more than 50% ownership or majority of the voting rights in the subsidiary. Under U.S. GAAP (FIN 46 (R)), if an entity has variable interests whereby one party absorbs losses or benefits from net profits in excess of its ownership interest then those variable interests must be evaluated. Ocensa was not consolidated under Colombian Government Entity GAAP until March 2009, but Ocensa was a variable interest entity under the rules of ASC 810 and was included in our consolidated results pursuant thereto until March 2009 under U.S. GAAP. Thereafter, Ocensa was consolidated under both Colombian Government Entity GAAP and U.S. GAAP. See Note 35 to our consolidated financial statements for a description of our analysis.

## Equity Method Accounting

Under Colombian Government Entity GAAP, the equity method is applied for investments where significant influence, but not control, exists. However, unlike U.S. GAAP, there is no ownership requirement between 20% and 50%. The equity method does not apply where there is no significant influence over the investment, regardless of the ownership percentage.

## Employee Benefit Plans

There are significant differences in the measurement of expense and balance sheet amounts for employee benefit plans between Colombian Government Entity GAAP and U.S. GAAP. See "Item 5. Operating and Financial Review and Prospects—Critical Accounting Policies and Estimates—Pension Plans and Other Benefits" and Note 35 to our consolidated financial statements.

## **Investment Securities**

There are significant differences between Colombian Government Entity GAAP and U.S. GAAP in the measurement of expense and balance sheet amounts for investments. See Note 35 to our consolidated financial statements.

# Provisions — Allowances and Contingences

There are significant differences between Colombian Government Entity GAAP and U.S. GAAP in the measurement of expense and balance sheet amounts for provisions: allowances and contingences . See Note 35 to our consolidated financial statements.

# Cumulative Translation Adjustment

Under Colombian Government Entity GAAP, foreign currency investments held in a currency other than U.S. dollars must be remeasured to U.S. dollars prior to translating such financial information to Colombian Pesos as the reporting currency. Any impact as a result of the translation process is recognized in equity as cumulative translation adjustments.

Under U.S. GAAP, investments in foreign currency must be remeasured to the functional currency with the effects recorded in the income statement and translate them to the reporting currency with the effects recognized in equity as cumulative translation adjustments.

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# LIQUIDITY AND CAPITAL RESOURCES

Our principal sources of liquidity in 2013 were cash flows from our operations amounting to Ps\$17,522,761 million and cash flows from financing activities, mainly from the proceeds of our additional indebtedness, which totaled Ps\$7,492,632.

We plan to fund part of our capital expenditures through local and international financial markets. We believe that we should be able to access local and international debt markets if the need arises, although we can make no assurances that these external sources of financing will be available in terms acceptable to us, if at all. See "Item 3. Key Information—Risk Factors—Risks related to our business." Furthermore, we may decide to access the equity market through the issuance of an additional 8.49% of our common stock as authorized by Law 1118 of 2006 or to obtain funds through credit facilities with commercial banks, export development credits or the sale of shares in non-strategic assets.

The schedule for carrying out our investment plan depends on our cash generating activities, capital market conditions, the execution of the investment budget in the various business areas and possible acquisitions. Our investment plan and anticipated capital expenditures in future years may change based on market and other conditions and our results of operations and financial resources.

Our principal uses of liquidity in 2013 were (1) Ps\$14,224,814 million in capital expenditures, which included investments in natural and environmental resources and reserves, and additions to our property, plant and equipment, (2) dividend payments for the fiscal year 2013 amounting to Ps\$14,570,467 million and (3) income tax charged to Ecopetrol amounting to Ps\$7,289,682.

As of December 31, 2013, we had outstanding consolidated indebtedness of Ps\$22,198,551 million, which corresponded mainly to:

ECOPETROL S.A.

- Ps\$1.84 trillion (approximately US\$954 million) of which Ps\$1.55 trillion were earmarked for liability management, prepaying an outstanding syndicated loan disbursed in 2009 and eliminating the Ecopetrol S.A.'s guarantee for the loan. The new facility was executed in May 2013 with seven local banks; the loan has a term of 12 years (until 2025) including a three-year grace period. The interest rate under the facility equals the DTF, plus an additional 2.5% TA. Amortization payments will be made semi-annually under the facility once the grace period has ended. Ecopetrol S.A. used the rest of the proceeds Ps\$0.28 trillion from this loan to finance our Strategic Plan and for general corporate purposes.
- An issuance of US\$2,500 billion aggregate principal amount of SEC-registered notes, issued on September 18, 2013. The registered notes were listed on the NYSE. The terms of the registered notes are as follows: US\$350 million of 4.25% Notes due 2018, US\$1,300 million of 5.875% Notes due 2023, US\$850 million of 7.375% Notes due 2043.
- A local issuance of Ps\$900 billion (approximately US\$468 million) notes on August 27, 2013. The notes were issued in four tranches with maturities of five, ten, fifteen and thirty years and with variable interest rates based on the Consumer Price Index plus spreads of 3.79%, 4.60%, 4.90% and 5.15%, respectively. The notes have semi-annual payments of interest and bullet amortization for each tranche. Ecopetrol S.A. used the proceeds from the offering of these notes to finance its investment plan.
- An issuance of US\$1,500 million aggregate principal amount of 7.625% Notes due 2019 (the "Original Notes") on July 23, 2009 by Ecopetrol S.A. The Original Notes were issued pursuant to Rule 144A/ Regulation S with registration rights. On September 3, 2009, Ecopetrol S.A. commenced a SEC-registered exchange offer to exchange up to US\$1.5 billion aggregate principal amount of the registered notes for an equal principal amount of its outstanding Original Notes. The exchange offer expired on October 2, 2009, and pursuant to the exchange offer, Ecopetrol S.A. issued an aggregate amount of US\$1,492,541,000 in registered notes and cancelled an aggregate amount of US\$1,492,541,000 in original notes. The registered notes were listed on the NYSE.

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- A local issuance of Ps\$1,000 billion (approximately US\$517 million) notes on December 1, 2010. The notes were issued in four tranches with maturities of five, seven, ten and 30 years and with variable interest rates based on the Consumer Price Index plus spreads of 2.80%, 3.30%, 3.94% and 4.90%, respectively. The notes have semi-annual payments of interest and bullet amortization for each tranche. We used the proceeds from the offering of these notes to finance Ecopetrol's 2010 investment plan.
- On March 22, 2013, Ecopetrol S.A. entered into a credit facility guaranteed by the U.S. Eximbank. The four international lender banks are JPMorgan Chase Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ LTD, Mizuho Corporate Bank, Ltd. and Citibank N.A. The facility consists of two tranches, whose terms are governed by: (1) a Facility Agreement for US\$420,442,800, amortized over 7 years at a rate of LIBOR + 0.65 and (2) a Credit Agreement for US\$426,616,323, amortized over 10 years at a rate of LIBOR + 0.90. The funds can only be disbursed abroad and used exclusively to reimburse for goods and services purchased from U.S. providers. As of December 31, 2013, Ecopetrol S.A. had drawn a total amount of US\$43 million under the Medium Term (CGF) Facility Agreement and US\$245 million under the Long Term (LTG) Facility Agreement.

# REFICAR

• US\$3.3 billion outstanding out of US\$3.5 billion under five credit facilities held by Reficar with commercial international banks (HSBC, Bank of Tokyo, Banco Bilbao Vizcaya Argentaria and Sumitomo) and export credit agencies (United States Export Credit Agency, Export-Import Bank of the United States (the US Eximbank), the Italian Export Credit Agency (SACE) and Exportkreditnämnden (EKN), the official Export Credit Agency in Sweden) to finance the refinery's expansion and modernization. The facilities have a tenor of 16 years and begin amortization in June 2014 with a payment of US\$47 million. Payments will be made semiannually.

# OTHER SUBSIDIARIES

- ODL: Ps\$647 billion (approximately US\$336 million) outstanding out of Ps\$800 billion under a loan facility with local banks. In August 2013, ODL negotiated terms of the facility obtaining: (1) a reduction in the interest rate from DTF + 4% T.A. to DTF + 2.5% T.A. and (2) an extension of the tenor of seven additional years (until 2020) with a two-year grace period. The principal amount will be amortized in 20 equal quarterly payments, beginning in November, 2015.
- ODL: Ps\$300 billion (approximately US\$156 million) series of notes outstanding, having a maturity of seven years, which are being amortized in five equal payments from 2012 to 2016 and have an interest rate based on the consumer price index plus an additional spread of 4.88%.
- Oleoducto Bicentenario de Colombia: Ps\$2.1 trillion (approximately US\$1.07 billion) out of Ps\$2.1 trillion under a facility due in 2024 with an interest rate of DTF + 4.54%. The loan will be amortized in 44 quarterly payments after a one-year grace period.
- Ocensa: In December 2013, Ocensa repaid local banks the total outstanding of a Ps\$900 billion facility.
- Bioenergy: Ps\$302 billion outstanding under an infrastructure leasing facility with a compounded average interest rate of DTF + 3.25% T.A. and a term of 15 years out of which 2 years correspond to a grace period, beginning amortization as of 2016. Ps\$110 billion under credit lines with three local banks.



### Use of Funds

### Capital Expenditures

The following table sets forth our consolidated capital expenditures for each of our business segments for 2013, 2012 and 2011.

	For the y	For the year ended December 31,		
	2013	2012	2011	
	(Pesos in millions)			
Exploration and Production	9,622,932	8,225,642	8,071,301	
Refining and Petrochemicals	3,835,556	4,460,105	3,045,510	
Transportation and Logistics	766,326	2,782,115	3,383,860	
Total	14,224,814	15,467,862	14,500,671	

Our investment plan approved for 2014 totals US\$10,595 million, of which US\$6,463 million is expected to be invested directly in Ecopetrol S.A. and US\$4,132 million in our subsidiaries. According to the plan, 95% of investments are expected to be made in Colombia and the remaining 5% will be made for exploration and production projects in the U.S. Gulf Coast, Brazil and Peru. As in prior years, the majority of investments (65%) is intended for exploration and production. The investment plan is expected to be financed through our own cash generation and through access to local and international debt markets, depending on market conditions.

# Cash from Operating Activities<sup>1</sup>

Net cash provided by operating activities decreased by 17% in 2013 compared with 2012 as a result of a 5% increase in cost of sales mostly due to the increase in (1) purchase of imported products (naphta and ultra low sulfur diesel), (2) services in association contracts mainly for water treatment, (3) maintenance costs for the pipeline integrity program and (4) labor costs. The 21% increase in operating expenses in 2013 negatively impacted net cash as well compared with 2012.

Net cash provided by operating activities decreased by 11% in 2012 compared with 2011 as a result of a 10% increase in the cost of sales due to higher international prices for purchase of crude oil.

## Cash Used in Investing Activities

In 2013, net cash used in investing activities decreased by 42% as compared with 2012 mainly due to (1) a 49% reduction of investments for liquidity purposes, (2) a 19% decrease in investments in property, plant and equipment and natural resources and (3) a 13% decrease in the redemptions and sales of securities. The latter despite a 12% increase in natural resources investments.

Net cash used in investing activities decreased by 8% in 2012 compared with 2011 mainly due to the fact that we did not acquire any companies after doing so in 2011. On the other hand, investments in property, plant and equipment and natural resources increased 7% in 2012 from 2011, mostly due to the increase in exploration and production activities.

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<sup>1</sup> Certain reclassifications have been made between operating and investment activities for 2011 and 2012 to conform to the 2013 presentation. This variation changed with respect to the variation reported in Ecopetrol's previous 20-F due to reclassifications made of certain activities within investment and operating activities.

## Cash Used in Financing Activities

Net cash used in financing activities increased 110% in 2013 compared with 2012 mainly due to the 73% increase in dividend payments which was partially offset by cash resources from financial obligations which increased 47%, mainly from international and local bond issuances from Ecopetrol S.A. Net cash used in financing activities increased 22% in 2012 compared with 2011 mainly due to an increase in dividend payments, partially offset by cash inflows derived from indebtedness from our subsidiaries Reficar and Bicentenario. See "Liquidity and Capital Resources."

#### Dividends

In 2013, we paid dividends of Ps\$14,570,467 million to our shareholders, including the Nation, to whom we owed Ps\$3,915,436 million of dividends on the net income of 2011 as of December 31, 2012. That amount was paid as of January 2013. As of December 31, 2013, we owed Ps\$1,309,852 million of dividends on the net income of 2012. That amount was paid as of January 2014.

On March 26, 2014, our shareholders at the ordinary general shareholders' meeting approved dividends for the fiscal year ended December 31, 2013, amounting to Ps\$10,690,341 million, or Ps\$260 per share, based on the number of outstanding shares as of December 31, 2013. The dividend per share was comprised of an ordinary dividend of Ps\$227 per share and an extraordinary dividend of Ps\$33 per share. The dividends corresponding to the Nation will be paid in eight installments. The first payment will be on July 16, the second will be made on August 11, the third will be made on September 8, the fourth will be made on October 8, the fifth will be made on November 10, the sixth will be made between December 9, 2014 and January 9, 2015, the seventh will be made between December 15, 2014 and January 15, 2015, and the last payment will be made between December 22 2014 and January 22, 2015. The payment of the ordinary and extraordinary dividend to the minority shareholders will be made in one lump sum from April 28, 2014.

# RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES, ETC.

Our Vice-Presidency of Technology and Innovation was created in 2012 to add value to our business chain through innovation, technology, knowledge and the development of competitive advantage. The Vice-Presidency of Technology oversees three directorates: The Colombian Petroleum Institute, the Directorate of Information Technology and the new Strategic Directorate of Knowledge, Innovation and Technology.

Our research and development activities are conducted by the Colombian Petroleum Institute, our research, development, transfer and data-protection unit. Its activities are focused on developing technology solutions for us and the Colombian oil industry. Its scope covers our entire value chain: exploration, production, refining, transportation, supply and marketing, as well as environmental issues, integrity and automatization. Each year, we present to the Colombian Institute for the Development of Science and Technology (*Instituto Colombiano para el Desarrollo de la Ciencia y la Tecnología*, or COLCIENCIAS) our research and development projects in order to get a certification for our investment in science and technology. In 2013, 2012 and 2011, COLCIENCIAS recognized investments of US\$42.69 million, US\$86.15 million, and US\$50.83 million, respectively, in science and technology projects. Our total investment in science and technology during 2013 was approximately US\$161 million, of which approximately US\$101 million corresponded to projects in research and development related to air and chemicals injection in oil fields, application of technologies for offshore exploration, petroleum systems in convergent margins, unconventional hydrocarbons, biofuels, petrochemicals, new refining processes, scaling deasphalting process, heavy oil upgrading, as well as information technology projects. We also invested US\$60 million in projects for specialized technical and technological development as well as knowledge and innovation for our strategic business group. In 2012, we invested approximately US\$97.3 million in science and technology and approximately US\$67.8 million in 2011.

Our intellectual capital is preserved through a technological value-generation process and an intellectual property protection process, which includes the consolidation of trade secrets, patents, copyrights, trademarks and publications in specialized journals. In the last seven years, we have filed 149 new patent applications including 21 in 2013 for technologies related to additives for hydrocarbon processing, hydrates removers and polymeric systems for production facilities, processes for stabilizing biodiesel and methods for internal cleaning of transport lines, among others.

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We currently hold 56 patents in Colombia, the United States, China, Mexico, Russia, Peru, Venezuela, Ecuador, Brazil and Nigeria. In 2013, 12 new patents were granted. Our applications have focused on improving additives production and the optimization of refining processes, equipment and tools to prevent fuel theft from pipelines, improvements in the transport of heavy and extra heavy crude oils and processes to obtain biofuels from vegetable oils at refineries, among others. In 2012, we were granted 135 copyrights. We also kept 33 trademarks, such as our first slogan, "Clean Barrels."

Ecopetrol has been selected for the fourth consecutive year as a finalist for the Global MAKE award (Most Admired Knowledge Enterprises), where it was ranked 26 among 150, improving two places compared with 2012. Likewise, Ecopetrol was ranked third among oil and gas companies worldwide, improving three places compared with 2012.

# **OFF-BALANCE SHEET ARRANGEMENTS**

As of December 31, 2013, we did not have off-balance sheet arrangements of the type that we are required to disclose under Item 5.E of Form 20-F.

# TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

## Contractual Obligations

We enter into various commitments and contractual obligations that may require future cash payments. The following table summarizes our contractual obligations as of December 31, 2013.

## **Payments Due by Period**

	Payments due by period				
	Less than				More than 5
	Total	1 year	1 to 3 years	3 to 5 years	years
Contractual Obligations:					
Employee Benefit Plan	26,661,452	1,046,399	3,221,839	3,580,895	18,812,319
Contract Service Obligations	7,549,159	3,682,503	3,527,649	267,823	71,184
Operating Lease Obligations	87,269	43,691	43,578	-	-
Natural Gas Supply Agreements	900,917	234,352	347,146	209,361	110,059
Purchase Obligations	184,997	129,860	55,137	-	-
Energy Supply Agreements	2,112,430	181,274	1,199,509	455,174	276,472
Capital Expenditures	2,147,380	1,853,882	278,586	10,351	4,560
Build, Operate, Maintain and Transfer Contracts					
(BOMT)	373,102	59,455	120,758	103,941	88,949
Capital (Finance) Lease Obligations	47,396	22,971	20,043	4,382	-
Financial Sector Debt	3,228,636	184,839	956,220	682,473	1,405,104
Bonds	17,873,141	636,603	2,134,430	4,789,295	10,312,813
Total	61,165,880	8,075,830	11,904,895	10,103,696	31,081,460

# ITEM 6. Directors, Senior Management and Employees

# DIRECTORS AND SENIOR MANAGEMENT

The information below sets forth the names and business experience of each of our Directors, executive officers and senior management, as of the date hereof:

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### Directors of Ecopetrol

The following are our current Directors elected at the shareholders' ordinary meeting held on March 26, 2014 for terms of one year beginning on that date:

*Minister of Mines and Energy, Amilcar Acosta Medina (63)* has been a member of our Board of Directors since March 25, 2010. He has served as Minister of Mines and Energy of Colombia since September 11, 2013, and previously served as Advisor to the Office of the General Comptroller of the Republic. Mr. Acosta served in the Senate of Colombia from 1991 until 2002 and was the President of the Colombian Congress from July 1997 to July 1998. From 1990 to 1991, he served as Deputy Minister of Mines and Energy. He has held positions as a researcher and professor at several universities and published many books and research articles on economics and on the mines and energy sector. He has been a columnist for the leading newspapers of Colombia. Mr. Acosta earned a BA in Economics from the University of Antioquia. He was appointed as a Director by the Nation.

*Minister of Finance and Public Credit, Mauricio Cárdenas Santamaría (51)* has been a member of our Board of Directors since March 27, 2008. Mr. Cárdenas was the Minister of Mines and Energy of Colombia from September 26, 2011 to August 30, 2012. He has served as Senior Fellow and Director at the Latin America Initiative of the Brookings Institution in Washington, D.C. Previously, Mr. Cárdenas served as Executive Director of Fedesarrollo (*Fundación para la Educación Superior y el Desarrollo*), President of Empresa de Energía Eléctrica de Bogotá, Minister of Economic Development, Minister of Transport and Director of the National Planning Agency of Colombia. Mr. Cárdenas has also served as a member of the Board of Directors of various organizations, including the Latin American and Caribbean Economic Association (LACEA), Universidad de los Andes and the BVC. Currently, he is a Director of the Central Bank of Colombia. Mr. Cárdenas holds a BA and an MSc in economics from the Universidad de los Andes and a Ph.D. in economics from the University of California, Berkeley. In 2001, Mr. Cárdenas was a visiting scholar at Harvard University's Center for International Development. In 1999, he was elected by Time Magazine and CNN as one of Latin America's Leaders for the New Millennium. Mr. Cárdenas was appointed as Director by the Nation.

Director of the National Planning Agency of Colombia, Tatiana Orozco de la Cruz (37) has been a member of our Board of Directors since September 11, 2013. Before reaching the National Planning Agency, Mrs. Orozco was Deputy Minister of Tourism for seven months. She also served as Executive Director of the Fundación ProBarranquilla, a private investment promotion agency for the city of Barranquilla. Mrs. Orozco has been professor, advisor and researcher at various Colombian entities. She earned a degree in economics from the Universidad de Los Andes, a degree in Marketing of Universidad del Norte de Barranquilla, and a master's degree in Development Management at the London School of Economics, United Kingdom. Mrs. Orozco was appointed as a Director by the Nation.

*Jorge Pinzón Sánchez (54)* has been a member of our Board of Directors since December 6, 2012. He is a freelance attorney and an arbitrator registered at the Centers of Conciliation and Arbitration of the Chambers of Commerce of Bogotá and Barranquilla. He was a partner at Estudios Palacios Lleras S.A., a law firm in consulting and arbitration of business, commercial and tax law. He also has served as the head of the Superintendency of Corporations as well as of the Superintendency of Finance of Colombia. He was also a member of the Advisory Committee of the Banking Superintendency, member of the General Board of the Securities Superintendency of Colombia, Secretary General of the Ministry of Finance and Public Credit and Deputy General Counsel, Secretary General and General Counsel of Banco del Comercio, among other positions in the public and private sector. He serves as an arbitrator in the Center of Arbitration of the Chamber of Colombian representative to the United Nations Commission on International Trade Law (UNCITRAL). Mr. Pinzón has been a member of several boards of directors of Colombian financial sector companies. He also was a law professor at Universidad Javeriana, Universidad de los Andes, as well as other universities. He has also published several legal articles. Mr. Pinzón earned a degree in law and a master's degree in Philosophy from Universidad Javeriana. He was appointed as an independent Director.

Luis Fernando Ramírez (54) serves as President of Federación Colombiana de Compañías de Leasing. Previously, Mr. Ramírez served as Minister of National Defense from 1999 to 2001, Minister of Labor and Social Security from 1992 to 1994, Vice-Minister of Finance and Public Credit and General Director of Taxes from 1986 to 1992. Mr. Ramírez earned a degree in Accounting from Universidad Jorge Tadeo Lozano and he was Fellow of the Center for International Affairs from Harvard University, Cambridge, Massachusetts. Mr. Ramírez was appointed as an independent Director.

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Joaquín Moreno Uribe (64) has been a member of our Board of Directors since March 27, 2008. Mr. Moreno worked for 33 years for the Royal Dutch/Shell Group. He has held various positions such as Project Manager in Colombia; Project and Operations Manager and Marketing and Operations Manager of Shell Química de Venezuela; Director of Marketing for Agrochemical Products and Global Marketing Manager for Petrochemical Products at Shell Centre–Shell International Chemicals Company in London; Director of Shell Venezuela S.A.; Director of Shell Colombia S.A., Director of Cerromatoso S.A., a Colombian mining company that is located in the department of Córdoba, dedicated to the production of ferro-nickel and iron-nickel alloy, and Exploration and Production Business Economics and Strategic Planning Director for Europe and the Middle East at the Shell International Headquarters in The Hague, the Netherlands. Mr. Moreno has also served as Country Chairman and President for Shell in Mexico, Colombia and Venezuela, as well as Regional CEO for Downstream Oil Business in the Northern Latin American Region. Mr. Moreno has been a member of the boards of directors of various local and international companies. Mr. Moreno earned a degree in civil engineering from Universidad Industrial de Santander and completed a program in advanced management at Harvard University Business School in Cambridge, Massachusetts. He was appointed as an independent Director.

*Gonzalo Restrepo López (63)* serves as Chairman of the Board of Directors. Mr. Restrepo was the Chief Executive Officer of Grupo Éxito S.A. for 23 years. Prior to this position, he served as CEO of Caribú Internacional, a textile and apparel company in Medellín; Caribe Motor S.A. and other private companies. Mr. Restrepo has been a member of different boards of directors of Colombian companies. In 2013, he received the Cross of Boyacá in the Order of Grand Official, the highest decoration and distinction of the Colombian state, given by the President of the country. Mr. Restrepo earned a degree in Management from Syracuse University, United States and an MBA in Marketing from the University of Georgia, Athens, Georgia. Mr. Restrepo was appointed as an independent Director.

*Horacio Ferreira (44)* is an executive leader with more than 20 years of international experience in the oil industry. His knowledge and expertise stem from previous positions as CEO and President of an oilfield services company in Houston, TX to application of state of art technologies in the oil industry. He has led and executed numerous reservoir engineering projects in the Americas, Europe, Africa, Middle East and Far East and has conducted research in optimization of multiphase meters, underbalanced reservoir engineering, real time reservoir and production analysis, reservoir simulation and waterflood techniques with horizontal wells. Mr. Ferreira has several technical publications in reservoir management with a focus on production optimization and reservoir management. He holds a BS from Texas A&M University, MS and D.Eng. degrees in Petroleum Engineering from Texas A&M University, and a business graduate degree in Management of International Corporations from Texas A&M University. He was appointed as an independent Director representing the hydrocarbon producing provinces of Colombia.

*Roberto Steiner Sampedro (54)* has been a member of our Board of Directors since October 12, 2011. Mr. Steiner is an associate researcher and former Executive Director of Fedesarrollo. He served as Alternate Executive Director of the International Monetary Fund from 2002 to 2007, Director of the Economics Research Department of the Central Bank of Colombia from October 1989 to April 1993, Director of the Economic Development Research Centre of Universidad de los Andes, Consultant at the World Bank from 1995 to 1996, Deputy Director of Fedesarrollo from 1993 to 1994, Deputy Director of the Economics Research Department of the Central Bank of Colombia from 1988 to 1989, and Senior Economist at the Central Bank of Colombia from 1988 to 1989, and Senior Economist at the Central Bank of Colombia nuiversities, including the Universidad de los Andes, Universidad Javeriana and Universidad Nacional. In 1995, he was a summer professor at Columbia University in New York. He has published several books, articles and research papers on economics. Mr. Steiner earned a degree in economics from Universidad de los Andes and M.A. and M.Phil degrees in economics from Columbia University in New York. Mr. Steiner was appointed as an independent Director representing the minority shareholders.

### Officers and Senior Management of Ecopetrol

The following presents information concerning our executive officers and senior management. Unless otherwise noted, all of these individuals are Colombian citizens.

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*Javier Gutiérrez (62)* has served as our President and Chief Executive Officer since January 22, 2007. Prior to becoming our CEO, Mr. Gutiérrez had served as CEO of Interconexión Eléctrica S.A. ESP (ISA) since 1992, where he had begun his career in the planning department in 1975. Mr. Gutiérrez also worked as Vice-President of the Colombian Commission for Regional Electric Integration from 1995 to 1997. Mr. Gutiérrez earned a degree in civil engineering and a master's degree in industrial engineering from Universidad de los Andes and a specialization degree in finance from Universidad EAFIT. Mr. Gutiérrez has worked as a part-time professor of statistics and research at Universidad de los Andes and as a professor of operational research at Universidad EAFIT.

Adriana M. Echeverri (42) joined Ecopetrol in 1994. She is currently serving as Chief Strategy and Development Officer and served as Chief Financial Officer until May 2013. Prior to being appointed as our CSO, Mrs. Echeverri worked as Chief Financial Officer, Head of the Finance and Treasury Unit and Head of the Corporate Finance Unit. She earned a degree in finance and foreign affairs and an MBA from Universidad Externado de Colombia.

*Magda Manosalva (42)* joined Ecopetrol in 2005. She has been serving as Ecopetrol S.A.'s Chief Financial Officer since November 2013. Prior to being appointed as our CFO, Mrs. Manosalva was assigned, in 2012, as the Chief Financial Officer of Reficar S.A. Mrs. Manosalva earned a degree and a master's degree in Economics from Universidad Nacional de Colombia, and a specialization degree in finance at Harvard Extension School. Over the course of her career she has worked on matters related to Treasury, financial risks and liquidity management.

*Margarita Obregón (56)* joined Ecopetrol in 2000. Mrs. Obregón has served as Secretary General and Secretary of the Board of Directors since January 2008. She also serves as the company's Chief Ethics and Compliance Officer, whose responsibilities include monitoring and supervising the ethics and compliance program, among others, and as Leader of Corporate Social Responsibility, Corporate Governance and Corporate Communications. Prior to joining Ecopetrol, Mrs. Obregón worked in the supply department of Previsora S.A., an insurance company, and as a legal advisor of lands for British Petroleum Company – BP, at Alvaro Rengifo y Cia. She also served as the head of the Business and Administration department of the Fiduciaria del Estado. Mrs. Obregón earned a law degree from Colegio Mayor de Nuestra Señora del Rosario with specialization degrees in public management and financial law.

*Hector Manosalva (52)* joined Ecopetrol in 1986 and serves as Production and Exploration Executive Vice-President. Mr. Manosalva is a petroleum engineer educated at the Universidad de América in Bogotá, and completed post-graduate studies in Finance at the Universidad EAFIT and Executive Management at the Universidad de los Andes. Over the course of his career at Ecopetrol, Mr. Manosalva has served as Chief of Production, Head of the Planning Division, Production Manager of the Southern Region, Director of Corporate Social Responsibility, Advisor to the Office of the President of the Republic for the Protection of Energy Infrastructure and Production Manager of the Central Region.

*Pedro A. Rosales (50)* joined Ecopetrol in 1989, and has served as our Downstream Executive Vice-President since February 2008. Mr. Rosales is responsible for the Company's refining, petrochemicals, marketing and distribution, biofuels and gas businesses. Mr. Rosales has held several positions in the Company within the areas of maintenance, operations, projects, planning and administration. Prior to becoming our Downstream Executive Vice-President, Mr. Rosales served as our Vice-President of Transportation since January 2003 and as our Chief Operations Officer since 2006. Mr. Rosales earned a degree in mechanical engineering and an MBA from Universidad de los Andes.

*Hector Castaño (51)* joined us in 1988 and has served as our Production Vice-President since 2011. Mr. Castaño earned a degree in petroleum engineering from Universidad Nacional and a specialization degree in management from Universidad Sur Colombiana de Neiva. He has held a number of positions in Ecopetrol, including Director of Production in the Central region, in the Southern region and in the Mid-Magdalena Valley region.

*Humberto Fuenzalida (50)* is a Chilean citizen and was born in Santiago de Chile. He earned a Geophysics degree from the University of Chile in 1988. He also earned a Ph.D. in the same discipline from the University Louis Pasteur in Strasbourg in 1995. His career includes 15 years of experience working for Enap-Sipetrol in the exploration area and on an Exploration Manager assignment in Egypt. He has expertise from different locations around the world including Chile, Colombia, Egypt and the Gulf of Mexico. He joined Ecopetrol S.A. in 2009 in the Exploration Management department as a Geophysicist and served as Manager of International Exploration until 2012. He is currently in charge of the Exploration Vice-Presidency of Ecopetrol S.A.

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Rafael Guzmán (48) is the Vice-President of E&P's Technique and Development of Exploration and Production and has over 17 years of experience in the oil and gas industry. He holds a BSc degree in petroleum engineering from Universidad America in Colombia, and an MSc in petroleum engineering and a Ph.D. in petroleum engineering with a minor in mathematics, both from Stanford University. Mr. Guzmán joined Ecopetrol in October 2010 as a Regional Manager. Prior to Ecopetrol, he worked with ENI and BP. Mr. Guzmán was awarded the Society of Petroleum Engineers (SPE) Ferguson Medal, the Ramey Fellowship at Stanford University and the Infantas award for innovation from ACIPET. He also served as SPE Colombian chapter president from 1995 to 1997.

*Federico Maya (49)* has served as our Vice-President of Refining and Petrochemicals since December 2005. Mr. Maya has held various positions at Ecopetrol over the last 20 years, including Marketing and Contract Coordinator for Ecopetrol's Gas Department, Corporate Planning Directory member, and Vice-President of Supply and Marketing. Mr. Maya earned a degree in chemical engineering from Pontificia Universidad Bolivariana and a specialization degree in marketing from Universidad EAFIT.

*Claudia Castellanos (50)* has served as our Vice-President of Supply and Marketing since 2009. Mrs. Castellanos earned a degree in chemical engineering from Universidad Industrial de Santander and a specialization degree in energy resources management from Universidad Autónoma de Bucaramanga. She has worked in Ecopetrol for over 25 years including positions as a process engineer at Refinería de Cartagena, where she also worked in the Economics Department. Prior to becoming our Vice-President of Supply and Marketing, Mrs. Castellanos was Gas Manager for six years, where her focus was the domestic and international commercialization of natural gas.

Jaime Bocanegra (45) has served as Vice-President of Transportation since April 22, 2013. Mr. Bocanegra earned a degree in petroleum engineering from Universidad de América in Colombia, a specialization degree in Management, a specialization degree in International Management of Oil and Gas Industry and Strategic Leadership. He has worked for Ecopetrol for the last 20 years and has held various positions within the company, including Plant Coordinator, Multipurpose Pipelines Manager, Chief of Department, Program Manager of Dosquebradas and Chief of the Centralized Operations.

Martha Cecilia Castaño (45) joined us in 2004 and has served as our Vice-President of Human Resources since 2008. Prior to becoming our Human Resources Vice-President, Mrs. Castaño worked as Coordinator of Organizational Culture, Chief of the Leadership, Internal Communications and Cultural Unit and was also head of the Labor Relations Department. Mrs. Castaño earned a degree in social communications and a specialization degree in economic journalism from Universidad de la Sabana and a master's degree in Business Administration from INALDE Business School. She has also worked in Acopi, El Tiempo, Uniandinos and Empresa de Telecomunicaciones de Bogotá (ETB), in several areas such as human resources management, corporate communications and labor relations.

*Oscar Villadiego (49)* joined us in 1986 and is currently serving as the Vice-President of HSE and Operational Sustainability. He served as Vice-President of Services and Technology from February 2008 until 2012. He has held several positions in the Production Vice-Presidency for crude oil reserves, the development unit and the human resources unit. He served as manager for the Central region for a period of 2.5 years, and as Technical Manager for the Production Vice-Presidency for four years. Mr. Villadiego earned a degree in Petroleum Engineering from Universidad America in 1987.

*Rodolfo Garcia (42)* joined us in February 2000 and has been our Deputy General Counsel since December 2013. Mr. García has been a Professor at Universidad del Rosario Law School, Universidad de los Andes Business School and Universidad Externado de Colombia Law School. He was the Colombian Representative to the Latin American Chapter of the Association of International Petroleum Negotiators – AIPN – during 2011 and 2012. Currently, he is a member of the Colombian College of Mining and Petroleum Lawyers. During his career in Ecopetrol, he was legal counsel in different areas, including goods and services contracts, exploration and production, new business and M&A. Mr. García earned a law degree from Universidad del Rosario and a specialization degree in public management and administrative institutions from Universidad de los Andes.

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Jaime Pineda (51) has served as our Director of Strategic Procurement since March 2012. He joined Ecopetrol in November 1989, working for the Legal Advisory Office in Barrancabermeja, and has served as our Head of Procurement Legal Advice Office from 2003 until 2012. He also serves as Professor at Santo Tomas and Externado de Colombia universities. Mr. Pineda has a Law Degree from Universidad Autónoma de Bucaramanga, specialization degrees in public procurement from Universidad Santo Tomas and contracting law from Universidad Externado de Colombia.

*Néstor Saavedra (51)* has served as our Vice-President of Innovation and Technology since September 2012. Mr. Saavedra earned a degree in petroleum engineering from Universidad Industrial de Santander and a master's degree in petroleum engineering from Texas A&M University. His work within the Company has included serving as Director of the Colombian Petroleum Institute of Ecopetrol, coordinating horizontal well technology and rock mechanics projects, as well as assessing and predicting the behavior of Colombian oil fields. Mr. Saavedra serves as Director of the Society of Petroleum Engineers in the South American and Caribbean Region.

*Carlos Zamudio (49)* has been the Director of Shared Services since August 2012. Mr. Zamudio has more than 20 years of extensive experience in service delivery operations in multinational companies at regional and global levels. He previously worked at Belcorp, where he was the Corporate Director of the Shared Services Center, overseeing 15 countries including the U.S. and Brazil. He also worked at Procter & Gamble, where he was the Corporate Finance Manager for Chile, Brazil, Costa Rica and Colombia, as well as the Global Business Services Manager for the Latin America region.

None of our Directors or executive officers has any familial relationship with any director or executive officer.

## COMPENSATION

The total compensation paid to our Directors, executive officers and senior management during 2013 amounted to Ps\$14,730 million.

Based on a resolution adopted at our 2012 annual shareholders' meeting, compensation for Directors for attendance at Board of Directors and/or committee meetings in person increased from the equivalent of four to six minimum monthly wage salaries, which totals approximately Ps\$3,537,000 for 2013 and Ps\$3,696,000 for 2014. Fees for attendance at virtual meetings are set at 50% of the in-person meeting fee.

Our Directors are not eligible to receive pension and retirement benefits from us. The total amount set aside to provide pension and retirement benefits to our eligible executive officers totals Ps\$14,729 million.

## SHARE OWNERSHIP

No individual Director or executive officer beneficially owns more than 1% of our outstanding shares.

The following Directors and executive officers own shares of Ecopetrol:

Director	Shares	%
Joaquín Moreno Uribe	50.000	0.0001216%
Mauricio Cárdenas Santamaría	2.000	0.0000049%
Executive Officer	Shares	%
Javier Gutiérrez Pemberthy	144.413	0.0003512%
Héctor Manosalva	49.380	0.0001201%
Jaime A. Pineda	7.142	0.0000174%
Federico Maya	50.000	0.0001216%
Claudia Castellanos	13.571	0.0000330%

Under Colombian law, all of our shareholders have the same economic privileges and voting rights.

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# **BOARD PRACTICES**

Our Board of Directors is composed of nine members and is responsible for, among other things, establishing our general business policies. According to Colombian law, the members of the Board of Directors must be elected at the annual shareholders' meeting in accordance with a proportional representation system similar to cumulative voting (through an electoral quota voting system). The number of votes required to fill each position is calculated by dividing the number of possible votes by the number of open board positions. The members of the Board of Directors may be elected without an electoral quota voting system when there is unanimity. Pursuant to our bylaws, Directors are elected for a one-year term, and the positions are filled either by person or by position. Members of the Board may be reelected indefinitely. Currently, we have three members appointed by their position: the Minister of Mines and Energy, the Minister of Finance and Public Credit and the Director of the National Planning Agency. Our current Directors were elected at the ordinary shareholders' meeting. Our CEO is appointed by the Board of Directors.

The compensation of our Directors is set exclusively by the shareholders at the general shareholders' meeting. Colombian law prohibits Directors from receiving corporate loans. Directors are compensated for attending board meetings and committee meetings. A Board meeting requires a quorum of at least five members and decisions are approved with a majority of the members present. None of the contracts of any of our Directors contains provisions for benefits upon termination of such Director's services.

Under Colombian law, a director or executive officer must disclose during the general shareholders' meeting any transaction that may result in a conflict of interest. The general shareholders' meeting may approve or reject the transaction giving rise to the conflict of interest with the vote of the majority of the shares present at the shareholders' meeting. If the director or executive officer who has the conflict is a shareholder, his or her vote must be excluded. We disclose conflicts of interest of our employees, executive officers and directors in our Corporate Governance and Board of Directors reports.

Neither our bylaws nor our corporate governance code provide a retirement age for our Directors. Under our bylaws, there is no requirement for a person to have a minimum number of shares to be elected as a Director. Colombian law provides that Directors willing to sell or purchase shares in our Company need prior authorization from the entire Board of Directors. Colombian law does not impose any limitation as to the number of shares that may be acquired by a Director.

Pursuant to our bylaws, our Board of Directors has four committees (Audit Committee, Corporate Governance and Sustainability Committee, Compensation and Nomination Committee and Business Committee), which establish guidelines, set specific actions and evaluate and submit proposals designed to improve performance in the areas under their supervision and control. These committees are populated by members of the Board of Directors who are also appointed by the members of the Board of Directors. In addition to applicable regulations, the committees also have their own specific regulations that establish their purposes, duties and responsibilities.

Board Committees' Composition as of March 31, 2014.

Audit Committee	Compensation and Nomination Committee	Corporate Governance and Sustainability Committee
Joaquín Moreno Uribe	Minister of Finance and Public Credit	Horacio Ferrerira Rueda
Roberto Steiner Sampedro	Minister of Mines and Energy	Gonzálo Restrepo López
Jorge Pinzón Sánchez	Gonzalo Restrepo Lopez	Jorge Pinzón Sánchez
Luis Fernando Ramírez	Luis Fernando Ramírez	Roberto Steiner Sampedro
		Director of the National Planning Agency of
		Colombia
		Minister of Finance and Public Credit

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## **Business Committee**

Minister of Mines and Energy Minister of Finance and Public Credit Director of the National Planning Agency of Colombia Gonzalo Restrepo López Horacio Ferreira Rueda Joaquín Moreno Uribe

#### Audit Committee

Our audit committee, which must be comprised of at least three members, all of them independent Directors, is our highest internal control body and provides support to our Board of Directors on risk, accounting and financial matters. It is in charge of guaranteeing the design, implementation and supervision of our internal control over financial reporting. It also ratifies the annual hydrocarbons reserves report and provides support for our Board on analyzing topics related to financial matters, risks, control environment and the assessment of the Company's internal and external auditors.

All committee members are required to be knowledgeable in accounting matters and at least one of them is required to be an expert in financial and accounting matters. Luis Fernando Ramirez will serve as the audit committee financial expert.

### Compensation and Nomination Committee

Our compensation and nomination committee, which must be comprised of at least three members, including at least one independent director, provides general guidelines for the selection and compensation of our executive officers and employees.

# Corporate Governance and Sustainability Committee

Our corporate governance and sustainability committee, which must be comprised of at least three members, including at least one independent director, makes proposals to our Board of Directors to ensure and supervise the fulfillment of our good corporate governance and sustainability practices in accordance with our corporate governance code.

#### Business Committee

Our business committee, which must be comprised of at least five members, including at least one independent Director, assists our Board in analyzing potential business ventures. Based on its delegation of power, the committee studies and analyzes capital expenditure policies, major investment projects, strategy, new business and other matters that would help us move forward in our efforts toward the consolidation of our strategy. The primary criteria used in the committee's decision-making are the optimization of our portfolio and the proper allocation of our resources.

# **EMPLOYEES**

As of December 31, 2013, Ecopetrol S.A. had 8,800 employees. A collective bargaining agreement between us and our three main labor unions (USO, ADECO and SINDISPETROL) governs the labor relations we have with our unionized employees, which amounted to 2,560 employees as of December 31, 2013. It also governs the labor relations with the 1,140 non-unionized employees that agreed to abide by it after requesting a waiver of Agreement 01 of 1977. Agreement 01 of 1977 governs the labor relations of our employees in positions of trust, totaling 5,100 Ecopetrol S.A. employees as of December 31, 2013. The benefit schemes provided in the collective bargaining agreement and in Agreement 01 of 1977 do not differ significantly. Employees are subject to Law 100 of 1993 with respect to their retirement scheme.

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Most of our employees are located in Colombia. In order to support our corporate growth strategy, we increased the total number of Ecopetrol S.A. employees by 8.8% from 8,087 in 2012 to 8,800 in 2013. The table below presents the breakdown of Ecopetrol S.A.'s employees according to the business segments where they work, and the personnel of our subsidiaries for the years ended December 31, 2013, 2012 and 2011. As of December 31, 2013, Ecopetrol S.A. had eight direct employees working abroad.

	As	As of December 31,		
	2013 <sup>(1)</sup>	2012	2011	
Ecopetrol S.A.				
Exploration and Production				
Exploration	188	174	130	
Production	1,867	1,725	1,565	
Others	437	386	309	
Total Exploration and Production	2,492	2,285	2,004	
Downstream				
Refining	2,716	2,425	2,134	
Marketing	187	181	175	
Others	18	16	18	
Total Downstream	2,921	2,622	2,327	
Transport	1,184	1,097	964	
Corporate	2,203	2,083	2,008	
TOTAL ECOPETROL S.A.	8,800	8,087	7,303	
Ecopetrol America Inc.	47	28	14	
Bioenergy S.A.	106	143	102	
Bioenergy Zona Franca S.A.S.	92	35	23	
Hocol S.A.	197	194	202	
Equión Energía Limited	486	493	465	
Oleoducto Central S.A.	245	133	133	
Oleoducto de Colombia S.A.	1	1	1	
Oleoducto de los Llanos S.A.	16	17	19	
Oleoducto Bicentenario de Colombia S.A.S.	28	27	19	
Ecopetrol del Perú S.A.	2	12	12	
Refinería de Cartagena S.A.	234	158	142	
Ecopetrol Óleo e Gás do Brasil Ltda.	14	14	10	
Propilco S.A.	353	339	325	
Cenit	65	20	-	
TOTAL	10,686	9,701	8,770	

(1) 193 persons employed by us during 2013 were not included in our 2013 employee statistics as they were independent contractors involved in non-regular activities and cannot be classified as temporary employees.

During 2013, Ecopetrol S.A. had 603 temporary employees, a decrease of 38% compared to 2012. In 2012 and 2011, Ecopetrol S.A. had 833 and 574 temporary employees, respectively.

## **Labor Unions**

We currently have three industry-wide labor unions and one company labor union:

- Unión Sindical Obrera de la Industria del Petróleo USO (industry labor union);
- Asociación de Directivos Profesionales, Técnicos y Trabajadores de las Empresas de la Rama de Actividad Económica del Recurso Natural del Petróleo y sus Derivados de Colombia ADECO (industry labor union);
- Sindicato Nacional de Trabajadores de Empresas Operadoras, Contratistas, Subcontratistas de Servicios y Actividades de la Industria del Petróleo y Similares SINDISPETROL (industry labor union); and

• Sindicato Nacional de Trabajadores de Ecopetrol — SINCOPETROL (company labor union).

Currently ECOPETROL does not have any workers in the SINCOPETROL union. This union does not participate in the negotiation process.

Our employees and any employee working for any company in the oil and gas industry may join the USO, ADECO or Sindispetrol. Sincopetrol may only be joined by our employees.

On August 2, 2011 and November 8, 2011, we experienced two work stoppages promoted by the USO in Barrancabermeja to support workers protesting at an unaffiliated oil and gas exploration and production company, Pacific Rubiales Energy. After our subsidiary Cenit was created on June 15, 2012, some workers (members of the USO) protested on June 19 and December 22, 2012. These protests did not affect our operations. In 2013 we did not experience any significant labor events.

Typically, union protests do not impact our operations because, as soon as they occur, we implement our continuity plan and integrate other trained workers that can operate in emergency situations. Furthermore, the company has a systematic relationship model established with the unions based on dialogue and consultation. Colombian legislation limits the exercise of strikes in the essential public services such as those provided by us.

On August 22, 2009, as a result of consensual negotiations, we entered into a five-year collective bargaining agreement with USO, ADECO and Sindispetrol. During the first quarter of 2012, we held meetings with the unions to discuss revisions to the collective bargaining agreement signed in 2009. The meetings were carried out under normal conditions and did not affect our operations. During these meetings, we analyzed certain articles of the collective bargaining agreement to clarify ambiguities as well as those that became outdated after the Company became public. The aspects that were analyzed during the revision process were, among others, union rights, health care benefits and food and transportation allowances.

The collective bargaining agreement will expire on June 30, 2014, which could lead to a negotiation of terms, including compensation, with the unions USO, ADECO and SINDISPETROL. We look to conclude the negotiations at the direct settlement stage, once the petitions have been received from the unions. According to the Colombian labor legislation, the expiration of a collective bargaining agreement does not result in the termination of the conditions in the expired collective bargaining agreement will be extended until a new agreement is signed or an arbitral award is rendered.

The following are the relevant terms of the current agreement in effect since 2009 and expiring on June 30, 2014:

- Transportation Subsidy. The monthly transportation subsidy depends on the employee's location and ranges between Ps\$1.376 and Ps\$147.506.
- Food Subsidy. The monthly food subsidy is Ps\$332.880.
- Lodging Subsidy. The monthly lodging subsidy is Ps\$222.357.
- *Education Subsidy*. This subsidy covers 90% of tuition and board expenses and fixed amounts of transportation and textbooks for our employees and their children.
- *Health Benefits*. We pay 100% of medical expenses for workers and their families. The health benefits include comprehensive health care service, and programs in the prevention of diseases, the supply of medicines and others.
- Six-Months Bonus. Ecopetrol pays an additional 48 days of regular wage to its workers each year: 24 days of additional regular wage in June and 24 in December.

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- *Stability Clause*. Employees affiliated with the Unión Sindical Obrera de la Industria del Petroleo labor union (USO) who, as of December 1, 2004, had worked over 16 months continuously, cannot be terminated without good cause.
- Retirement Plan for Employees. Employees hired after January 29, 2003 are not covered by our retirement scheme but are covered by the national social security system.
- *Five-Year Bonus*. A cash benefit bonus accrues on a yearly basis and is paid for every five-year period an employee works in the Company. The bonuses range from 9 days of basic payment plus Ps\$193,990 for an employee who has worked for the Company for 5 years to 34 days of basic payment plus Ps\$193,990 for an employee who has worked for the Company for 5 years to 34 days of basic

# Labor Relations

As part of our goal to improve workplace morale, in 2010 we implemented a number of initiatives to maintain good and trustworthy relations with our employees, guarantee competitive wages, strengthen our corporate principles and culture, provide opportunities for personal development and improve the general welfare of our employees. Our initiatives also sought to strengthen communication processes and to implement performance-based compensation.

To improve the quality of life of our employees, we extend various types of loans to them, including housing loans and general-purpose loans. In 2013, we extended 1,192 housing loans for a total of Ps\$131 billion and 1,303 general-purpose loans for a total of Ps\$8.6 billion. We also provided on-site and external training and development courses to our employees. As of December 31, 2013, our investments in employees' development amounted to Ps\$24.9 billion, and we extended a total of Ps\$139 billion in subsidies for education.

# Labor Regulation

In accordance with Article 123 of the Colombian Constitution and the Article 7 of Law 1118 of 2006, our employees are considered "public servants" even though they are subject to the common labor law. As such, their behavior is subject to the rules applicable to those who handle public matters. A violation of those rules could lead to a disciplinary, criminal, or civil action.

# ITEM 7. Major Shareholders and Related Party Transactions

# MAJOR SHAREHOLDERS

The following table sets forth the names of our major shareholders, and the number of shares and the percentage of outstanding shares owned by them at March 31, 2014:

	At March 31, 2014	
Shareholders	Number of shares	% Ownership
Nation - Ministry of Finance and Public Credit	36,384,788,817.196	88.49
Public float	4,731,909,639	11.51
Total	41,116,698,456.196	100

All our common shares have identical voting rights.

As of March 31, 2014, 0.84% of our common shares were held of record in the form of American Depository Shares. As of March 12, 2014, we had 28 registered holders and 12,890 beneficiaries of common shares, or ADSs representing common shares, in the United States.

# **RELATED PARTY TRANSACTIONS**

#### Agreements

Ecopetrol S.A. and Ocensa engage in a variety of transactions with other members of the Corporate Group in the ordinary course of business. Set forth below is a description of material related party transactions. For additional information about transactions with related parties, see Note 16 to our consolidated financial statements.

### Ocensa

Ecopetrol S.A. has entered into the following agreements with Ocensa:

- In March 1995, Ecopetrol S.A. entered into an agreement for the transportation of crude oil through the Ocensa pipeline. Pursuant to the terms of this agreement, Ecopetrol S.A. was required to make monthly payments that varied depending on both the volume of crude oil we transported through the pipeline and a tariff imposed by Ocensa on the basis of Ocensa's financial projections and their expected volumes of crude oil. In 2012, payments made by Ecopetrol S.A. under this agreement amounted to US\$290.42 million. On January 17, 2013, this agreement was amended as a result of Ocensa's new business model. Among other changes, this amendment to the transportation agreement establishes the payment of the tariff calculated according to Resolutions issued in 2010 by the Ministry of Mines and Energy. In 2013, another amendment was executed that modified the terms by which the payments of invoices should be made.
- On January 17, 2013, the Amended and Restated Oleoducto Central Agreement and other agreements derived from it were terminated by mutual consent among the parties. On the same date, January 17, 2013, Ocensa and its shareholders—Cenit, Ecopetrol Pipelines International Limited, Santiago Pipelines Company, New Santiago Pipelines Company, Total Colombia Pipeline, Inversiones Sol del Sur S.A.S. and Cepsa Colombia S.A.—entered into a new shareholders agreement that establishes the basis for a new business model, pursuant to which Ocensa has become a profit center instead of a cost center. This agreement became effective as of the date of execution and will be in effect until Ocensa is registered on an exchange. Additionally, this agreement might be renegotiated if the control structure of Ocensa is modified.
- On October 28, 2013, Ecopetrol entered into a natural gas supply contract in force until November 30, 2018, pursuant to which Ecopetrol S.A. receives a fixed price per MBTU. This agreement replaced the contract for natural gas supply entered into on December of 2004, under which Ocensa paid a variable rate to Ecopetrol. In 2013, Ecopetrol S.A. received an aggregate sum of US\$3.35 million under the former contract.
- On July 10, 2012, Ecopetrol entered into a ship or pay agreement for the operation of Ocensa's unloading facilities at which Ecopetrol unloads crude oil. This agreement was later amended on March 12, 2013 and on July 19, 2013. By virtue of this agreement, Ecopetrol S.A. paid fees of US\$2.48 million to Ocensa in 2013. These fees correspond to a cost of US\$1.50 per barrel of crude oil that is unloaded. The agreement is for a term of five years, and may be terminated for any of the following reasons: in case of breach; dissolution and winding up of Ecopetrol; change of control of Ecopetrol when the new shareholder, its directors or managers are reported in OFAC or have been convicted for a crime related to money laundering or terrorist financing; assignment of the agreement without compliance with the requirements set forth in the agreement; or unilaterally by either of the parties in case of a justified event.
- In November 1996, Ecopetrol S.A. leased the Cravo Norte dock to Ocensa. Pursuant to the terms of the agreement, Ecopetrol S.A. received monthly payments during 2013 of US\$300.00 plus applicable taxes. This contract was transferred to Cenit, effective in January 2014.



- In September 1999, Ecopetrol S.A. entered into a joint operation agreement for the TLU-3 Coveñas buoy with Ocensa and ODC. Pursuant to the terms of this agreement Ecopetrol S.A. is required to make fixed monthly payments of US\$75,000 plus a variable amount depending of the volume of crude oil exported through the buoy. There have not been variable payments in the last three years. The duration of this agreement is indefinite but can be terminated by mutual consent. In December 2013, Ocensa's board of directors authorized the assignment of this agreement by Ecopetrol S.A. to Cenit.
- In December 1999, Ecopetrol S.A. entered into an operation and maintenance agreement for the Porvenir, Miraflores and Vasconia pumping stations. In 2013, pursuant to the terms of this agreement, Ecopetrol S.A. received payments of approximately US\$13.64 million plus applicable taxes, fixed and variable costs in 2013.

Ocensa has entered into the following agreements with some of our subsidiaries:

- In March 1995, Equión Energia Limited and Santiago Oil Company entered into an agreement for the transportation of crude oil through the Oleoducto Central S.A. (Ocensa) pipeline. In November 2012, Equión Energía Limited and Santiago Oil Company transferred, by means of various transactions, its shares (24.8%) and transportation rights (19.8%) holdings in the Ocensa pipeline to wholly owned subsidiaries of Ecopetrol S.A. (51%) and Talisman (49%). Equión kept 5% of transportation rights in Ocensa. In 2013, the transportation fees billed by Ocensa were: Equión Energía Limited (US\$21.5 million), Santiago Oil Company (US\$3.7 million) and Hocol and Homcol (US\$10.9 million).
- On January 3, 2013, the Technical Services and Management Agreement (*Contrato de Servicios Técnicos y Administrativos*) between Ecopetrol S.A. and Ocensa was terminated by mutual consent.
- Ocensa, Equión and Ecopetrol S.A. entered into a water batching agreement for a five-year term beginning on July 1, 2010. The purpose of this agreement is to transport the water necessary for oil and gas production. In 2013, Ocensa received US\$0.30 million in fees under this contract. These fees correspond to the reimbursement of costs incurred by Ocensa for rendering services under this contract.
- On December 19, 2013, Ecopetrol S.A. entered into a gas supply agreement for the generation of electricity with Equión, Santiago Oil and SPEP. Equión, Santiago Oil and SPEP will receive distributions of oil and gas in set proportions (Equión 11.64%, Santiago 7.35% and SPEP 11.64%). This agreement became effective as of January 1, 2014 and will expire on December 31, 2018. This agreement will terminate should either of the following events occur: the Rio Chitamena association contract terminates or Ocensa is no longer the owner of electricity generation equipment. In 2013, Ocensa did not make any payments pursuant to this contract. For subsequent years, the contract provides that Ocensa will pay each of the other parties an amount set forth by a formula set in the contract.

# Oleoducto de Colombia S.A. (ODC)

Ecopetrol S.A. entered into the following agreements with ODC:

• In July 1992, a take-and-pay agreement for the transportation of hydrocarbons. Pursuant to this agreement, Ecopetrol S.A. must pay a previously agreed tariff over the volume of hydrocarbons transported. The duration of this agreement is indefinite; however the contract will remain in force as long as Ecopetrol S.A. holds shares in Oleoducto de Colombia S.A., whether directly, or through an affiliate. As of January 2013, the applicable tariff is the one set by the Ministry of Mines and Energy (MME). The MME Tariff had been set in 2011 for a four-year term, with a yearly adjustment based on the consumer price index. For 2013, the tariffs were US\$1.7053 per barrel (January through June) and US\$1.7705 per barrel (July through December).

- In August 1992, an operation and maintenance agreement for the Vasconia and Coveñas terminals both property of ODC. Pursuant to the terms of this agreement, ODC paid in 2013 approximately US\$34.4 million, which include a variable surcharge between 5% and 12% on such expenses, plus any applicable taxes. The duration of this agreement is indefinite, but can be terminated by any party upon six-months' notice.
- In March 1998, a joint operation agreement for the TLU-1 Coveñas buoy. Pursuant to the terms of this agreement, ODC paid Ecopetrol S.A. approximately US\$10.5 million in 2013. The duration of this agreement is indefinite and can be terminated by mutual agreement. In December 2013, Ecopetrol S.A. assigned its rights under this agreement to Cenit, though Ecopetrol S.A. kept its role as operator under the agreement.
- In September 1999, a joint operation agreement for the TLU-3 Coveñas buoy with Ocensa and ODC. Pursuant to the terms of this agreement, ODC paid approximately US\$8.9 million in 2013. The duration of this agreement is indefinite. In December 2013, Ecopetrol S.A. assigned its rights under this agreement to Cenit, though Ecopetrol S.A. kept its role as operator under the agreement.
- In July 2006, an operation and maintenance agreement for the Caucasia Station and the Vasconia-Coveñas pipeline system. Since 2010, this agreement only covers the operation of the Caucasia station and the Vasconia-Coveñas pipeline system, both property of ODC. Pursuant to the terms of this agreement, Ecopetrol S.A. received payments of approximately US\$16.7 million in 2013, which includes expenses incurred by Ecopetrol S.A. for the performance of the agreement, with a variable surcharge of between 5% and 12% on such expenses, plus any applicable taxes. The duration of this agreement is indefinite.

ODC has entered into the following agreements with some of our subsidiaries:

- Between March 1992 and January 1993, Hocol, Equión Energía Limited and Santiago Oil Company each entered into agreements with ODC for the transportation of crude oil through the Vasconia-Coveñas pipeline. The term of each of these agreements is indefinite. As of January 2013, the applicable tariff is the one set by the Ministry of Mines and Energy.
- In April 1996, due to the construction of Ocensa's pipeline, ODC and OCENSA entered into a construction agreement. According to this agreement Ocensa leases certain areas, and uses facilities and auxiliary systems in Vasconia, Caucasia and Coveñas. The contract has a yearly term which renews automatically unless any party gives termination notice no later than three months prior to the termination date. Under the contract, Ocensa pays a monthly fee totaling US\$1.4M yearly.
- In August 2001, ODC entered into a shared costs agreement with Ocensa. According to this agreement, the two companies agreed on cost sharing for security, air and land transportation along the pipelines, and for pipeline mechanic and geotechnical maintenance—*i.e.*, maintenance of the pipeline itself, which includes the prevention of damage associated with landslides. This contract has been biannually renewed by mutual consent and can be terminated anytime upon six months' notice by either party.
- In January 2010, ODC and Ocensa entered into a collaboration agreement to secure administrative, legal and financial services for ODC. The duration of this agreement is indefinite, but can be terminated by any party upon six-months' notice. It has been agreed that ODC pays Ocensa a monthly fee that totals US\$1 million per year.
- In July 2010, ODC entered into a pipeline maintenance agreement with Ocensa. According to this agreement Ocensa coordinates all activities required for the ODC's pipeline mechanics and geotechnical maintenance. The duration of this agreement is indefinite, but can be terminated by either party upon six-months' notice. ODC pays Ocensa a fixed monthly fee totaling US\$0.7M per year. The cost of services rendered by third parties that benefit both parties is shared according to the terms of the shared costs agreement.

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# Oleoducto de los Llanos Orientales (ODL)

Ecopetrol S.A. have entered into two ship-or-pay agreements with ODL:

- In March 2009, Ecopetrol S.A. entered into a ship-or-pay agreement with ODL that establishes a financing tariff used to pay ODL's indebtedness to Grupo Aval for five years. This agreement was superseded by a new contract executed in May 2010, with a seven-year term, to reflect new conditions agreed with Grupo Aval. In August 2013, this contract was amended, providing a new term of seven years, two two-year grace periods, and an interest rate of DTF + 2.5%. This financing tariff is collected through a trust fund, which in turn is responsible for making the debt service payments to Grupo Aval. Under this agreement, ODL has committed to transport 75 thousand bpd during the initial two-year grace period of the facility and 90 thousand bpd during the remaining years including the new term. Ecopetrol is responsible for 65% of this capacity.
- In September 2009, Ecopetrol S.A. entered into a second ship-or-pay agreement with ODL that establishes a financing tariff collected through a trust fund that in turn is responsible for making debt service payments to security holders. Under this agreement, ODL committed to transport 19.5 thousand bpd during the first phase of the ODL project (which began in September 2009 and ended in the first quarter of 2010) and 39 thousand bpd upon commencement of the second phase of the ODL project which occurred in the first quarter of 2010.
- In December 2009, Ecopetrol S.A. entered into a service agreement with ODL to transport crude oil. This agreement expires in June 2016 and can be renewed. Pursuant to the terms of this agreement, in 2013 Ecopetrol S.A. made monthly payments totaling Ps\$229 billion for the year.
- In March 2010, Ecopetrol S.A. entered into a pipeline operating and maintenance agreement with ODL. This agreement has a five-year term and the amount payable to us for the entire term of the agreement is Ps\$56.4 billion, plus any applicable taxes.
- In March 2010, Ecopetrol S.A. entered into an undiluted crude oil supply agreement, which was renewed in December 2013 until December 2014. Pursuant to the terms of this agreement, in 2013 ODL paid to Ecopetrol S.A. Ps\$19.2 billion plus applicable taxes.
- In July 2013, Ecopetrol S.A. entered into a service agreement with ODL to dilute, in the facilities of Cusiana (CPF Cusiana), crude oil transported in the Rubiales Monterrey/Cusiana pipeline, with a committed capacity of 182 thousand bpd. For 2013, 130 thousand bpd of the committed capacity corresponds to the "Take or Pay" volume. Pursuant to the terms of this agreement, in 2013, Ecopetrol had made monthly payments totaling Ps\$7.6 billion for the year.

# Oleoducto Bicentenario de Colombia S.A.S.

- In November 2011, Ecopetrol S.A. signed a five-year technical assistance services contract for the construction of the Araguaney-Coveñas pipeline. This contract is finishing its first phase on March 2014. Future phases are under evaluation.
- In June 2012, Ecopetrol S.A. entered into ship-or-pay and ship-and-pay crude oil transportation agreements with Oleoducto Bicentenario that establishes a price, which requires the payment of Bicentenario's indebtedness to local banks for 12 years. This tariff is collected through a trust; the trust is also responsible for making the debt service payments to the banks. The duration of the ship-or-pay agreement is the earlier of 12 years or when the credit has been entirely paid, and the duration of the ship-and-pay agreement is 20 years after the ship-or-pay terminates. Under these agreements, Bicentenario has committed to transport at least 110,000 bpd, of which the 55% of the agreement volume is provided directly by Ecopetrol S.A. and 0.97% indirectly by Hocol. In June 2012, Ecopetrol S.A. entered into storage-or-pay and storage-and-pay agreements with Oleoducto Bicentenario. Under these agreements, Bicentenario is committed to receive, store, preserve and deliver our crude oil. The storage-or-pay agreement will terminate when Bicentenario's indebtedness to local banks has been entirely paid, and the duration of the storage-and-pay agreement is 20 years after the storage-or-pay agreement terminates.



• In August 2012, Ecopetrol S.A. entered into an Operation and Maintenance agreement for the Arguaney – Banadia pipeline system. Pursuant to the terms of this agreement Ecopetrol S.A. received Ps\$23 billion from the beginning of the contract through December 2013. Ecopetrol S.A. will receive estimated payments of US\$36.4 million per year. The duration of this agreement is 15 years.

### **Other Agreements**

- Ecopetrol S.A. entered into a supply agreement with Ecodiesel, a company in which Ecopetrol S.A. has a 50% equity interest. This agreement has been operative since August 1, 2010. Pursuant to the terms of this agreement, Ecodiesel must deliver to Ecopetrol S.A.—and Ecopetrol S.A. must in turn purchase—at least 80% of Ecodiesel's biodiesel production each month. Payments vary depending on the purchased volumes of biodiesel. This agreement expires on December 31, 2017.
- In 2010, Ecopetrol S.A. renewed the service agreement with Societal Colombiana de Servicios Mortuaries S.A., or Serviport, a company in which we had a 49% equity interest through September 30, 2012. On October 1, 2012, Ecopetrol S.A.'s equity ownership in Serviport passed to Cenit. Pursuant to the terms of this agreement, Serviport assists Ecopetrol S.A. in its maritime operations at the Coveñas port. This agreement expires on May 27, 2019.

# **Transactions with Other State-Controlled Entities**

We are a state-controlled oil and gas company and operate in an industry regulated by governmental authorities, agencies and other organizations.

In the ordinary course of business we enter into transactions with other state-owned entities that include but are not limited to the following:

- selling and purchasing goods, including crude oil purchases of ANH royalties;
- properties and other assets;
- rendering and receiving services;
- leasing assets;
- depositing and borrowing money; and
- using public utilities.

# Purchases of Hydrocarbons

The purchase of hydrocarbons is made in the ordinary course of business, and on terms comparable to those offered to private parties. We have established procurement policies and approval processes for purchases of products and services, which do not depend on whether the counterparties are state-owned entities.

## Loans to Our Employees

We extend loans for housing and general purposes to all of our employees as part of our compensation scheme. The principal amount of the loan depends on the applicant's tenure and cannot exceed 59 times the applicant's monthly salary. We do not guarantee any loans made by third parties.



Other than maintaining housing loans to some executive officers as described in the table below, neither we nor any of our subsidiaries, have provided loans (including housing loans), extended or maintained credit lines, arranged for the extension of credit by third parties, materially modified or renewed an extension of credit lines, in the form of a personal loan to or for any of our executive officers since our ADSs were registered under the Exchange Act.

The following table sets forth a description of the loans outstanding to our executive officers as of December 31, 2013 (figures in millions of Colombian Pesos).

Executive Officer	Date of Approval	Nature of the Loan and Date of Disbursement	Principal Amount of the Loan	Amount Outstanding at December 31, 2013	Largest Amount Outstanding during period	Termination Date	Applicable Interest Rate
Javier G. Gutiérrez	January 23, 2007	Housing, June 26, 2008	729.0	542.8	729	June, 2028	UVR(1)
Pedro A. Rosales	April 30, 1997	Housing, August 16, 1997	47.3	0	247.5	-	-
	September 16, 2003	Housing, December 11, 2003	231.9	118.7		December, 2018	UVR(1)
Oscar Villadiego <sup>(2)</sup>	December 29, 1999	Housing, January 11, 2001	78.0	5.5	78	April, 2019	UVR(1)
Nestor Saavedra <sup>(3)</sup>	August 10, 2007	Housing, October 25, 2007	134.1	88.8	134.1	April, 2018	UVR(1)
Adriana M. Echeverri	January 27, 1997	Housing, August 16, 1997	44.8	0	45.1	-	-
	June 12, 2002	Housing, December 10 2002	37.1	24.5		February, 2018	UVR(1)
Jaime Bocanegra Bernal <sup>(4)</sup>	November 12, 2010	December 15, 2011	271.4	252.4	271.4	June, 2027	UVR(1)
Magda Manosalva <sup>(5)</sup>	October 10, 2007	November 27, 2007	133.4	235.1	318	-	-
	March 30, 2009	May 26, 2009	184.6			July, 2024	UVR(1)

(1) As the regulatory entity for these purposes, the Central Bank of Colombia (Banco de la República) defines the term "UVR" as *Unidad de Valor Real* (Real Value Unit), an accounting unit which reflects purchasing power based exclusively on the consumer price index variation certified by the National Statistics Department of Colombia (DANE). The UVR is used to calculate the cost of housing credits in Colombia. This accounting unit allows financial entities to adjust credit values to the cost of living increase in Colombia.

- (2) Oscar Villadiego became an executive officer in March 2012 upon the reorganization of our senior management's structure approved by our Board of Directors. See "Item 6. Directors, Senior Management and Employees—Officers and Senior Management of Ecopetrol."
- (3) Néstor Saavedra became an executive officer in September 2012.
- (4) Jaime Bocanegra became an executive officer in July 2013.
- (5) Magda Manosalva became an executive officer in November 2013.

# ITEM 8. Financial Information

# CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

Our annual consolidated financial statements are filed as part of this annual report starting on page F-1.

### LEGAL PROCEEDINGS

We are a party to various legal proceedings in the ordinary course of business. Other than the proceedings disclosed in this annual report, we are not involved in any pending (or, to our knowledge, threatened) litigation or arbitration proceeding that we believe will have a material adverse effect on our Company. Other legal proceedings that are pending against or involve us and our subsidiaries are incidental to the conduct of our and their business. We believe that the ultimate disposition of such other proceedings individually or in an aggregate basis will not have a material adverse effect on our consolidated financial condition or results of operations.

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As of December 31, 2013, we were a party to 3,201 legal proceedings relating to civil, administrative, environmental, tax and labor claims filed against us in the Colombian courts and arbitration tribunals, of which 286 had an accrual provision. We allocate sufficient amounts of money and time to defend these claims. Historically, we have been successful in defending lawsuits filed against us. Based on the advice of our legal advisors, it is reasonable to assume that the litigation procedures brought against us will not materially affect our financial position or solvency regardless of the outcome. See Note 31 to our annual consolidated financial statements included in this annual report for a discussion of our legal proceedings.

In December 2010, Llanos Oil Exploration Ltd., or Llanos Oil, filed a lawsuit against us in a district court of the Netherlands before The Court of The Hague which, if decided against us, could materially affect our financial condition. The plaintiff alleges early termination attributable to us of the following exploration activity contracts: the 1997 Las Nieves Association Contract and the 2002 Guatapurí Association Contract. These contracts were terminated because of the default by Llanos Oil on July 28, 2000, and July 23, 2003, respectively, in accordance with the provisions of the contracts. In the incidental proceedings judgment of May 30, 2012, the district court in The Hague ruled that it lacks jurisdiction to hear the case and rejected all the legal grounds of the plea of Llanos Oil regarding the jurisdiction of the court. Llanos Oil appealed on August 2012. On October 15, 2013, the Court of Appeals rejected Llanos Oil's appeal in full; the judgment of the Court of First Instance that the Dutch Courts do not have jurisdiction was confirmed. Llanos Oil appealed the judgment of the Court of Appeals before the Supreme Court and the decision on appeal is expected during the second half of 2014. We have not created a provision for this claim because our legal counsel in The Hague considers the probability of success for Llanos Oil to be remote.

On April 16, 2012, we were served with a class action suit against us, seeking monetary damages of approximately Ps\$86 billion related to the December 2011 Caño Limón-Coveñas Crude Oil Pipeline Spill. See "Item 4. Information on the Company—Overview by Business Segment—Transportation Infrastructure— Incidents at Transportation Facilities—Caño Limón–Coveñas Crude Oil Pipeline Spill." The Colombian Attorney General's Office filed a motion requesting the judge to require the claimant to justify the amount. The claimant reduced the claim to Ps\$11 billion. However the court appraised the damages to be at the most Ps\$298 million, based on the number of people involved in the class action. The court set the date of the conciliation hearing for October 23, 2012, but the claimant did not attend and instead requested the court to set a new date for the settlement hearing. The court declined the request and decided to continue with the proceeding. The evidence stage of this proceeding started in 2013. Our legal counsel is of the opinion that this class action suit has only a remote possibility of success.

#### Foncoeco

An association of former employees known by the acronym *Foncoeco* brought an action against us in connection with a company profit-sharing plan offered in 1962 that expired in 1975. The plaintiffs claim that our Board of Directors had set aside a specific amount under the profit-sharing plan, which was not entirely distributed to employees eligible under the plan. The court of first instance ruled on June 25, 2002 in our favor and rejected the plaintiffs' arguments. The plaintiffs appealed the ruling to the Bogota Higher Tribunal, which ordered us to present a *rendición de cuentas* (an accounting action) to the first instance judge based on the amounts allocated by our Board of Directors. Based on the judge's conclusion with respect to our accounting and the expert testimony of a witness presented by the plaintiffs, who we maintain included amounts never allocated by our Board of Directors to the profit sharing plan, the first instance judge, in 2005, ordered us to pay Ps\$541,833 million, or approximately US\$281.2 million. We appealed the decision by the first instance judge to the Bogota Higher Tribunal and on June 22, 2011, the court ruled in our favor and reduced the amount we must pay to Ps\$6.6 million, or approximately US\$3.418. On March 14, 2012, the Colombian Supreme Court of Justice permitted an extraordinary appeal filed by the plaintiffs. Ecopetrol filed its defense pleadings on May 18, 2012. On November 1, 2013, Colombian Supreme Court of Justice ruled that appeal filed by Foncoeco was to be ungrounded. Therefore, Supreme Court judgment declared that the sentence formerly issued by civil high court of Bogotá, awarding damages against Ecopetrol for only Ps\$6.6 million (approximately US\$3,418), was correct and to be sustained.

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On January 6, 2014, The United States Department of Justice (DOJ) announced the unsealing of charges against two former co-chief executive officers and the former general counsel of PetroTiger Ltd. (PetroTiger), alleging, among other things, violations of the U.S. Foreign Corrupt Practices Act (FCPA) and conspiracy to commit violations of the FCPA and money laundering in connection with payments made to an Ecopetrol employee, who by the time of the announcement by the DOJ no longer worked at the Company, to secure Ecopetrol's approval for PetroTiger's entry into an oil services contract with Mansarovar Energy Colombia Ltd. Ecopetrol participated in the Mansarovar project as non-operating partner. At that time, the DOJ also announced that the general counsel of PetroTiger had pled guilty on November 8, 2013 to a criminal information charging one count of conspiracy to violate the FCPA and to commit wire fraud. One of the charged former co-CEO's pleaded guilty on February 18, 2014 to the same charges. Charges remain pending against the other former chief executive officer. Ecopetrol has approached the Colombian authorities to provide information for the criminal investigation and cooperated with the prosecutor general's office. Additionally, it has responded to information requests from the DOJ and Colombian authorities in connection with the investigation of the PetroTiger executives. Ecopetrol is evaluating the need to implement further enhancements to its compliance program.

### DIVIDENDS

We do not have a dividend policy. Pursuant to Colombian law, we may distribute dividends to our shareholders. Our Board of Directors may propose a dividend, which declaration, amount and payment per share is subject to approval by a simple majority of the shareholders. In 2011, 2012 and 2013 the shareholders approved the distribution of 70.3%, 79.9% and 80.1% of 2010, 2011 and 2012 net income, respectively. On March 26, 2014, our shareholders at the ordinary general shareholders' meeting approved an ordinary dividend of 69.9% plus an extraordinary dividend of 10.2% of net income for the fiscal year ended December 31, 2013. See "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Use of Funds—Dividends."

### SIGNIFICANT CHANGES

There have not been any significant changes since the date of our annual consolidated financial statements for the year ended December 31, 2013.

### ITEM 9. The Offer and Listing

# TRADING MARKETS

In August 2007, we conducted an initial public offering of 10.1% of our common shares in Colombia. As a result of such offering, our common shares have traded on the BVC since November 2007 under the symbol "ECOPETROL." Our ADSs, representing 20 common shares, have been traded on the NYSE under the symbol "EC" since September 2008. JPMorgan Chase Bank, N.A. serves as depositary for our ADSs.

Since August 2010, our ADSs have been traded on the Toronto Stock Exchange under the symbol "ECP."

The second round of the equity offering program took place between July 27 and August 17, 2011. The offer was directed exclusively to investors in Colombia as permitted by Law 1118 of 2006. A total of 644,185,868 shares were allotted, equivalent to approximately Ps\$2.38 trillion. Out of the 219,054 investors participating in this round, 73% were new stockholders. In addition, 87% of the offering was allocated to retail investors and the remaining 13% to institutional investors. Funds obtained by us through this offering were allocated to the Company's investment plan.

In the future, the Nation (via the Ministry of Finance and Public Credit), as our controlling shareholder, may make decisions or announcements about its intention to sell part of its holding of our capital stock, as it has announced in recent years. We understand that our cooperation is necessary for the successful coordination of the Nation's process.

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The following table sets forth reported high and low closing prices in Pesos for our shares and the reported average daily trading volume of our shares on the BVC for the periods indicated. The table also sets forth information on the trading price of our shares in Pesos and U.S. dollars, as well as the average trading volume.

	Shares Traded on the BVC				
	Pesos per share		U.S. dollars pe	Average number of shares traded	
	High	Low	High	Low	per day
2009	2,815	1,990	1.4707	0.7833	10,245,002
2010	4,660	2,370	2.5582	1.1958	8,764,023
2011	4,300	3,575	2.2823	1.9466	6,750,979
2012	5,850	4,200	3.3236	2.1619	8,396,801
2013	5,710	3,695	3.2091	1.8992	7,018,859
Most recent quarters					
First quarter 2012	5,480	4,200	3.0963	2.1619	11,929,722
Second quarter 2012	5,850	4,850	3.3236	2.7133	9,823,519
Third quarter 2012	5,430	4,870	2.9820	2.7096	6,398,774
Fourth quarter 2012	5,790	5,140	3.1866	2.8253	5,480,062
First quarter 2013	5,710	4,895	3.2091	2.7050	6,608,557
Second quarter 2013	5,020	3,850	2.7447	1.9815	9,265,648
Third quarter 2013	4,495	3,875	2.3672	2.0181	6,141,186
Fourth quarter 2013	4,590	3,695	2.4388	1.8992	6,081,654
First quarter 2014	4,030	3,390	2.0506	1.6755	7,720,085
Most recent six months					
October 2013	4,590	4,320	2.4388	2.2867	5,240,155
November 2013	4,490	3,905	2.3661	2.0267	5,583,634
December 2013	4,160	3,695	2.1489	1.8992	7,436,786
January 2014	3,700	3,390	1.9203	1.7008	7,847,711
February 2014	3,770	3,430	1.8585	1.6755	8,295,332
March 2014	4,030	3,430	2.0506	1.6758	7,032,450
April 2014 (through 25)	4,030	3,500	2.0556	1.8073	8,627,481

(1) U.S. dollars per common share translated at the Representative Market Exchange Rate as of each period.

The following table sets forth reported high and low closing prices in U.S. dollars for our ADSs and the average daily trading volume of our ADSs on the NYSE for the periods indicated. The table also sets forth information on the trading price of our ADSs in U.S. dollars, as well as the average trading volume.

	ADSs Traded on NYSE		
	U.S. dollars per ADS <sup>(1)</sup>		Average number of ADSs
	High	Low	traded per day
2009	29.99	15.31	48,289
2010	51.92	23.60	163,749
2011	46.00	38.47	357,289
2012	67.48	44.52	551,410
2013	63.80	37.93	464,193
Most recent quarters			
First quarter 2012	61.86	44.52	522,679
Second quarter 2012	67.48	53.83	749,654
Third quarter 2012	59.55	53.96	505,225
Fourth quarter 2012	63.70	56.13	429,951
First quarter 2013	63.80	53.71	480,344
Second quarter 2013	54.70	39.87	621,213
Third quarter 2013	47.69	40.40	337,225
Fourth quarter 2013	48.91	37.93	420,859
First quarter 2014	40.79	33.20	624,531
Most recent six months			
October 2013	48.91	45.60	277,066
November 2013	46.90	40.42	323,308
December 2013	42.97	37.93	664,304
January 2014	38.45	33.97	726,731
February 2014	36.63	33.20	557,973
March 2014	40.79	33.67	575,986
April 2014 (through 25)	41.16	36.41	590,329

(1) Each ADS represents the right to receive 20 of our common shares.

## TRADING ON THE BOLSA DE VALORES DE COLOMBIA

The BVC is the largest stock exchange in Colombia for trading securities and derivatives. The BVC is a member of the World Federation of Exchanges and the *Federación Iberoamericana de Bolsas*.

The BVC is the only exchange where our common shares trade in Colombia. The table below sets forth the reported aggregate market capitalization of the companies traded on the BVC, as of December 31, 2013.

	Aggregate Market Ca	pitalization of the BVC
	Market Capitalization	Market Capitalization
	(Ps\$ in billions) (US\$ in billi	
December 31, 2013	413,916	214.817

(1) Representative Market Exchange Rate as of December 31, 2013.

### Registration and Transfer of Shares

Under Colombian law, transfers of shares must be registered on the issuer's stock ledger. Only those holders registered on the stock ledger are considered by law as shareholders.

The shares are evidenced in physical or electronic form.

Transfers of shares are subject to a process for registration that differs depending on whether the shares are evidenced in physical or electronic form.

Transfers of shares evidenced in electronic form required to be executed through the Colombia Stock Exchange. In Colombia, only the relevant stockbrokers called *sociedades comisionistas de bolsa* are authorized to make the transfers of shares through the Colombia Stock Exchange. The transfers of shares are registered in the Centralized Security Deposit (*Depósito Centralizado de Valores*) or DECEVAL, through the relevant stockbrokers. DECEVAL records the share transfer on its systems, in order to make the corresponding registration in the issuer stock ledger.

Transfers of shares evidenced by physical certificates must be registered on the issuer's stock ledger either by the transferor endorsing the certificates to the buyer or by giving written instruction to the issuer to this effect.

Transfers of shares do not require any fees to be paid to the issuer, but they may be subject to certain taxes, fees or charges which must be paid by the holders to the stockbrokers.

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Under Colombian legislation, if a transfer of shares for a value equivalent to or higher than 66,000 UVR must be made through the BVC if the shares are registered with the BVC. Otherwise, shareholders can freely negotiate a transfer of shares.

Nevertheless, the following transfers are not required to be executed through the BVC:

- transfers between shareholders who are considered to be the same beneficial owner;
- transfers of shares owned by financial institutions, under supervision of Superintendency of Finance, that are in a liquidation process;
- repurchases of shares by the issuer;
- property delivered in lieu of payment, or payment of money or other valuable property, different than the amount owed or demanded, in exchange for the extinguishment of the debt;
- transfers of shares made by the Nation or the Financial Institutions Warranty Fund (Fondo de Garantias de Instituciones Financieras) or FOGAFIN;
- transfers of shares issued abroad by Colombian companies, provided they take place outside Colombia;
- transfers of shares issued by foreign companies, offered through a public offer in Colombia, provided that they take place outside Colombia; and
- any other transaction specifically authorized by the Superintendency of Finance to take place outside the BVC.

For the purposes described above, multiple transfer transactions made within one hundred twenty (120) calendar days, between the same parties on shares of the same issuer and under similar conditions, are treated as a single transfer.

# ITEM 10. Additional Information

#### BYLAWS

The following is a summary of the material provisions of our bylaws. The last amendment of our bylaws was approved on March 21, 2013 by the shareholders, which allows the Board of Directors to authorize the issuance and placement of non-convertible bonds as well as other debt securities.

The Bylaws are contained in Public Deed No. 5314 of December 14, 2007, issued by the Second Notary of Bogotá; amended by Public Deed No. 560 of May 23, 2011, issued by the Notary Forty- Six of Bogotá and the Deed No. 666 of May 7, 2013, issued by the Notary Sixty-Five of Bogotá.

This summary does not purport to be complete and is qualified by reference to our bylaws, which are filed as an exhibit to this annual report. For a description of the provisions of our bylaws relating to our Board of Directors and its committees, see "Item 6. Directors, Senior Management and Employees."

### **Organization and Register**

Ecopetrol was organized on August 25, 1951, existing under the laws of Colombia. Since November 13, 2007, Ecopetrol has been a mixed economy company. We are registered in the Chamber of Commerce of Bogotá (*Cámara de Comercio de Bogotá*) under registry number 899.999.068-1.

## **Corporate Purpose**

Pursuant to Article 4 of our bylaws, we may engage in the exploration, production, refining, transportation, storage, distribution and commercialization of crude oil and its by-products in Colombia and abroad, and to support, promote and manage democratization programs and sales of its equity in accordance with applicable rules. Our bylaws also authorize us to perform activities for the exploration and production of crude oil in areas that prior to January 1, 2004 were operated by us directly or were subject to agreements subscribed by us; to directly or indirectly explore and produce crude oil in areas assigned to us by the ANH; to directly or indirectly explore and produce crude oil in areas assigned to us by the ANH; to directly or indirectly explore and produces in Colombia or abroad; to undertake research for developing and commercializing alternative energy sources; and in general, to undertake any other activity instrumental or required to develop our corporate purpose. Our corporate purpose includes administering and managing all properties that were formerly part of the De Mares concession.

Additionally, pursuant to Article 5 of our bylaws, we may enter into all acts, contracts and legal business and activities that may be required for us to adequately fulfill our corporate purpose.

# Preference Rights and Restrictions Attaching to Our Shares

We have only one class of stock without special rights or restrictions. Our shareholders do not have any type of preemptive rights.

Under Commercial Colombian law, our shareholders have the following economic privileges and voting rights:

- to participate and vote on the decisions of the general shareholders' meeting;
- to receive dividends based on the financial performance of the Company in proportion to their share ownership;
- to transfer and sell shares according to our bylaws and Colombian law;
- to inspect corporate books and records 15 business days prior to the ordinary shareholders' meeting where the year-end financial statements are to be approved;
- upon liquidation, to receive a proportional amount of the corporate assets after the payment of external liabilities; and
- to sell the shares, known as *derecho de retiro*, if a corporate restructuring affects the economic or voting rights of the shareholders in the terms and conditions established under Colombian law.

Our bylaws and corporate governance code provide additional rights to our minority shareholders. These rights include:

- Sale of Assets. For a ten-year period counted from the date of subscription of the declaration of the Nation dated July 26, 2007 or until the Nation loses its status as majority shareholder, the Nation guarantees that any sale of 15% or more of our assets requires the approval of the general shareholders' meeting and that the Nation would only be allowed to vote its shares in favor of the proposal if 2% or more of our minority shareholders accept the proposal.
- Candidate List. Pursuant to our bylaws and Law 1118 of 2006, the Nation will include in its candidate list for election of members of the Board of
  Directors one member selected by the departments that produce hydrocarbons. In addition, pursuant to the declaration of the Nation dated July 26,
  2007, the Nation will include in its candidate list for election of members of the Board of Directors one member selected by the ten largest minority
  shareholders. The minority shareholders' right to select a candidate loses its effect when minority shareholders, according to their share participation,
  name a member to our Board of Directors.

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- *Extraordinary Meetings*. Our bylaws and corporate governance code provide that the entity exercising permanent control over Ecopetrol must instruct the Company's CEO or External Auditor to call an extraordinary meeting of the Company's shareholders when so requested by a plurality of shareholders holding at least 5% of the total number of outstanding shares. Such requests shall be made in writing and must clearly indicate the purpose of the meeting.
- Investor Attention Office. Ecopetrol has an investor attention office, a specialized unit responsible for receiving complaints from our shareholders. Pursuant to our bylaws, shareholders holding at least 5% of the total number of shares outstanding may request that the investor attention office conduct a special audit of the following documents: the income statement; the proposal for the distribution of profits; the report of the Board of Directors as to the economic and financial status of our Company; the report from our general counsel as to the legal status of our Company; and the report from the independent auditors. Special audits cannot be made of documents that contain scientific, technological or statistical information of our Company, or agreement that gives us competitive and economic advantages over our competitors, or in respect of any document related to intellectual property. Shareholders also have the right to propose good corporate governance recommendations to the office for the protection of investors.
- Others. Pursuant to our bylaws, shareholders holding at least 5% of the total number of shares outstanding may propose recommendations to our Board of Directors pertaining to the management of our Company. Any shareholder may file a written petition to our Board of Directors to investigate corporate governance violations that the shareholder believes to have been committed.

## Amendments to Rights and Restrictions to Shares

We have only one class of stock and it has no special rights or restrictions. Our shareholders do not have any type of preemptive rights. The rights given to our shareholders by law are described in our bylaws and may only be modified through an amendment to the law.

The additional rights given to our minority shareholders in our bylaws and corporate governance code may only be modified through an amendment of those internal documents.

#### **General Shareholders' Meeting**

Shareholders' meetings may be ordinary or extraordinary. Ordinary meetings will take place in our legal domicile located in Bogota, Colombia, within the first three months following the end of each fiscal year, on the day and at the time set forth in the notice for the general shareholders' meeting. The call for the general shareholders' meeting may be made electronically or by written communication sent to each shareholder. In both cases the call must be published in a newspaper of wide circulation 20 business days prior to the date on which the meeting will take place.

In the ordinary general shareholders' meeting, our Board of Directors and the external auditor are appointed and our annual financial statements, profit distribution, audit and management reports and any other matter provided under applicable law or our corporate bylaws are approved.

Extraordinary meetings of shareholders may be called by our Board of Directors, by our president or chief executive officer, by our external auditor, or by shareholders holding at least 5% of the shares outstanding, or when unforeseen or urgent needs of the Company require it. Calls to extraordinary meetings should be made at least eight days prior to the date of the meeting, with the exception of the case where the Law requires a greater time between the summons and the meeting, and may be made electronically or by written communication to each shareholder; in both cases the call must be published in a newspaper of wide circulation. The meeting notice must specify the agenda for the meeting.

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The required quorum for both ordinary and extraordinary meetings is 50% plus one share entitled to vote and decisions are approved with a majority of the members present. This quorum is exempted in the case of "second-call meetings," which may take place when a meeting fails to obtain the required quorum and is called within a period between 10 business days and 30 business days from the first date, in which case decisions may be adopted by a majority of the shares present regardless of the number represented.

Decisions made at ordinary and extraordinary shareholders' meeting must be approved by a majority of the shares present. Colombian law requires supermajorities in the following cases:

- the vote of at least 70% of the shares present and entitled to vote at the ordinary shareholders' meeting is required to approve the issuance of stock not subject to preemptive rights;
- the vote of at least 78% of the shares represented entitled to vote is required to approve the distribution of less than 50% of the annual net profits. If the sum of all legal reserves (statutory, legal and optional) exceeds the amount of the outstanding capital, the Company must distribute at least 70% of the annual net profits;
- the vote of at least 80% of the shares represented is required to approve the payment of dividends in shares; and
- the vote of 100% of the outstanding and issued shares is required to replace a vacancy on the Board of Directors without applying the electoral quotient system.

Shareholders may be represented by proxies provided that the proxy: (1) is in writing (faxes and electronic documents are valid), (2) specifies the name of the representative, (3) specifies the date or time of the meeting for which the proxy is given and (4) includes other information specified by the applicable law. Proxies granted abroad do not require legalization or an apostille.

During our ordinary annual shareholders' meeting, our employees and Directors are only allowed to represent their own shares, unless they act as legal representatives.

### Limitations to the Rights to Hold Securities

There are no limitations in our bylaws or Colombian law on the rights of Colombian residents or foreign investors to own the shares of our Company, or on the right to hold or exercise voting rights with respect to those shares, except in cases of legal representation.

# Restrictions on Change of Control Mergers, Acquisitions or Corporate Restructuring of the Company

Under Colombian law and our bylaws, the general shareholders' meeting has full authority to approve any corporate restructuring, including any mergers, acquisitions or spin-offs. Corporate restructurings are also subject to the requirement that the Nation must hold a minimum of 80% of our common stock at all times. While Law 1118 of 2006 is in effect, there cannot be any restructuring that results in a change of control of our Company.

# **Ownership Threshold Requiring Public Disclosure**

Our corporate governance code (chapter 1, Section 5, Identification of the Main Shareholders) provides that we must disclose periodically on our web page, the names of the shareholders of our Company including, at least, the 20 shareholders with the greatest number of shares. We must also disclose this information to the Superintendency of Finance at the end of each fiscal year.

Colombian securities regulations set forth the obligation to disclose any material event or *hecho relevante*. Any transfer of shares equal or greater than 5% of our capital stock or any person acquiring a percentage of shares that would make him the beneficial owner of 5% or more of our capital stock, is a material event, and therefore, must be disclosed to the Superintendency of Finance.



## Changes in the Capital of the Company

There are no conditions in our bylaws governing changes in our capital stock that are more stringent than those required under Colombian law, with the exception that the Nation must hold a minimum of 80% of our capital stock at all times.

#### **External Auditor**

Pursuant to our bylaws, our external auditor shall not be appointed for more than five consecutive one-year terms by us. However, an external auditor may be hired again after two terms have passed since the conclusion of its last term of appointment. At the ordinary general shareholders' meeting on March 26, 2014, the shareholders appointed Pricewaterhouse Coopers Ltd. as external auditor of Ecopetrol.

# MATERIAL CONTRACTS

#### Transportation Agreement between Ecopetrol and Empresa Colombiana de Gas ESP/Transportadora de Gas del Interior S.A. ESP

On October 6, 2006, we entered into a natural gas transportation agreement with Empresa Colombiana de Gas ESP, or Ecogas, for the transportation of natural gas from the Ballena terminal located in the La Guajira fields to the Barrancabermeja terminal. On February 27, 2007, Ecogas transferred the rights and obligations under this agreement to Transportadora de Gas del Interior S.A. ESP, currently operating as Transportadora de Gas Internacional S.A. ESP, or TGI. This agreement expired on November 30, 2012.

On October 1, 2008, Ecopetrol and TGI signed a natural gas transportation agreement for the transportation of 116,500 thousand cfpd from December 1, 2012 to December 31, 2020 of natural gas from the Ballena terminal located in the La Guajira fields to Barrancabermeja. Pursuant to the terms of the agreement, we pay to TGI a regulated transportation tariff composed of a fixed fee, variable fee depending on transported volumes and an administration, operation and maintenance fee. Payments for transported volume are made in Pesos. During 2013, we paid Ps\$136.6 billion to TGI under the agreement for the transportation services provided to us by TGI.

### Transportation Agreement between Ecopetrol and Ocensa

On March 31, 1995, we entered into a crude oil transportation agreement with Ocensa. See "Item 7. Major Shareholders and Related Party Transactions— Related Party Transactions—Agreements—Ocensa."

#### Reficar

On December 30, 2011, we entered into a construction support agreement pursuant to which we agreed to support Reficar's costs and expenses related to cost overruns and delays in construction. The project financing contract and the related guarantee are described in "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources."

## Oleoducto Bicentenario de Colombia S.A.S.

In June 2012, we entered into ship-or-pay and ship-and-pay crude oil transportation agreements with Oleoducto Bicentenario establishing a tariff and requires the payment of Bicentenario's indebtedness to local banks for twelve years. This tariff is collected through a trust, which in turn is responsible for making the debt service payments to the banks. The duration of the ship-or-pay agreement is the earlier of 12 years or when the debt has been entirely paid, and the duration of the ship-and-pay agreement is 20 years after the ship-or-pay terminates. Under these agreements, Bicentenario has committed to transport at least 110 thousand bpd, of which the 55% of the agreement volume is provided directly by Ecopetrol and 0.97% indirectly by Hocol.

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# **EXCHANGE CONTROLS**

Payments in foreign currency with respect to certain foreign exchange transactions including international investments between Colombian residents and non-Colombian residents must by law be conducted through the commercial exchange market. Therefore, any foreign currency income or expenses under the ADRs must be channeled through that market. Transactions conducted through the commercial exchange market are made at market rates freely negotiated with authorized intermediaries (banks, financial corporations, administrators and others).

Foreign portfolio investments must be made through authorized foreign exchange investment management companies. Only brokerage firms, trust companies and investment management companies, subject to the inspection and supervision of the Superintendency of Finance, are allowed to make investments in the local Colombian market on behalf of foreign investors. Such firms, trust companies and investment management companies also act as the foreign investors' local representatives for tax and foreign exchange purposes.

Colombian law provides that the Colombian Central Bank may intervene in the foreign exchange market at its own discretion at any time. Likewise, from time to time, the Colombian government introduces amendments to the International Investment Statute. The Colombian Central Bank may also limit the remittance of dividends and/or investments of foreign currency received by Colombian residents whenever the international reserves fall below an amount equal to three months of imports. We cannot assure you that the Colombian Central Bank will not intervene in the future. However, since the establishment of the current foreign exchange regime in 1991, the Colombian Central Bank has never taken such action except for a brief restriction by the national government in 2004. See "Item 3. Key Information—Risk Factors—Risks relating to Colombia's political and regional environment."

### Registration of foreign investment represented in underlying shares

Colombia's International Investment Statute and the regulations issued by the Colombian Central Bank, which have been amended from time to time through related decrees and regulations, regulate the manner in which non-Colombian resident entities and individuals can invest in Colombia and participate in the Colombian securities markets. Among other requirements, the statute and regulations mandate registration of foreign investment transactions with the Colombian Central Bank and specify procedures to authorize and administer such foreign investment transactions. Additionally, pertinent information must be updated on a regular basis (yearly or monthly, depending on the type of information).

Under these foreign investment regulations, the failure of a foreign investor to report or register with the Colombian Central Bank foreign exchange transactions relating to investments in Colombia on a timely basis may prevent the investor from obtaining remittance rights, constitute an exchange control infraction, and result in a fine.

Foreign investors who acquire ADRs are not required to register this investment with Colombian authorities. Holders of ADRs will benefit from the registration to be obtained by the custodian for our common shares underlying the ADRs in Colombia. Such registration allows the custodian to convert dividends and other distributions with respect to the common shares into foreign currency and remit the proceeds abroad. If investors in ADRs choose to surrender their ADRs and withdraw common shares, they must retain an administrator for the investments and register their investments in common shares as a portfolio investment through their local representative. The local representative is the brokerage firm, trust company or investment management company that acts on behalf of the holders of the ADRs in Colombia, and the request for registration is made by them.

Colombian residents who acquire ADRs and either receive profits from this investment, surrender their ADRs or liquidate their investment in ADRs must register these operations with the Colombian authorities and comply with applicable regulations through its Colombian brokerage firm.

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In obtaining its own foreign investment registration, an investor who surrenders its ADRs and sells common shares may incur expenses and/or suffer delays in the application process. Investors would only be allowed to transfer dividends abroad or transfer funds received as distributions relating to our common shares after their foreign investment registration procedure with the Colombian Central Bank has been completed. In addition, the depositary's foreign investment registration may also be adversely affected by future legislative changes, but its rights to transfer dividends abroad or profits arising from distributions relating to our common shares must be maintained according to Colombian law and foreign investment treaties entered into by Colombia in force at the time of the registration of the investment, except when Colombia's international reserves fall below an amount equivalent to three months' worth of imports.

# TAXATION

#### **Colombian Tax Considerations**

The following is a general description of the Colombian tax considerations for investments in common shares in Colombia or for the purchase of ADSs, in a foreign securities market. This description is based on applicable law in effect as of the date of this annual report, which may be subject to change.

Prospective purchasers of common shares or ADSs should consult their own tax advisors for a detailed analysis of the tax consequences resulting from the acquisition, ownership and disposition of common shares or ADSs.

#### General Rules

Entities and individuals who are residents or are domiciled in Colombia or are considered residents in Colombia for tax purposes are subject to Colombian income tax on their worldwide income. Non-resident entities and non-resident individuals are subject to income tax in Colombia solely on their Colombian-source income which, as a general rule, originates in the sale of assets located in the country at the time of the sale, in the exploitation of tangible and intangible assets in Colombia, and in the rendering of services within the Colombian territory. Double taxation treaties signed by Colombia, if applicable, provide for special rules regarding income tax.

For purposes of Colombian taxation, an individual is a resident if he or she meets any of the following criteria:

- (1) remains in Colombia for more than 183 calendar days within any given 365-consecutive-day term;
- (2) is related to the Colombian Government's foreign service or to individuals who are at the Colombian Government's foreign service and who, by virtue of the Vienna Conventions on diplomatic and consular relations, is exempt from taxes during the time of service; or
- (3) is a Colombian national and:
  - has a spouse or permanent companion, or dependent children, who are Residents, or
  - 50% or more of his or her total income is sourced in Colombia, or
  - 50% or more of his or her assets are managed in Colombia, or
  - 50% or more of his or her assets are deemed to be located in Colombia, or
  - has failed to provide proof of residency in another country (different from Colombia) upon previous official request by the Colombian tax office, or
  - is a resident of a country deemed a tax haven under Colombian law. By Decree 2193 of October 7, 2013 the Government defined the States that are considered tax havens.

For purposes of Colombian taxation, an entity is deemed to be a national, and, therefore, is subject to taxation in Colombia as a resident, if it meets any of the following criteria:



- (1) it has its place of business or its place of effective management in Colombia during the corresponding year or taxable period;
- (2) it has its main domicile in the Colombian territory; or
- (3) it has been incorporated in Colombia, in accordance with Colombian laws.

Pursuant to the Colombian Tax Statute, a foreign company or non-resident individual has a permanent establishment in Colombia when said company or individual performs activities in Colombia through: (1) a fixed place of business (i.e., branches, factories or offices), or (2) an individual who is not an independent agent empowered to execute agreements on behalf of the foreign company. Permanent establishments are considered Colombian taxpayers in connection with the income and taxable gains attributed to said permanent establishment. A foreign company or entity will not be deemed to have a permanent establishment by the sole fact that it acts through a broker or any other independent agent.

### Tax Treatment of a Non-Resident of Colombia who Purchases an ADS in a Foreign Securities Market

#### Dividends

As a general rule, dividends paid to foreign companies, foreign entities or non-Colombian residents who are investing in Colombian shares directly or through a foreign investment capital fund, or FICF, are treated as Colombian-source income, and thus are subject to Colombian income tax.

To avoid double taxation, dividends are not subject to tax at the shareholder level when they are paid out of corporate profits that have been previously taxed at the corporate level. If the accounting or commercial earnings of a Colombian company exceed the profits subject to income tax at the corporate level, then the excess distributed as dividends is subject to income tax at the shareholder level. If the shareholder is a non-resident, the applicable tax rate is 33%. The regulation and decrees that govern the tax reform (Law 1607 of 2012, which entered into force on January 1, 2013) were enacted by the government in 2013.

If the shareholder is a non-resident entity or a non-resident individual investing through an FICF on portfolio investments, the applicable withholding tax rate is 25% and it is applied on the basis of the total amounts distributed, assuming that the dividends cannot be attributed to a permanent establishment in Colombia belonging to the shareholder. Foreign shareholders subject to such withholding taxes are not required to file an income tax return in Colombia.

Therefore, dividends distributed out of taxed earnings at the corporate level to shareholders who are non-residents will be exempt from income and withholding taxes. This exception does not apply in the case of distributions paid out of non-taxed earnings at the corporate level, which would be subject to the 33% income tax rate.

## Taxation of Capital Gains from the sale of ADSs

Capital gains obtained from the sale of ADSs by non-resident entities, Colombian individuals who are not residents in Colombia or foreign non-resident individuals, are not subject to income tax in Colombia as such sale does not result in Colombian-source income to the extent that the ADSs are not deemed to be owned in Colombia.

If the holder of the ADSs who is a non-resident entity, a Colombian individual who is not a resident in Colombia or a foreign non-resident individual, decides to surrender the ADSs and withdraw the underlying common shares, it is arguable that such transaction does not constitute a capital gain subject to income tax in Colombia. However, different interpretations may be adopted by the Colombian Tax Authorities on this matter.



## Tax Treatment in Colombia of Non-Resident Who Purchases Ecopetrol's Shares in Colombia's Securities Market

# Dividends

As a general rule, dividends paid to foreign companies or foreign entities, non-Colombian residents, who are investing in Colombian shares directly or through a FICF are treated as Colombian-source income; thus, they are subject to Colombian income tax.

To avoid double taxation, dividends are not subject to tax at the shareholder level when they are paid out of corporate profits that have been previously taxed at the corporate level. If the accounting or commercial earnings of a Colombian company exceed the profits subject to income tax at the corporate level, then the excess distributed as dividends is subject to income tax at the shareholder level. If the shareholder is a non-Colombian resident, the applicable tax rate is 33%. The regulation and decrees that govern the tax reform (Law 1607 of 2012, which entered into force on January 1, 2013) were enacted by the government in 2013.

If the shareholder is a non-resident entity or a non-resident individual investing through a FICF on portfolio investments, the applicable withholding tax rate is 25% and it is applied on the basis of the total amounts distributed, assuming that the dividends cannot be attributed to a permanent establishment in Colombia belonging to the shareholder. Foreign shareholders subject to said withholding taxes are not required to file an income tax return in Colombia.

Therefore, dividends distributed out of taxed earnings at the corporate level to shareholders who are non-residents, will be exempt from income and withholding taxes. This exception does not apply in the case of distributions paid out of non-taxed earnings at the corporate level, which would be subject to the 33% income tax rate.

# Taxation of Capital Gains for the Sale of Shares

Capital gains obtained in the sale of shares listed on the BVC and owned by the same beneficial owner, are not subject to income tax in Colombia, provided that the shares sold during the taxable year do not represent more than 10% of the outstanding shares of the listed company. Pursuant to Article 18 of Decree 2634 of 2012, sellers of shares are not required to file an income tax return for the transfer of securities that are listed in the National Registry of Securities and Issuers (*Registro Nacional de Valores y Emisores* or *RNVE*) as long as the foreign investment is treated as a portfolio investment under article 3 of Decree 2080 of 2000.

If the above-mentioned requirements are not met, the capital gain obtained in the sale of shares is subject to income tax or capital gains tax, under the following rules:

- The gain or loss arising therefrom will be equivalent to the difference between the sale price and the tax basis of the shares. As a general rule, the tax basis of shares is equal to the price paid for such shares (*i.e.*, cost of acquisition).
- The applicable tax rate and the withholding tax rate have to be determined on a case-by-case basis.

## Tax Treatment of Non-Residents Who Purchase Ecopetrol's Shares in the BVC Market and Exchange Them for ADSs

# Dividends

Payment of dividends made from Colombia to a non-resident are subject to the tax treatment described above. Therefore, payments to holders of ADSs are not subject to income, withholding or remittance taxes. Dividends paid to the Depositary of ADSs arising from Colombian shares are not subject to taxation, unless dividends are paid out of earnings that were not taxed at the corporate level, in which case they will be subject to income tax in Colombia at a 33% rate via withholding tax.



### Taxation on Capital Gains for the Sale of Shares

Assuming that the exchange of securities is treated as a sale of Ecopetrol's shares, the seller is subject to the tax treatment described above.

Therefore, capital gains obtained in the sale of shares listed on the BVC and owned by the same beneficial owner, are not subject to income tax in Colombia, provided that the shares sold during the taxable year do not represent more than 10% of the outstanding shares of the listed company. Pursuant to Article 18 of Decree 2634 of 2012, sellers of shares are not required to file an income tax return for the transfer of securities that are listed in the RNVE as long as the foreign investment is treated as a portfolio investment under article 3 of Decree 2080 of 2000.

If the abovementioned requirements are not met, the capital gain obtained in the sale of shares is subject to income tax or capital gains tax, under the following rules:

- The gain or loss arising therefrom will be equivalent to the difference between the sale price and the tax basis of the shares. As a general rule, the tax basis of shares is equal to the price paid for such shares (*i.e.*, cost of acquisition).
- The applicable tax rate and the withholding tax rate have to be determined on a case-by-case basis.

#### **U.S. Federal Income Tax Consequences**

This summary describes the principal U.S. federal income tax consequences of the ownership and disposition of common shares or ADSs, but it does not purport to be a comprehensive description of all of the U.S. tax consequences that may be relevant to a decision to hold or dispose of common shares or ADSs. This summary applies only to purchasers of common shares or ADSs who will hold the common shares or ADSs as capital assets for tax purposes and does not apply to special classes of holders such as dealers in securities or currencies, holders whose functional currency is not the U.S. dollar, holders of ten percent or more of our shares (taking into account shares held directly or through depositary arrangements), tax-exempt organizations, financial institutions, holders liable for the alternative minimum tax, securities traders who elect to account for their investment in common shares or ADSs on a mark-to-market basis, partnerships or other pass-through entities, insurance companies, U.S. expatriates, persons that purchase or sell common shares or ADSs as part of a wash sale for tax purposes, and persons holding common shares or ADSs in a hedging transaction or as part of a straddle, conversion or other integrated transaction for U.S. federal income tax purposes. The statements regarding U.S. tax law set forth in this summary is based on the Internal Revenue Code of 1986, as amended, which we call the "Code," its legislative history, existing and proposed regulations, published rulings and court decisions all as in force on the date of this annual report, and changes to such law subsequent to the date of this annual report may affect the tax consequences described herein (possibly with retroactive effect). This summary is also based in part on the representations of the Depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms.

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

In this discussion, references to a "U.S. Holder" are to a beneficial holder of a common share or an ADS that is (1) a citizen or resident of the United States, (2) a corporation, or any other entity taxable as a corporation, organized under the laws of the United States, any state thereof or the District of Columbia, (3) an estate whose income is subject to United States federal income tax regardless of its source, or (4) a trust if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust.

For United States federal income tax purposes, holders of ADSs will generally be treated as owners of the common shares represented by such ADSs.



This discussion addresses only United States federal income taxation. Holders of common shares or ADSs should consult their own tax advisor regarding the United States federal, state and local and other tax consequences of owning and disposing of common shares and ADSs in their particular circumstances.

# Distributions on Common Shares or ADSs

A distribution to U.S. Holders made by us of cash or property with respect to common shares or ADSs generally will be treated as a dividend for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current or accumulated earnings and profits, as determined for United States federal income tax purposes, will be treated first as a tax-free return of capital reducing such U.S. Holder's adjusted tax basis in the common shares or ADSs. Any distribution in excess of such adjusted tax basis will be treated as capital gain and will be either long-term or short-term capital gain depending upon whether the U.S. Holder held the common shares or ADSs for more than one year. Distributions of additional common shares or ADSs to U.S. Holders that are part of a pro rata distribution to all of our shareholders generally will not be subject to U.S. federal income tax. We do not maintain calculations of our earnings and profits under U.S. federal income tax principles, and, therefore, U.S. Holders should expect that any distributions generally will be reported as dividends for U.S. federal income tax purposes. As used below, the term "dividend" means a distribution that constitutes a dividend for U.S. federal income tax purposes.

The amount of any distribution will include the amount of any Colombian tax withheld on the amount distributed, and the amount of a distribution paid in Pesos will be measured by reference to the exchange rate for converting Pesos into U.S. dollars in effect on the date the distribution is received by the Depositary (or by a U.S. Holder in the case of a holder of common shares) regardless of whether the payment is in fact converted into U.S. dollars. If the Depositary (or U.S. Holder in the case of a holder of common shares) does not convert such Pesos into U.S. dollars on the date it receives them, generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is included in income to the date the payment is converted into U.S. dollars will be treated as ordinary income or loss and will not be eligible for the special tax rate applicable to qualified dividend income (as discussed below). The gain or loss generally will be income or loss from sources within the United States for foreign tax credit limitation purposes. Dividends paid by us will not be eligible for the Code.

If you are a noncorporate U.S. Holder, dividends that constitute qualified dividend income will be taxable to you at the preferential rates applicable to long-term capital gains provided that you meet certain holding requirements. Dividends paid on the ADSs will be treated as qualified dividend income if (1) the ADSs are readily tradable on an established securities market in the United States and (2) we were not, in the year prior to the year in which the dividend is paid, a passive foreign investment company (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 were not treated as a PFIC for U.S. federal income tax purposes with respect to our 2013 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 the 2014 taxable year. However, this conclusion is a factual determination that is made annually and thus may be subject to change. Based on existing guidance, it is not clear whether dividends received with respect to the common shares will be treated as qualified dividends. In addition, the U.S. Treasury has announced its intention to promulgate rules pursuant to which holders of ADSs or common shares 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.

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A U.S. Holder will be entitled, subject to a number of complex limitations and conditions, to claim a U.S. foreign tax credit in respect of any Colombian income taxes withheld on dividends received on common shares or ADSs. U.S. Holders who do not elect to claim a credit for any foreign income taxes paid during the taxable year may instead claim a deduction in respect of such Colombian income taxes provided the U.S. Holder elects to deduct (rather than credit) all foreign income taxes for that year. Dividends received with respect to the common shares or ADSs will be treated as foreign source income, subject to various classifications and other limitations. For the purposes of the U.S. foreign tax credit limitations, the dividends paid with respect to our common shares or ADSs will generally constitute either "passive" or "general" income. The rules relating to computing foreign tax credits or deducting foreign income taxes are extremely complex, and U.S. Holders are urged to consult their own independent tax advisers regarding the availability of foreign tax credits with respect to any Colombian income taxes withheld.

### Sale, Exchange or Other Taxable Dispositions of Common Shares or ADSs

A U.S. Holder generally will recognize capital gain or loss upon the sale, exchange or other taxable disposition of common shares or ADSs in an amount equal to the difference between the U.S. dollar value of the amount realized on the sale, exchange or other taxable disposition of the common shares or ADSs and the U.S. Holder's adjusted tax basis, determined in U.S. dollars, in the common shares or ADSs. Any gain or loss will be long-term capital gain or loss if the common shares or ADSs have been held for more than one year. Certain non-corporate U.S. Holders (including individuals) may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. The deductibility of capital losses is subject to limitations under the Code.

If you are a U.S. Holder of common shares or ADSs, the initial tax basis of your common shares or ADSs will be the U.S. dollar value of the Pesodenominated purchase price determined on the date of purchase. If the common shares or ADSs are treated as traded on an "established securities market," a cash basis U.S. Holder, or, if it elects, an accrual basis U.S. Holder, will determine the dollar value of the cost of such common shares or ADSs by translating the amount paid at the spot rate of exchange on the settlement date of the purchase. If you convert U.S. dollars to Pesos and immediately use that currency to purchase common shares or ADSs, such conversion generally will not result in taxable gain or loss to you.

With respect to the sale or exchange of common shares or ADSs, the amount realized generally will be the U.S. dollar value of the payment received determined on (1) the date of receipt of payment in the case of a cash basis U.S. Holder and (2) the date of disposition in the case of an accrual basis U.S. Holder. If the common shares or ADSs are treated as traded on an "established securities market," a cash basis taxpayer, or, if it elects, an accrual basis taxpayer, will determine the U.S. dollar value of the amount realized by translating the amount received at the spot rate of exchange on the settlement date of the sale.

Deposits and withdrawals of common shares in exchange for ADSs, and ADSs for common shares generally will not result in the realization of gain or loss for U.S. federal income tax purposes.

### Backup Withholding and Information Reporting

In general, dividends on common shares or ADSs, and payments of the proceeds of a sale, exchange or other taxable disposition of common shares or ADSs, paid within the United States, by a U.S. payor through certain U.S.-related financial intermediaries to a U.S. Holder are subject to information reporting and may be subject to backup withholding at a current rate of 28% unless the holder (1) establishes that it is a corporation or other exempt recipient or (2) with respect to backup withholding, provides an accurate taxpayer identification number and certifies that it is a U.S. person and that no loss of exemption from backup withholding has occurred.

Backup withholding is not an additional tax. The amount of any backup withholding tax 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, provided that the required information is timely furnished to the Internal Revenue Service (the "IRS"). A U.S. Holder generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed its U.S. federal income tax liability by timely filing a refund claim with the IRS.

#### U.S. Tax Considerations for Non-U.S. Holders

A holder or beneficial owner of common shares or ADSs that is not a U.S. Holder for U.S. federal income tax purposes (a "non-U.S. Holder") generally will not be subject to U.S. federal income or withholding tax on dividends received on common shares or ADSs, unless the dividends are "effectively connected" with the non-U.S. Holder's conduct of a trade or business within the United States. In such a case a non-U.S. Holder generally will be taxed in the same manner as a U.S. Holder. In the case of "effectively connected" dividends received by a corporate non-U.S. Holder, the corporate non-U.S. Holder may, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate.



A non-U.S. Holder of common shares or ADSs will not be subject to U.S. federal income or withholding tax on gain realized on the sale of common shares or ADSs, unless (i) the gain is "effectively connected" with the non-U.S. Holder's conduct of a trade or business in the United States, or (ii) 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. In the case of "effectively connected" gains realized by a corporate non-U.S. Holder, the corporate non-U.S. Holder may, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate.

Although non-U.S. Holders generally are exempt from backup withholding and information reporting requirements, a non-U.S. Holder may be required to comply with certification and identification procedures in order to establish its exemption from information reporting and backup withholding.

# DOCUMENTS ON DISPLAY

We file reports, including annual reports on Form 20-F, and other information with the SEC pursuant to the rules and regulations of the SEC that apply to foreign private issuers. You may read and copy any materials filed with the SEC in the SEC's public reference room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room. Any filings we make are also available to the public over the Internet at the SEC's website at www.sec.gov and at our website at www.ecopetrol.com.co. (This URL is intended to be an inactive textual reference only. It is not intended to be an active hyperlink to our website. The information on our 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.)

# ITEM 11. Quantitative and Qualitative Disclosures About Market Risk

# **Risk Management and Financial Instruments**

We are exposed to certain risks associated with the nature of our operations and the financial instruments we use. Among those risks that affect our financial assets, liabilities and expected future cash flows are the changes in commodity prices, currency exchange rates and interest rates.

Commodity price risk is associated with our day-to-day operations as we export and import crude oil, natural gas, and refined products. We control our exposure to commodity price volatility using the "cash flow at risk" methodology, under which we estimate the impact that price fluctuations have over the liquidity of the company. When the amount of cash flow at risk is in excess of our established risk tolerances, we may use derivative financial instruments such as options and swaps to hedge our exposure to volatility in commodity prices. Additionally, we also occasionally use short-term hedges attached to cash flows to protect our financial statements from price fluctuations. We do not use derivative financial instruments for speculative or profit-generating purposes.

Currency risk arises in our operations because approximately 61% of our income is denominated in U.S. dollars and only 30% of our expenses are denominated in the same currency, whereas our income and expenses denominated in Colombian Pesos are 39% and 70%, respectively. We control our currency risk using natural hedging when possible, by maintaining funds in U.S. dollars and Pesos to meet our expenses in the respective currencies. However, we have to sell U.S. dollars regularly in order to cover the currency mismatches that may arise. We usually use derivative financial instruments such as forwards, futures and swaps depending on the impact of exchange rate on our U.S. dollar-denominated obligations, which may affect the cash flow of the Company. This situation partially mitigates any adverse effect that currency risk may have over our financial statements.

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Interest rate risk arises from our exposure to changes in interest rates, as we have floating-rate instruments in our investment portfolio and issuances of floating rate debt linked to LIBOR, DTF and IPC rates. Thus, volatility in interest rates may affect the fair value and cash flows related to our investments and floating rate debt. In 2013, our analysis of the situation about credit risk events and the global financial markets drove us to decide not to hedge the interest rate risk. Nevertheless, our treasury office continuously monitors the performance of interest rates and its impact on our financial statements. On the other hand, the exposure to interest rate risk of our fixed income portfolio is controlled through its effective duration. The limits allowed for this item are between +/- 25% of the portfolio's benchmark duration. The trust funds linked to the pension obligations of the company (PAP)<sup>2</sup> are also exposed to changes in interest rates, as they include fixed- and floating-rate instruments that are marked to market. This exposure is continuously monitored by our treasury office given the potential impact volatility may have on our financial statements. The treasury office's information is gathered from reports sent by the asset managers. These reports refer to regulatory limits as well as market, credit and liquidity risks. It is important to mention that the investment guidelines of the PAPs are issued by the Colombian regulation for pension funds, as stipulated in the Decree 941 of 2002 and Decree 1861 of 2012, where it is indicated that they have to follow the same regime as the regular obligatory pension funds in their moderate (i.e., neither conservative nor aggressive) portfolio.

#### Investment Guidelines

Following Decree 1525 of 2008 which provides general rules on investments for public entities, our management established guidelines for our investment portfolios. In general terms, they determined that we must invest our excess cash in fixed-income securities issued by entities rated A or higher in the long term and A1/P1/F1 or higher in the short term (international scale) by Standard & Poor's, Moody's or Fitch Ratings. We may invest in securities issued or guaranteed by the U.S. government or Colombian government. In our Peso portfolio, we must invest in fixed-income securities of issuers rated AAA in the long term and F1+/BRC1+ in the short term (local scale) by the previously mentioned rating agencies, except securities issued or guaranteed by the Colombian government.

Our investment portfolio in U.S. dollars is segmented into four tranches, each one matching our liquidity needs. The working capital tranche is calculated taking into account our cash flow needs for the next 60 days. The liquidity tranche is calculated as the contingent cash flow needs over the working capital, taking into account the development of capital expenditures related to projects. The asset liability tranche is built to match our long-term debt. The investment tranche includes the remaining amount of the total portfolio after deducting the amounts pertaining to the above mentioned tranches and after subtracting the Peso portfolio.

Our investment portfolio in Pesos is segmented in two tranches, each one matching our liquidity needs. The first tranche is calculated taking into account our cash flow needs for the next 30 days, and the second tranche is built for investment purposes.

# Sensitivity Analysis

The following table provides information about our financial statements as of December 31, 2013 that may be sensitive to changes in West Texas Intermediate, or WTI, prices and exchange rates:

	Income Statement 2013	Income Statement Case WTI <sup>(1)</sup> + US\$1	Difference Between Real 2013 and Case WTI (Pesos in Billions)	Income Statement Case TRM <sup>(2)</sup> - 1%	Difference Between Real 2013 and Case TRM
Local Revenue	26,207.90	26,395.46	187.56	26,417.54	209.64
Export Revenue	44,220.82	44,617.79	396.98	44,622.98	402.16
Total Revenue	70,428.71	71,013.25	584.54	71,040.52	611.80
Cost of Sales	42,554.28	42,770.93	216.65	42,769.43	215.15
Selling Operating Expenses	4,921.55	4,921.55	0.00	4,921.55	0.00
Administrative Operating Expenses	1,102.70	1,102.70	0.00	1,102.70	0.00
Operating Profit	21,850.17	22,130.03	367.89	22,246.83	396.66
Non-Operating Income (Expenses)	-88.03	-88.03	0.00	-88.03	0.00
Profit before Income Tax	21,762.15	22,130.03	367.89	22,158.80	396.66
Income Tax	-8,088.84	-8,223.28	-134.44	-8,234.36	-145.52
Minority Interest	-686.87	-686.87	0.00	-686.87	0.00
Net Income	12,986.44	13,222.15	235.71	13,240.40	253.96

Notes: The consolidation for the GE includes all subsidiaries. The scenarios include only Hocol, Equión, Savía Perú and America Inc.

WTI= West Texas Intermediate.

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(1) Average WTI for 2013 was US\$97.91 per barrel.

(2) Average Market Representative Rate for 2013 was Ps\$1,868.9 per US\$1.00 on a calendar day basis.

For further information regarding the trust funds linked to the pension obligations of the company, see Note 23 to our consolidated financial statements.

# Assumptions for the Sensitivity Analysis of Financial Statements

- The base scenario on which our sensitivity analysis is made corresponds to the Consolidated Statements of Financial, Economic, Social and Environmental Activity or Income Statement for 2013, as presented elsewhere in this annual report.
- The sensitivity of the WTI price index is the increase of one U.S. dollar per barrel of crude oil in the average WTI reference price based on a 365-day year for 2013. Prices assumed correspond to real prices for crude oil, natural gas and refined products for 2013, adjusted to account for the differences between such real prices and the WTI reference price.
- The sensitivity of our results to changes in the exchange rates is the 1.96% average appreciation of the Peso against the U.S. dollar during 2013. ٠ Prices assumed correspond to real prices of crude oil, natural gas and refined products in 2013, proportionally adjusted to account for differences between actual and the monthly average exchange rate.

The table below sets forth the line items that are being affected by the variation on the reference prices or the average exchange rate.

# VARIATION ON WTI REFERENCE PRICE

# VARIATION ON AVERAGE EXCHANGE RATE

# **OPERATING INCOME**

Local Sales Crude Oil Refined products Natural gas

Local Sales Crude Oil Refined products Natural gas

Exports

Crude Oil Refined products Natural gas

# COST OF SALES

#### Local purchases

Purchases from business partners Purchases of hydrocarbons from the ANH Purchases of Natural gas

Imports Crude Oil Products

NON-OPERATING INCOME

Exchange income Exchange loss

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#### Local purchases

Crude Oil

Natural gas

Refined products

Purchases from business partners Purchases of hydrocarbons from the ANH Purchases of Natural gas

Imports

Exports

Crude Oil Products

# ITEM 12. Description of Securities Other than Equity Securities

# ITEM 12.A. Debt Securities

Not applicable.

# ITEM 12.B. Warrants and Rights

Not applicable.

# ITEM 12.C. Other Securities

Not applicable.

# ITEM 12.D. American Depositary Shares

# Fees and Charges That a Holder of our ADSs May Have to Pay, Either Directly or Indirectly

JPMorgan Chase Bank, N.A., our Depositary, may charge each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us or issuances pursuant to a merger, exchange of securities or any other transaction or event affecting the ADSs or deposited securities, and each person surrendering ADSs for withdrawal of deposited securities in any manner permitted by the deposit agreement or whose ADRs are cancelled or reduced for any other reason, US\$5.00 for each 100 ADS (or any portion thereof) issued, delivered, reduced, cancelled or surrendered, as the case may be. The Depositary may sell (by public or private sale) sufficient securities and property received in respect of a share distribution, rights and/or other distribution prior to such deposit to pay such charge.

The Depositary collects its fees for issuance and cancellation of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may collect its annual fee for Depositary services by deduction from cash distributions, or by directly billing investors, or by charging the book-entry system accounts of participants acting for them. The Depositary may generally refuse to provide services to any holder until the fees and expenses owing by such holder for those services or otherwise are paid.

The following additional charges may be incurred by ADS holders, by any party depositing or withdrawing shares or by any party surrendering ADSs or to whom ADSs are issued (including, without limitation, issuance pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADRs or the deposited securities or a distribution of ADSs), whichever is applicable:

- a fee of US\$1.50 per ADR or ADRs for transfers of certificated or direct registration ADRs;
- a fee of up to US\$0.02 per ADS for any cash distribution made pursuant to the deposit agreement;
- a fee of US\$0.05 per ADS per calendar year (or portion thereof) for services performed by the Depositary in administering our ADR program (which fee may be charged on a periodic basis during each calendar year and shall be assessed against holders of ADRs as of the record date or record dates set by the Depositary during each calendar year and shall be payable in the manner described in the next succeeding provision);
- any other charge payable by the Depositary, or any of the Depositary's agents, including, without limitation, the custodian, or the agents of the Depositary's agents in connection with the servicing of our shares or other deposited securities (which charge shall be assessed against registered holders of our ADRs as of the record date or dates set by the Depositary and shall be payable at the sole discretion of the Depositary by billing such registered holders or by deducting such charge from one or more cash dividends or other cash distributions);

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- a fee for the distribution of securities (or the sale of securities in connection with a distribution), such fee being in an amount equal to the fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities (treating all such securities as if they were shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the Depositary to those holders entitled thereto;
- stock transfer or other taxes and other governmental charges;
- cable, telex and facsimile transmission and delivery charges incurred at the ADS holder's request;
- transfer or registration fees for the registration of transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities;
- expenses of the Depositary in connection with the conversion of foreign currency into U.S. dollars; and
- such fees and expenses as are incurred by the Depositary (including, without limitation, expenses incurred in connection with compliance with foreign
  exchange control regulations or any law or regulation relating to foreign investment) in delivery of deposited securities or otherwise in connection
  with the Depositary's or its custodian's compliance with applicable laws, rules or regulations.

We will pay all other charges and expenses of the Depositary and any agent of the Depositary (except the custodian) pursuant to agreements from time to time between us and the Depositary. The fees described above may be amended from time to time.

# Fees and Other Direct and Indirect Payments Made by the Depositary to Us

Our Depositary has agreed to reimburse us for certain expenses we incur that are related to establishment and maintenance of the ADR program, including investor relations expenses and exchange application and listing fees. In 2013, the Depositary did not make reimbursements to us. During the first quarter of 2014, reimbursements were made in the amount of approximately US\$1,861,078.41 for expenses related to investor relations expenses during 2013.

# 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

# **Disclosure Controls and Procedures**

As required by Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as of December 31, 2013, we evaluated the design and effectiveness of our financial disclosure controls and procedures under the supervision and participation of our management, including our Chief Executive Officer and Chief Financial Officer. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even if effective, disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

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Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of the end of the period covered by this annual report, our disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed in the reports that we file and submit under the Securities Exchange Act of 1934 is recorded, summarized and reported as and when required and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

# Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15(d)-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is a process designed under the supervision of our Chief Executive Officer and Chief Financial Officer, and affected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with generally accepted accounting principles, and it includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of our assets;
- 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 are being made only in accordance with authorization of our management and
  directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a
  material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, effective control over financial reporting cannot, and does not, provide absolute assurance of achieving our control objectives. Also, projection of any evaluation of the effectiveness of the internal controls to future periods is 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.

As of the year ended December 31, 2013, our management conducted an assessment of the effectiveness of our internal control over financial reporting in accordance with the criteria established in 1992 in the publication "Internal Control – Integrated Framework," issued by the Treadway Commission's Committee of Sponsoring Organizations (COSO), as well as the rules prescribed by the SEC in its Final Rule "Management's Report on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports."

Based on the assessment performed, management concluded that our internal control over financial reporting was effective as of the end of the period covered by this annual report.

The effectiveness of our internal control over financial reporting has been audited by PricewaterhouseCoopers Ltda., an independent registered public accounting firm, as stated in their audit report accompanying our consolidated financial statements.

# **Changes in Internal Control over Financial Reporting**

Effective on November 1, 2013, and as a result of a recruitment process, Ms. Magda Manosalva was appointed as Corporate Vice President of Finance and Chief Financial Officer succeeding Ms. Adriana Echeverri, who remains with the Company as Corporate Vice President of Strategy and Growth.



There were no changes made in our internal control over financial reporting during the year ended December 31, 2013 that have materially affected or are reasonably likely to materially affect the Company's internal controls over financial reporting.

# Attestation Report of the Registered Public Accounting Firm

PricewaterhouseCoopers Ltda.'s attestation report on our internal control over financial reporting is included in their audit report accompanying our consolidated financial statements. See our consolidated financial statements.

#### ITEM 16. [Reserved]

# ITEM 16.A. Audit Committee Financial Expert

Our Board of Directors has determined that Luis Fernando Ramirez qualifies as an "audit committee financial expert," and he is independent under the definition of "independent" applicable to us under the rules of the NYSE (17 C.F.R. § 240.10A-3). See "Item 6. Directors, Senior Management and Employees—Audit Committee."

# ITEM 16.B. Code of Ethics

We have adopted a code of ethics within the meaning of this Item 16B of Form 20-F, which complies with applicable U.S. and Colombian law. Our code of ethics applies to our chief executive officer, chief financial officer, principal accounting officer, persons performing similar functions and other personnel. Our code of ethics is available on our website at http://www.ecopetrol.com.co/english/especiales/Ethics\_Code2010\_English/index\_eng.html. If we amend the provisions of our code of ethics that apply to our chief executive officer, our chief financial officer, our principal accounting officer and persons performing similar functions, or if we grant any waiver of such provisions, we will disclose such amendment or waiver on our website at the same address.

# ITEM 16.C. Principal Accountant Fees and Services

# AUDIT AND NON-AUDIT FEES

Our consolidated financial statements for the fiscal year ended December 31, 2013 were audited by PricewaterhouseCoopers Ltda. and our consolidated financial statements for the fiscal year ended December 31, 2012 were audited by KPMG Ltda.

The following table sets forth the fees billed to us by PricewaterhouseCoopers Ltda. during the fiscal year ended December 31, 2013.

	2013
	PricewaterhouseCoopers
	Ltda.
	(in millions of Pesos,
	excluding 16% value added
	tax)
Audit fees	7,029 378
Audit-related fees	378
Tax fees	151
All other $fees^{(1)}$	384
Total	7,942

(1) They are comprised of coaching sessions in management skills dictated to officers of some affiliates as well as participation in open training courses.

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*Audit Fees.* The audit fees listed in the table above are the aggregated fees billed by PricewaterhouseCoopers Ltda. in connection with their audits of our annual consolidated financial statements (under Colombian Government Entity GAAP and U.S. GAAP), interim consolidated financial statements (under Colombian Government Entity GAAP) and periodic review of documents filed with the SEC. In addition, these audit fees include fees related to our independent auditors' audits of our internal controls over financial reporting.

Audit-related Fees. The audit-related fees listed in the table above are those fees billed by PricewaterhouseCoopers Ltda. in connection with their agreedupon audit procedures of our variable compensation bonus system.

*Tax Fee.* The tax fees listed in the table above correspond to (1) assisting some subsidiaries in the preparation of the income tax return and information submitted in magnetic means, (2) preparation of the income tax returns and information for submission in magnetic means for some expatriate officers of the Company, and (3) review of compliance with transfer pricing obligations.

The following table sets forth the fees billed to us by KPMG Ltda. during the fiscal years ended December 31, 2013 and 2012, respectively.

	As of December 31,
	2013
	KPMG Ltda. 2012
	(in millions of pesos,
	excluding 16% value added tax)
Audit fees	1,338 6,548
Audit-related fees	225
Tax fees	295
All other fees <sup>(1)</sup>	3,384
Total	1,338 10,452

 Provision of advice that helps Ecopetrol develop its documents, procedures and policies related to Business Continuity Planning in certain areas of the organization.

*Audit Fees.* The audit fees listed in the table above are the aggregated fees billed by KPMG Ltda. in connection with their audits of our annual consolidated financial statements (under Colombian Government Entity GAAP and U.S. GAAP), interim consolidated financial statements (under Colombian Government Entity GAAP), subsidiary audits (under local GAAP) and review of periodic documents filed with the SEC. In addition, these audit fees include fees related to our independent auditors' audits of our internal controls over financial reporting.

Audit-related Fees. The audit-related fees listed in the table above are the fees billed by KPMG Ltda. in connection with their agreed-upon procedures of our variable compensation bonus system.

*Tax Fee.* The tax fees listed in the table above correspond to (1) assisting some subsidiaries in the preparation and filing of appropriate tax returns with the tax authorities (including electronic filings), (2) advising some subsidiaries about the tax consequences associated with new or proposed legislation and (3) rendering advice to some subsidiaries on the likely tax consequences of proposed transactions and the appropriate methods of structuring and reporting.

# Audit Committee Approval Policies and Procedures

Our audit committee approves on a case-by-case basis any engagement of our external independent auditors to provide services different than those related to auditing our financial statements. Occasionally, the Audit Committee will have no doubt that these additional services do not compromise the external auditor's independence. When in doubt, the Committee will request the opinion of the internal auditor.

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# ITEM 16.D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

# ITEM 16.E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

# ITEM 16.F. Change in Registrant's Certifying Accountant

Not applicable.

# ITEM 16.G. Corporate Governance

Pursuant to the requirements of Section 303A.11 of the NYSE's Listed Company Manual, the following is a summary of the significant differences between our corporate governance practices and those required for U.S. companies under the NYSE listing standards.

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**Our Corporate Governance Practices** 

# **Director** Independence

The majority of the board of directors must be independent. §303A.01. "Controlled companies," which would include Ecopetrol if we were a U.S. issuer, are exempt from this requirement. A controlled company is one in which more than 50% of the voting power is held by an individual, group or another company, rather than the public. §303A.00. Law 964 of 2005 establishes that (1) the board of directors of listed companies must be comprised of a minimum of five directors and a maximum of ten directors and (2) at least 25% of board members must be independent. Under our corporate governance guidelines, our board of directors must be comprised of nine directors, of which at least three must be independent. As of the date of this annual report, we have six (6) independent directors.

A comparable rule does not exist under Colombian law. Except for our Audit

# **Executive Sessions**

The non-management directors of each listed company must meet at regularly scheduled executive sessions without management. §303A.03.

# Committee, our Board of Directors does not meet without management.

# Nominating/Corporate Governance and Sustainability Committee

A nominating/corporate governance and sustainability committee composed entirely of independent directors is required. The committee must have a charter specifying the purpose, duties and evaluation procedures of the committee. §303A.04. "Controlled companies" are exempt from these requirements. §303A.00. Colombian law does not require the establishment of a nominating and corporate governance and sustainability committee composed entirely of independent directors. Pursuant to our bylaws, both our corporate governance and sustainability committee and our nomination and compensation committee shall be composed of at least one independent director that acts pursuant to a written charter.

# **Compensation Committee**

A compensation committee composed entirely of independent directors is required, which must evaluate and approve executive officer compensation. The committee must have a charter specifying the purpose, duties and evaluation procedures of the committee. §303A.05. "Controlled companies" are exempt from this requirement. §303A.00.

An audit committee with a minimum of three independent directors satisfying the independence and other requirements of Rule 10A-3 under the Exchange Act and the more stringent requirements under the NYSE standards is required. §§303A.06 and 303A.07. Colombian law does not require the establishment of a compensation committee composed entirely of independent directors. Pursuant to our bylaws, our nomination and compensation committee shall be composed of at least one independent director who acts pursuant to a written charter.

# Audit Committee

According to Law 964 of 2005, Colombian companies that are authorized to issue securities by the Superintendency of Finance must have an audit committee that satisfies the requirements of Law 964 of 2005, including its minimum number of members, independence criteria and audit related duties. Our audit committee is composed entirely of independent directors, and the committee meets the requirements of Law 964 of 2005 and Rule 10A 3 under the Exchange Act.

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# **Equity Compensation Plans**

Equity compensation plans and all material revisions thereto require shareholder approval, subject to limited exemptions. §§303A.08 and 312.03.

Under Colombian law, no similar right to vote on equity compensation plans and material revisions thereto is given to shareholders. We do not give our shareholders the right to vote on equity compensation plans and material revisions thereto.

#### **Corporate Governance Guidelines**

Listed companies must adopt and disclose corporate governance guidelines. §303A.09. The Superintendency of Finance does recommend the adoption of corporate governance guidelines. However, according to Superintendency of Finance Circular No. 007/2011, the adoption of corporate governance guidelines is voluntary. Listed companies must annually publish a corporate governance survey comparing their corporate governance standards with those recommended by the Superintendency of Finance. Our corporate governance guidelines (Code of Good Corporate Governance) are listed on our website at http://www.ecopetrol.com.co.

# Code of Ethics for Directors, Officers and Employees

Corporate governance guidelines and a code of business conduct and ethics is required, with disclosure of any waiver for directors or executive officers. The code must contain compliance standards and procedures that will facilitate the effective operation of the code. §303A.10.

We have adopted a code of ethics which complies with applicable U.S. and Colombian law. Our code of ethics applies to our chief executive officer, chief financial officer, principal accounting officer, persons performing similar functions and generally to all the employees, members of the board of directors, suppliers, and contractors of Ecopetrol S.A. and its corporate group. Our code of ethics is available on our website at http://www.ecopetrol.com.co.

# ITEM 16.H. Mine Safety Disclosure

Not applicable.

# ITEM 17. Financial Statements

Not applicable.

#### ITEM 18. Financial Statements

See our audited consolidated financial statements beginning on page F-1, incorporated herein by reference.

# ITEM 19. Exhibits

Exhibit No. Desc	cription
1.1 Ame	ended and Restated Bylaws of Ecopetrol, S.A., dated March 21, 2013, as recorded under Public Deed No. 666 of May 7, 2013 (incorporated
2	eference to Exhibit 3.1 on Form F-3 filed with the U.S. Securities and Exchange Commission on July 26, 2013 (File No. 333-190198))
(Eng	glish Translation).

4.1 Transportation Agreement between Ecopetrol S.A. and Oleoducto Central S.A., dated March 31, 1995 (incorporated by reference to Exhibit 4.1 on Form 20-F filed with the U.S. Securities and Exchange Commission on September 12, 2008 (File No. 001-34175)) (English Translation).

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# Exhibit No. Description

- 4.2 Supplementary Agreement to Transportation Agreement between Ecopetrol S.A. and Oleoducto Central S.A., dated January 13, 2013 (incorporated by reference to Exhibit 4.2 on Form 20-F filed with the U.S. Securities and Exchange Commission on April 29, 2013 (File No. 001-34175)) (English Translation).
  - 4.3 Natural Gas Transportation Agreement between Ecopetrol S.A. and Transportadora de Gas del Interior S.A. ESP, dated October 1, 2008 (incorporated by reference to Exhibit 4.3 on Form 20-F filed with the U.S. Securities and Exchange Commission on April 29, 2013 (File No. 001-34175)) (English Translation).
  - 4.4 Supplementary Agreement No. 1, dated December 5, 2008, to the Natural Gas Transportation Agreement between Ecopetrol S.A. and Transportadora de Gas del Interior S.A. ESP, dated October 1, 2008 (incorporated by reference to Exhibit 4.4 on Form 20-F filed with the U.S. Securities and Exchange Commission on April 29, 2013 (File No. 001-34175)) (English Translation).
  - 4.5 Supplementary Agreement No. 2, dated April 11, 2012, to the Natural Gas Transportation Agreement between Ecopetrol S.A. and Transportadora de Gas Internacional S.A. E.S.P., dated October 1, 2008 (incorporated by reference to Exhibit 4.5 on Form 20-F filed with the U.S. Securities and Exchange Commission on April 29, 2013 (File No. 001-34175)) (English Translation).
  - 4.6 Crude Oil Transportation Services Agreement between Ecopetrol S.A. and Cenit Transporte y Logística de Hidrocarburos S.A.S., dated April 1, 2013 (incorporated by reference to Exhibit 4.6 on Form 20-F filed with the U.S. Securities and Exchange Commission on April 29, 2013 (File No. 001-34175)) (English Translation).
  - 4.7 Refined Products Transportation Services Agreement between Ecopetrol S.A. and Cenit Transporte y Logística de Hidrocarburos S.A.S., dated April 1, 2013 (incorporated by reference to Exhibit 4.7 on Form 20-F filed with the U.S. Securities and Exchange Commission on April 29, 2013 (File No. 001-34175)) (English Translation).
  - 4.8 Indenture, dated as of July 23, 2009, between the Company and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.2 to the Company's Form F-4 filed with the U.S. Securities and Exchange Commission on July 31, 2009 (File No. 333-160965)).
  - 4.9 Bicentenario Transport Contract between Oleoducto Bicentenario de Colombia S.A.S. and Ecopetrol S.A., dated June 20, 2012 (English Translation).
  - 8.1 List of subsidiaries of Ecopetrol S.A.
  - 12.1 Section 302 Certification of the Chief Executive Officer.
- 12.2 Section 302 Certification of the Chief Financial Officer.
- 13.1 Section 906 Officer Certification.
- 15.1 Consent letter of PricewaterhouseCoopers Ltda.
- 15.2 Consent letter of KMPG Ltda.
- 15.3 Consent letter of Ryder Scott Company, L.P.
- 15.4 Consent letter of Gaffney, Cline & Associates, Inc.
- 15.5 Consent letter of DeGolyer and MacNaughton.
- 99.1 Third-Party Reserve Report of Ryder Scott Company, L.P.
- 99.2 Third-Party Reserve Report of Gaffney, Cline & Associates, Inc.
- 99.3 Third-Party Reserve Report of DeGolyer and MacNaughton.

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The amount of long-term debt securities of Ecopetrol authorized under any given instrument does not exceed 10% of its total assets on a consolidated basis. Ecopetrol 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.

# SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

ECOPETROL S.A.
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	By: <u>/s/ Magda Manosalva</u> Name: Magda Manosalva Title: Chief Financial Officer
	By: /s/ Javier G. Gutiérrez
	Name: Javier G. Gutiérrez
Dated: April 25, 2014	Title: Chief Executive Officer

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Ecopetrol S.A. and Subsidiaries

# **Consolidated Financial Statements**

# Years ended December 31, 2013, 2012 and 2011

# Ecopetrol S.A. and Subsidiaries

# **Consolidated Financial Statements**

# Years ended December 31, 2013, 2012 and 2011

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# **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Ecopetrol S. A.

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of financial, economic, social and environmental activities, of changes in shareholders' equity and of cash flows present fairly, in all material respects, the financial position of Ecopetrol S. A. and its subsidiaries (the "Company") at December 31, 2013, and the results of their operations and their cash flows for the year ended December 31, 2013, in conformity with generally accepted accounting principles for Colombian Government Entities issued by the Contaduría General de la Nación. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework 1992 issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). 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 Item 15 of this Form 20-F as of December 31, 2013. Our responsibility is to express an opinion on these financial statements and on the Company's internal control over financial reporting based on our integrated audit. We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit 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 audit 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

Generally accepted accounting principles for Colombian Government Entities vary in certain significant respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effect of such differences is presented in Note 35 to the consolidated financial statements.

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

/s/ PricewaterhouseCoopers Ltda.

Bogotá, Colombia April 25, 2014

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# **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Ecopetrol S.A.:

We have audited the accompanying consolidated balance sheets of Ecopetrol S.A. and subsidiaries (the "Company") as of December 31, 2012, and the related consolidated statements of Financial, Economic, Social and Environmental Activities, Changes in Stockholders' Equity, and Cash Flows for the years ended December 31, 2012 and 2011. Our responsibility is to express an opinion on these consolidated financial statements based on our 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. Our audits of the consolidated 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 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 opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in Colombia, promulgated by the National Accounting Office (Contaduría General de la Nación or CGN).

Accounting principles generally accepted for Colombian Government Entities vary in certain significant respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effects of such differences is presented in Note 34 to the consolidated financial statements.

/s/ KPMG Ltda.

Bogotá, Colombia April 29, 2013

# ECOPETROL S.A. and Subsidiaries Consolidated Balance Sheets As of December 31, 2013 and 2012 (Expressed in millons of Colombian pesos)

Assets         Career assets:           Career assets:         5         5,841,438         5         7,940,690           Investments (notes 2 and 4)         1,659,308         1,371,559         4,017,559         3,259,399         2,260,232           Accounts and toots receivable, net (notes 2 and 5)         6,176,891         3,259,399         2,260,232         4,010,40         5,378,326           Deferred tax assets (notes 2 and 7)         2,732         1,401,40         5,378,326         5,812,223         4,001,40         5,378,326         5,381,2223         4,001,40         5,378,326         5,381,2223         4,001,40         5,378,326         5,381,2223         4,001,40         5,378,326         5,381,223         4,001,40         5,378,326         5,381,223         4,001,40,393         5,381,223         4,001,40,393         5,381,223         4,001,493         5,381,223         4,001,493         5,381,223         4,001,493         5,381,223         4,001,493         5,381,233         4,393,493         1,37,393         4,394,493         1,37,393         5,381,232,323         5,381,232,323         5,381,232,333         4,393,493         1,373,494         1,37,359         5,381,232,393         5,381,233,393         4,393,493         1,373,374,493         4,474,493,493         1,374,593         5,31,337,393         4,393,493			2013		2012
Cash and cash equivalents (notes 2 and 3)       S       8,841,438       S       7,940,690         Investments (notes 2 and 4)       1,659,308       1,371,559       2,806,282         Advances and doposits (notes 2 and 7)       8,614,050       5,378,395       2,806,282         Advances and doposits (notes 2 and 7)       8,614,050       5,378,395       2,806,282         Advances and doposits (notes 2 and 7)       2,7,732       14,014         Total current assets       S       2,877,162       S       2,883,627         Investments (notes 10)       2,1,732       14,014       100,655       500,451         Advances and dopes recevable, net (notes 2 and 5)       5,812,223       500,555       500,451         Advances and dopes recevable, net (note 10, 10,100,100,100,100,100,100,100,100,	Assets				
Cash and cash equivalents (notes 2 and 3)       S       8,841,438       S       7,940,690         Investments (notes 2 and 4)       1,659,308       1,371,559       2,806,282         Advances and doposits (notes 2 and 7)       8,614,050       5,378,395       2,806,282         Advances and doposits (notes 2 and 7)       8,614,050       5,378,395       2,806,282         Advances and doposits (notes 2 and 7)       2,7,732       14,014         Total current assets       S       2,877,162       S       2,883,627         Investments (notes 10)       2,1,732       14,014       100,655       500,451         Advances and dopes recevable, net (notes 2 and 5)       5,812,223       500,555       500,451         Advances and dopes recevable, net (note 10, 10,100,100,100,100,100,100,100,100,					
Investments (noise 2 and 4)         1,659,308         1,371,559           Accounts and notes receivable, net (note 2 and 5)         6,176,891         5,261,501           Inventories, net (note 6)         3,259,399         2,806,282           Advances and deposits (notes 2 and 7)         8,614 (050         5,378,926           Prepaid expenses (note 8)         148,334         110,655           Deferred tax sasts (note 17)         27,373         14,014           Total current assets <b>\$ 28,727,162 \$ 22,883,627</b> Investments (notes 2 and 4)         \$ \$ 1,587,598 \$ \$,512,223           Advances and deposits (notes 2 and 7)         92,613 117,708           Deposits beld in trust (note 9)         4498,745 \$ 478,81           Property plant and deposits (notes 2 and 7)         4,004,790           Property plant and equipment, net (note 10)         4,047,794 \$ 4,004,790           Deferred tax (note 12 and 17)         21,456,659         18,568,730           Other assets (notes 2 and 13)         3,005,955         4,003,733           Valuations (note 12 and 17)         21,456,659         18,568,730           Deferred tax (note 12 and 17)         2,661,096         20,647,890           Other assets (notes 2 and 15)         5         23,59,488         Accounts payable and related parties (notes 2 and 16)         9,53		¢	0.041.420	¢	7.040.000
Accounts and notes receivable, net (notes 2 and 5)       6.176,891       5.261.501         Inventories, net (note 6)       3.259.399       2.806.282         Advances and deposits (notes 2 and 7)       8.614.050       5.378.926         Prepaid expenses (note 8)       144.83.44       110.655         Deferred tax assets (note 17)       27.732       14.014         Total current assets:       8       28.727.162       8       22.883.627         Investments (notes 2 and 4)       \$       1.887.598       \$       5.812.223         Accounts and notes receivable, net (notes 2 and 5)       5.20.056       5.03.451       Advances and deposits (notes 2 and 7)       192.613       172.708         Deposits held in trust (note 9)       478.745       478.810       77.146.95       8       5.868.730         Deferred charges (notes 12 and 17)       21.456.659       185.868.730       0.665.92       110.671.713       0.90.763         Valuations (note 14)       26.961.096       20.647.890       7.458.91       7.458.91       7.458.91       7.458.91       7.458.91       7.459.95       8       3.23.973.73       1.90.95.757       7.458.91       7.458.91       7.458.91       7.458.91       7.458.91       7.458.91       7.458.91       7.459.95       1.13.879.5785       8		\$		\$	
Inventories, net (note 6)       3,259,399       2,806,282         Advances and deposits (notes 2 and 7)       8,614,050       5,758,256         Prepaid expenses (note 8)       144,314       110,655         Deferred tax sasets (note 8)       144,314       110,655         Corp term assets:       \$       28,727,162       \$       22,883,627         Investments (notes 2 and 4)       \$       \$       5,812,223       \$<					
Advances and deposits (notes 2 and 7)       8,614,050       5,378,926         Prepaid expenses (note 8)       144,344       110,655         Deferred tax assets (note 17)       27,732       14,014         Total current assets       \$28,727,162       \$22,883,627         Long term assets:       \$1,587,598       \$5,812,223         Advances and deposits (notes 2 and 7)       192,613       172,720         Advances and deposits (notes 2 and 7)       21,456,680       31,43,455         Advances and deposits (notes 2 and 7)       192,613       172,708         Deposits held in trust (note 9)       473,745       478,810         Property, plant and equipment, net (note 10)       44,98,600       31,143,955         Natural and environmental resources, net (note 11)       21,456,659       114,357,45         Deferred charges (notes 12 and 17)       4,040,790       3,646,421         Other assets (notes 2 and 13)       2,66,109       20,647,800         Valuations (note 14)       2,66,109       20,647,800         Total assets       \$132,427,994       \$113,879,578         Current liabilities:       \$132,427,994       \$10,905,375         Financial obligations (notes 2 and 15)       \$2,359,488       10,905,375         Tacks, contributions and duties payable (note 17) </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Prepaid expenses (note 8)         148,344         110,655           Deferred tax assets (note 17)         27,732         14,014           Total current assets         \$         28,727,162         \$         22,883,627           Long term assets:         1         12,005         503,451         30,0056         503,451           Accounts and notes receivable, net (notes 2 and 5)         5,812,223         50,0056         503,451           Advances and notes receivable, net (notes 2 and 7)         192,613         172,708         478,745         478,810           Deposits hole 9)         478,745         478,810         31,349,55         478,745         478,810         26,961,096         20,647,890         40,004,790         3,646,421         0,004,790         3,646,421         0,004,790         3,646,421         0,004,780         26,961,096         20,647,890         20,647,890         21,356,859         113,379,578         113,379,578         113,379,578         5         113,379,578         5         113,379,578         5         113,379,578         5         113,379,578         5         2,359,488         3,787,978,924         113,379,578         5         2,359,488         7,879,294         113,379,578         5         2,359,488         7,879,294         113,379,578         5					
Deferred tax assets (note 17) $27,722$ $14,014$ Total current assets:         \$ 28,727,162         \$ 22,883,627           Long term assets:         \$ 51,587,598         \$ 581,223           Accounts and notes receivable, net (notes 2 and 5)         \$ 50,451         \$ 50,451           Advances and deposits (note 2 and 7)         192,613         172,708           Deposits held in trust (note 9)         478,745         478,810           Property, phart and equipment, net (note 10)         4,99,868         37,134,955           Natural and environmental resources, net (note 11)         21,456,659         18,566,730           Deferred harges (notes 12 and 17)         4,004,790         3,664,621           Other assets (notes 2 and 13)         20,661,096         20,647,800           Valuations (note 14)         20,961,096         20,647,800           Current liabilities: <b>S</b> 132,427,994         \$ 113,879,578           Liabilities and Shareholders' Equity         2,359,048         3,789,294           Accounts payable and related parties (notes 12 and 16)         9,159,183         7,879,294           Labor and pension liabilities (note 17)         23,51,5005         1,322,298           Taxes, contributions and duties payable (note 17)         2,515,005         1,322,298					
Total current assets         \$ 28,727,162         \$ 22,2883,627           Long term assets:         investments (notes 2 and 4)         \$ 1,587,598         \$ 5,812,223           Accounts and notes receivable, net (notes 2 and 7)         192,613         172,708         \$ 520,956         \$ 503,451           Deposits hold in trust (note 9)         478,745         478,745         478,840         \$ 71,717,708           Deposits hold in trust (note 9)         478,745         478,840         \$ 71,719,739,758           Natural and environmental resources, net (note 10)         44,998,680         37,134,955         \$ 64,6421           Other assets (notes 2 and 13)         20,961,096         20,647,890         \$ 113,879,578           Valuations (note 14)         20,961,096         20,647,890         \$ 113,879,578           Current liabilities:         \$ 132,2427,994         \$ 113,879,578         \$ 2,359,488         \$ 26,599,59         \$ 2,359,488           Accounts payable and related parties (notes 2 and 15)         \$ 74,559         \$ 2,339,488         \$ 78,792,949         \$ 113,879,294           Labor and pension liabilities (note 17)         24,318         \$ 7,879,294         \$ 113,879,294         \$ 113,879,294         \$ 113,879,294         \$ 14,343,97         \$ 787,294         \$ 113,879,294         \$ 113,879,294         \$ 113,879,294					
Long term assets:         investments (notes 2 and 4)         \$ 1,587,598         \$ 5,812,223           Accounts and notes receivable, net (notes 2 and 7)         192,613         172,708           Deposits held in trust (note 9)         478,8745         478,810           Deposits held in trust (note 9)         478,8745         478,810           Deposits held in trust (note 10)         44,998,680         37,134,955           Natural and environmental resources, net (note 11)         21,456,659         18,568,730           Deferred charges (notes 12 and 17)         4,004,790         3,664,621           Other assets (notes 2 and 13)         3,500,595         4,030,763           Valuations (note 14)         26,561,096         20,647,789           Valuations (note 14)         26,596,1096         20,647,789           Valuations (note 14)         26,596,1096         20,647,789           Current liabilities:         i13,879,578         5         2,359,488           Accounts payable and related parties (notes 2 and 16)         9,159,118         7,879,294           Deferred tax liabilities (note 18)         28,628         256,599           Labor and pension liabilities (note 18)         2,315,005         1,852,989           Total current liabilities         \$ 2,1423,992         \$ 11,346,337		<b>e</b>		¢	
Investments (notes 2 and 4)         \$ 1,587,598         \$ 5,812,223           Accounts and notes receivable, net (notes 2 and 5)         \$20,056         \$503,451           Advances and deposits (notes 2 and 7)         \$122,613         \$122,703           Deposits held in trust (note 9)         \$473,745         \$478,810           Property, plant and equipment, net (note 10)         \$44,998,680         \$71,144,955           Natural and environmental resources, net (note 11)         \$24,456,659         \$18,568,730           Deferred charges (notes 2 and 13)         \$3,500,595         \$4,030,700         \$4,6421           Other assets (notes 2 and 13)         \$26,961,006         \$20,647,890         \$71,8759         \$2,359,488           Valuations (note 14)         \$26,961,006         \$20,647,890         \$71,879,294         \$113,879,578           Current liabilities:         \$132,427,994         \$133,879,578         \$2,359,488           Accounts payable and related parties (notes 2 and 16)         \$9,539,934         \$10,905,375           Taxes, contributions and duties payable (note 17)         \$9,159,183         7,879,294           Labor and persion liabilities (note 18)         \$2,215,005         \$2,256,029           Estimated liabilities and provisions (notes 2 and 19)         \$2,515,005         \$13,252,989           Total current liab	1 otai cuiteiti assets	Ф	20,727,102	Φ	22,003,027
Investments (notes 2 and 4)         \$ 1,587,598         \$ 5,812,223           Accounts and notes receivable, net (notes 2 and 5)         \$20,056         \$503,451           Advances and deposits (notes 2 and 7)         \$122,613         \$122,703           Deposits held in trust (note 9)         \$473,745         \$478,810           Property, plant and equipment, net (note 10)         \$44,998,680         \$71,144,955           Natural and environmental resources, net (note 11)         \$24,456,659         \$18,568,730           Deferred charges (notes 2 and 13)         \$3,500,595         \$4,030,700         \$4,6421           Other assets (notes 2 and 13)         \$26,961,006         \$20,647,890         \$71,8759         \$2,359,488           Valuations (note 14)         \$26,961,006         \$20,647,890         \$71,879,294         \$113,879,578           Current liabilities:         \$132,427,994         \$133,879,578         \$2,359,488           Accounts payable and related parties (notes 2 and 16)         \$9,539,934         \$10,905,375           Taxes, contributions and duties payable (note 17)         \$9,159,183         7,879,294           Labor and persion liabilities (note 18)         \$2,215,005         \$2,256,029           Estimated liabilities and provisions (notes 2 and 19)         \$2,515,005         \$13,252,989           Total current liab	Long term assets.				
Accounts and notes receivable, net (notes 2 and 5)         \$20,056         \$503,451           Advances and deposits (notes 2 and 7)         \$122,613         \$172,708           Deposits held in trust (note 9)         \$478,745         \$478,814           Property, plant and equipment, net (note 10)         \$21,455,659         \$18,568,730           Deferred charges (notes 12 and 17)         \$4,004,790         \$3,646,421           Other assets (notes 2 and 13)         \$25,959         \$4,030,763           Valuations (note 14)         \$26,961,096         \$20,647,890           Total assets         \$132,427,994         \$113,879,578           Current liabilities and Shareholders' Equity           Current liabilities (notes 2 and 16)         \$9,339,934         \$10,905,375           Taxes, contributions and duties payable (note 17)         \$24,318         -           Labor and persion liabilities (note 18)         \$23,002,627         \$23,254,075           Long merino liabilities (note 18)         \$21,423,992         \$11,346,337           Accounts payable and related parties (notes 2 and 19)         \$2,515,005         \$13,242,392         \$11,346,337           Taxes, contributions and duties payable (note 17)         \$24,318         -         -           Labor and perison liabilitities (note 18)         \$21,423,992		S	1 587 598	\$	5 812 223
Advances and deposits (notes 2 and 7)       192,613       172,708         Deposits held in trust (note 9)       478,745       478,810         Property, plant and equipment, net (note 10)       21,456,659       18,568,730         Deferred charges (notes 2 and 13)       3,600,595       4,004,790       3,646,421         Other assets (notes 2 and 13)       3,500,595       4,003,763         Valuations (note 14)       26,961,096       20,647,890         Total assets       \$ 132,427,994       \$ 113,879,578         Current liabilities:         Financial obligations (notes 2 and 15)       \$ 774,559       \$ 2,359,488         Accounts payable and related parties (notes 2 and 16)       9,159,183       7,879,294         Deferred tax liabilities (note 17)       24,318       -         Labor and pension liabilities (note 17)       24,318       -       18,526,999         Total current liabilities (note 17)       24,318       -       18,526,999         Total current liabilities (note 18)       2,515,005       1,852,999         Total current liabilities (note 17)       24,318       -         Labor and pension liabilities (note 18)       \$ 21,423,992       \$ 11,346,337         Accounts payable and provisions (notes 2 and 19)       \$		Ψ		Ψ	
Deposits held in frust (note 9)         478,745         478,745         478,745           Property, plant and equipment, net (note 10)         44,998,680         37,134,955           Natural and environmental resources, net (note 11)         21,456,659         18,568,730           Deferred charges (notes 12 and 17)         4,004,790         3,646,421           Other assets (notes 2 and 13)         26,961,096         20,647,890           Total assets         \$         132,427,994         \$         113,879,578           Current liabilities and Shareholders' Equity         Current liabilities:         \$         774,559         \$         2,359,488           Accounts payable and related parties (notes 2 and 16)         \$,9,539,344         10,905,375         7,8294         \$         113,879,2244           Deferred tax liabilities (note 17)         9,159,183         7,879,234         10,905,375         10,905,375           Total asets         \$         23,302,627         \$         23,232,4075         1,822,989           Total current liabilities (note 18)         \$         2,12,302,627         \$         23,232,4075           Labor and pension liabilities (notes 2 and 16)         \$         21,423,992         \$         11,346,337           Accounts payable and related parties (notes 2 and 16)         \$					,
Property, plant and equipment, net (note 10)         44,998,800         37,134,955           Natural and environmental resources, net (note 11)         21,456,659         18,568,730           Deferred charges (notes 12 and 17)         4,004,790         3,646,421           Other assets (notes 2 and 13)         26,661,095         20,647,890           Valuations (note 14)         26,661,095         20,647,890           Total assets         \$ 132,427,994         \$ 113,879,578           Current liabilities:         *         *         *           Financial obligations (notes 2 and 15)         \$ 774,559         \$ 2,359,488           Accounts payable and related parties (notes 2 and 16)         9,519,934         10,905,375           Taxes, contributions and dutices payable (note 17)         24,318         -           Labor and pension liabilities (note 18)         22,56,228         22,359,488           Deferred liabilities and provisions (notes 2 and 19)         2,515,005         1,852,989           Total current liabilities         \$ 21,423,992         \$ 113,46,337           Accounts payable and related parties (notes 2 and 16)         \$ 21,423,992         \$ 11,346,337           Labor and pension liabilities (note 18)         \$ 21,423,992         \$ 11,346,337           Long term liabilities         \$ 21,423,992         \$	Deposits held in trust (note 9)				
Natural and environmental resources, net (note 11)         21,456,659         18,568,730           Deferred charges (notes 12 and 17)         4,004,790         3,646,421           Other assets (notes 2 and 13)         26,961,096         20,647,890           Total assets         \$ 132,427,994         \$ 113,879,578           Current liabilities:         \$ 132,427,994         \$ 133,879,578           Current liabilities:         \$ 774,559         \$ 2,359,488           Accounts payable and related parties (notes 2 and 16)         9,539,934         10,905,375           Taxes, contributions and duties payable (note 17)         9,159,183         7,879,294           Deferred tax liabilities (note 18)         289,628         256,529           Estimated liabilities and provisions (notes 2 and 19)         2,515,005         1,852,989           Total current liabilities         \$ 21,423,992         \$ 11,346,337           Financial obligations (notes 2 and 15)         \$ 21,423,992         \$ 11,346,337           Accounts payable (note 17)         - 555,054         555,054           Expended liabilities (notes 18)         \$ 21,423,992         \$ 11,346,337           Financial obligations (notes 2 and 15)         \$ 21,423,992         \$ 11,346,337           Accounts payable and related parties (notes 2 and 16)         \$ 51,91,998         662,4			44,998,680		
Other assets (notes 2 and 13)       3,500,595       4,030,783         Valuations (note 14)       26,961,096       20,647,890         Total assets <b>S 132,427,994 S</b> Liabilities and Shareholders' Equity       Current liabilities:       5       774,559       \$       2,359,488         Current liabilities:       S       774,559       \$       2,359,488       7,879,294         Deferred tax liabilities (notes 2 and 15)       \$       7,879,294       9,159,183       7,879,294         Deferred tax liabilities (note 17)       24,318       -       226,662       226,929         Estimated liabilities (note 18)       22,615,005       1,852,989       Total current liabilities <b>S</b> 22,302,627 <b>S</b> 23,254,075         Long term liabilities (note 18)       2,515,005       1,852,989       Total current liabilities (notes 2 and 15)       S       21,423,992       \$       11,346,337         Accounts payable and related parties (notes 2 and 16)       \$       21,423,992       \$       13,346,337         Accounts payable and related parties (notes 2 and 16)       \$       21,423,992       \$       11,346,337         Accounts payable and related parties (notes 2 and 16)       \$       21,423,992       \$       11,346,337     <					
Valuations (note 14) Total assets       26,961,096       20,647,890         Liabilities and Shareholders' Equity       \$ 132,427,994       \$ 113,879,578         Liabilities:       Financial obligations (notes 2 and 15)       \$ 774,559       \$ 2,359,488         Accounts payable and related parties (notes 2 and 16)       9,539,934       10,905,375         Taxes, contributions and duties payable (note 17)       24,318       -         Labor and pension liabilities (note 18)       289,628       256,929         Estimated liabilities (note 18)       232,254,075       \$ 11,346,337         Total current liabilities       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 19)       \$ 51,63,819       4,277,81       4,070,74         Labor and pension liabilities (note 17)       -       55,054       55,054         Etimated liabilities and provisions (notes 2 and 19)       \$ 1,63,819       4,277,811       4			4,004,790		3,646,421
Total assets         § 132,427,994         § 113,879,578           Liabilities and Shareholders' Equity         Current liabilities:         Financial obligations (notes 2 and 15)         \$ 774,559         \$ 2,359,484           Current liabilities:         9,159,183         7,7879,294         \$ 2,359,484         10,905,375           Taxes, contributions and duties payable (note 17)         9,159,183         7,879,294         Deferred tax liabilities (note 17)         24,318         -           Labor and pension liabilities (note 18)         22,515,005         1,852,989         Total current liabilities         1,852,989           Total current liabilities (note 18)         2,515,005         1,852,989         11,346,337           Accounts payable and related parties (notes 2 and 19)         \$ 21,423,992         \$ 113,467,337           Accounts payable and related parties (notes 2 and 16)         \$ 91,198         3,776,07,44           Accounts payable and related parties (notes 2 and 16)         \$ 91,998         662,472           Labor and pension liabilities (note 17)         -         555,054           Lestimated liabilities and provisions (notes 2 and 19)         \$ 153,819         4,070,744           Taxes, contributions and duties payable (note 17)         -         555,054           Labor and pension liabilities (notes 2 and 20)         2,974,776         2,271,8			3,500,595		4,030,763
Liabilities and Shareholders' Equity         Liabilities and Shareholders' Equity           Current liabilities:         \$ 774,559         \$ 2,359,488           Accounts payable and related parties (notes 2 and 16)         9,539,934         10,905,375           Taxes, contributions and duties payable (note 17)         24,318         -           Labor and pensoin liabilities (note 18)         289,628         256,929           Total current liabilities:         \$ 21,423,992         \$ 11,346,337           Accounts payable and related parties (notes 2 and 19)         2,515,005         1,852,989           Total current liabilities:         \$ 22,302,627         \$ 23,254,075           Long term liabilities:         \$ 21,423,992         \$ 11,346,337           Accounts payable and related parties (notes 2 and 16)         \$ 21,423,992         \$ 11,346,337           Accounts payable and related parties (notes 2 and 16)         \$ 21,423,992         \$ 11,346,337           Accounts payable and related parties (notes 2 and 16)         \$ 21,423,992         \$ 11,346,337           Accounts payable (note 17)         -         -         555,054           Labor and pension liabilities (notes 2 and 16)         \$ 21,423,992         \$ 11,346,337           Accounts payable (note 17)         -         -         555,054           Uter long-term liabilities (n	Valuations (note 14)		26,961,096		20,647,890
Current liabilities: Financial obligations (notes 2 and 15)\$ 774,559\$ 2,359,488Accounts payable and related parties (notes 2 and 16) Taxes, contributions and duties payable (note 17) Deferred tax liabilities (note 17)9,159,1837,879,294Deferred tax liabilities (note 17) 	Total assets	\$	132,427,994	\$	113,879,578
Current liabilities: Financial obligations (notes 2 and 15)\$ 774,559\$ 2,359,488Accounts payable and related parties (notes 2 and 16) Taxes, contributions and duties payable (note 17) Deferred tax liabilities (note 17)9,159,1837,879,294Deferred tax liabilities (note 17) Labor and pension liabilities (note 18) Total current liabilities24,318 22,515,005-Labor and pension liabilities2,515,0051,852,989Total current liabilities: Financial obligations (notes 2 and 15)\$ 21,423,992\$ 11,346,337Accounts payable and related parties (notes 2 and 16) Labor and pension liabilities (note 18)\$ 21,423,992\$ 11,346,337Accounts payable and related parties (notes 2 and 16) Labor and pension liabilities (note 18) $5$ 51,13,8194,070,744Taxes, contributions and duties payable (note 17) Labor and pension liabilities (note 2 and 19) $5$ ,163,8194,376,004Other long-term liabilities $5$ 15,363 $5$ ,163,8194,376,004Other long-term liabilities $5$ 34,432,416 $5$ 23,228,455Non-controlling interests (note 21) $5$ 4,573,748 $5$ 2,602,167Shareholders' equity: (Note 22 and se attached statement) $71,119,203$ $64,740,881$ Total liabilities and shareholders' equity $5$ 132,427,994 $5$ 113,879,578Memorandum accounts (note 23) Debtors152,210,701144,971,427		_		_	
Financial obligations (notes 2 and 15)       \$ 774,559       \$ 2,359,488         Accounts payable and related parties (notes 2 and 16)       9,159,183       7,879,2934         Taxes, contributions and duties payable (note 17)       9,159,183       7,879,2934         Deferred tax liabilities (note 17)       24,318       -         Labor and pension liabilities (note 18)       289,628       256,029         Estimated liabilities and provisions (notes 2 and 19)       2,515,005       1,852,989         Total current liabilities       \$ 22,302,627       \$ 23,254,075         Long term liabilities:       \$ 21,423,992       \$ 11,346,337         Financial obligations (notes 2 and 15)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable (note 17)       - 555,054       \$ 23,284,075         Taxes, contributions and dutes payable (note 17)       - 555,054       \$ 2,974,776       2,271,844         S advase, forte 21       \$ 3,4432					
Accounts payable and related parties (notes 2 and 16) $9,539,934$ $10,905,375$ Taxes, contributions and duties payable (note 17) $9,159,183$ $7,879,294$ Deferred tax liabilities (note 17) $24,318$ $249,628$ $256,929$ Estimated liabilities (note 18) $289,628$ $256,929$ Total current liabilities $8$ $22,302,627$ $8$ $23,254,075$ Long term liabilities: $8$ $22,302,627$ $8$ $23,254,075$ Long term liabilities: $8$ $21,423,992$ $$$ $11,346,337$ Accounts payable and related parties (notes 2 and 16) $591,998$ $662,472$ Labor and pension liabilities (note 18) $4,277,831$ $4,070,744$ Taxes, contributions and duties payable (note 17) $-555,054$ $5,163,819$ $4,376,004$ Other long-term liabilities $2,974,776$ $2,271,844$ $376,004$ Other long-term liabilities (note 2 1) $8$ $34,432,416$ $8$ $23,282,455$ Non-controlling interests (note 21) $$$ $$$ $4,573,748$ $$$ $2,602,167$ Shareholders' equity: $71,119,203$ $64,740,881$ $$$ $133,479,578$ Memorandum accounts (note 23) $152,210,701$ $144,971,427$ Debtors $152,210,701$ $144,971,427$					
Taxes, contributions and duties payable (note 17)       9,159,183       7,879,294         Deferred tax liabilities (note 17)       24,318       -         Labor and pension liabilities (note 18)       289,628       256,929         Estimated liabilities (note 18)       2,515,005       1,852,989         Total current liabilities       \$ 22,302,627       \$ 23,254,075         Long term liabilities:       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       - 555,054         Estimated liabilities (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities (note 21)       \$ 34,32,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427	Financial obligations (notes 2 and 15)	\$		\$	
Deferred tax liabilities (note 17)       24,318         Labor and pension liabilities (note 18)       289,628       256,929         Estimated liabilities and provisions (notes 2 and 19)       2,515,005       1,852,989         Total current liabilities       \$ 22,302,627       \$ 23,254,075         Long term liabilities:       \$ 21,423,992       \$ 11,346,337         Financial obligations (notes 2 and 15)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       - 555,054       550,54         Estimated liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 2 and 20)       2,974,776       2,211,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427       144,971,427					
Labor and pension liabilities (note 18)       289,628       256,929         Estimated liabilities and provisions (notes 2 and 19)       2,515,005       1,852,989         Total current liabilities       \$ 22,302,627       \$ 23,254,075         Long term liabilities:       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 91,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxee, contributions and duties payable (note 17)       - 555,054         Estimated liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427					7,879,294
Estimated liabilities and provisions (notes 2 and 19)       2,515,005       1,852,989         Total current liabilities       \$ 22,302,627       \$ 23,254,075         Long term liabilities:       *       21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       \$ 591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,707,744         Taxes, contributions and duties payable (note 17)       - 555,054       - 555,054         Estimated liabilities and provisions (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881         (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427					-
Total current liabilities       \$ 22,302,627       \$ 23,254,075         Long term liabilities:       Financial obligations (notes 2 and 15)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       - 555,054         Estimated liabilities (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 113,879,578       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427					,
Long term liabilities:       Financial obligations (notes 2 and 15)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       - 555,054         Estimated liabilities (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       -       -       -         (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 113,879,578       \$ 113,879,578         Memorandum accounts (note 23)       Debtors       152,210,701       144,971,427					
Financial obligations (notes 2 and 15)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       -       555,054         Estimated liabilities and provisions (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427	Total current liabilities	\$	22,302,627	\$	23,254,075
Financial obligations (notes 2 and 15)       \$ 21,423,992       \$ 11,346,337         Accounts payable and related parties (notes 2 and 16)       591,998       662,472         Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       -       555,054         Estimated liabilities and provisions (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427	Long term lightlities:				
Accounts payable and related parties (notes 2 and 16)591,998662,472Labor and pension liabilities (note 18)4,277,8314,070,744Taxes, contributions and duties payable (note 17)-555,054Estimated liabilities and provisions (notes 2 and 19)5,163,8194,376,004Other long-term liabilities (notes 2 and 20)2,974,7762,271,844Total liabilities\$ 34,432,416\$ 23,282,455Non-controlling interests (note 21)\$ 4,573,748\$ 2,602,167Shareholders' equity: (Note 22 and see attached statement)71,119,20364,740,881Total liabilities and shareholders' equity\$ 132,427,994\$ 113,879,578Memorandum accounts (note 23) Debtors152,210,701144,971,427		\$	21 423 992	\$	11 346 337
Labor and pension liabilities (note 18)       4,277,831       4,070,744         Taxes, contributions and duties payable (note 17)       -       555,054         Estimated liabilities and provisions (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$       34,432,416       \$       23,282,455         Non-controlling interests (note 21)       \$       4,573,748       \$       2,602,167         Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$       132,427,994       \$       113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427       144,971,427		Ψ		Ψ	
Taxes, contributions and duties payable (note 17)       -       555,054         Estimated liabilities and provisions (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$       34,432,416       \$       23,282,455         Non-controlling interests (note 21)       \$       4,573,748       \$       2,602,167         Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$       132,427,994       \$       113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427       144,971,427			/		
Estimated liabilities and provisions (notes 2 and 19)       5,163,819       4,376,004         Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427			-		
Other long-term liabilities (notes 2 and 20)       2,974,776       2,271,844         Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427			5,163,819		
Total liabilities       \$ 34,432,416       \$ 23,282,455         Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427					
Non-controlling interests (note 21)       \$ 4,573,748       \$ 2,602,167         Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       152,210,701       144,971,427		\$		\$	
Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       Debtors       152,210,701       144,971,427			- , - , -		-, -,
Shareholders' equity:       (Note 22 and see attached statement)       71,119,203       64,740,881         Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       Debtors       152,210,701       144,971,427	Non-controlling interests (note 21)	\$	4,573,748	\$	2,602,167
Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       Debtors       152,210,701       144,971,427					
Total liabilities and shareholders' equity       \$ 132,427,994       \$ 113,879,578         Memorandum accounts (note 23)       Debtors       152,210,701       144,971,427	(Note 22 and see attached statement)		71,119,203		64,740,881
Debtors 152,210,701 144,971,427	Total liabilities and shareholders' equity	\$	132,427,994	\$	113,879,578
Debtors 152,210,701 144,971,427		_			
Creditors \$ (111,774.620) \$ (115,482,125)					, ,
	Creditors	\$	(111,774,620)	\$	(115,482,125)

The accompanying notes are an integral part of the Consolidated Financial Statements

# ECOPETROL S.A. and Subsidiaries Consolidated Statements of Financial, Economic, Social and Environmental Activities For the years ended December 31, 2013, 2012 and 2011 (Expressed in millions of Colombian pesos, except for net income per share which is expressed in Colombian pesos)

		2013		2012		2011
Revenues (note 24):						
Domestic sales	\$	26,207,899	\$	24,361,913	\$	23,554,629
Foreign sales		44,220,815		44,490,089		42,412,885
Total revenues	\$	70,428,714	\$	68,852,002	\$	65,967,514
Cost of sales (note 25)		42,554,282		40,535,508		36,704,584
Gross margin	\$	27,874,432	\$	28,316,494	\$	29,262,930
Operating expenses (note 26):						
Administration		1,455,717		874,980		1,018,917
Operation and projects		4,583,986		4,098,610		3,199,997
Operating income	\$	21,834,729	\$	23,342,904	\$	25,044,016
Non-operating income (expenses):						
Financial income (expenses), net (note 27)		45,653		(167,889)		(904,302)
Pension expenses (note 18 and 28)		(478,737)		(948,455)		(706,298)
Inflation gain (note 29)		155		97,663		21,836
Other income (expenses), net (note 30)		480,407		7,478		186,180
Income before income tax and non-controlling interest	\$	21,882,207	\$	22,331,701	\$	23,641,432
Comment in some top (note 17)		9 201 571		7.005.074		75(1(24
Current income tax (note 17) Deferred income tax (note 17)		8,291,571		7,095,874		7,561,634
		(202,733)		37,521		394,087
Income before non-controlling interest	\$	13,793,369		15,198,306	\$	15,685,711
Non-controlling interest		(686,866)		(419,359)		(233,377)
Not income for the year	0		-		•	
Net income for the year	<u>\$</u>	13,106,503	<u>\$</u>	14,778,947	<u>\$</u>	15,452,334
	Ø	210 70	Ø	250 44	Ø	200.27
Net income per share	<u>\$</u>	318.76	\$	359.44	\$	380.27

The accompanying notes are an integral part of the Consolidated Financial Statements

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# ECOPETROL S.A. and Subsidiaries Consolidated Statements of Changes in Shareholders' Equity For the years ended December 31, 2013 and 2012 (Expressed in millons of Colombian pesos except dividends per share)

	Subscribed and paid-in capital	Additional paid-in capital	Legal and other reserves	Incorporated institutional equity	Equity method surplus	Valuation surplus	Public Accounting Regime effect	Accumulated Retained earnings	Total Shareholders' equity
Balance as of December 31, 2011	\$ 10,279,175	\$ 6,788,144	\$ 9,179,412	\$ 174,080	\$ 1,166,810	\$ 12,671,696	\$ (696,361)	\$ 15,125,899	\$ 54,688,855
Distribution of dividends (\$300 per share)	-	-	-	-	-	-	-	(12,335,009)	(12,335,009)
Additional paid-in capital		10,390	-	-	-	-	-	-	10,390
Additional paid-in capital receivable	-	155,713	-	-	-	-	-	-	155,713
Valuation surplus	-	-	-	-	-	7,103,965	-	-	7,103,965
Property, plant and equipment revaluation	-	-	-	-	-	-	680,129	-	680,129
Legal reserve appropriation	-	-	187,958	-	-	-	-	(187,958)	-
Regulatory Decree 2336/95 reserve appropriation	-	-	1,829,362	-	-	-	-	(1,829,362)	-
Corporate Group unrealized reserve appropriation	-	-	2,123,538	-	-	-	-	(2,123,538)	-
Transportation infrastructure integrity reserve	-	-	605,135	-	-	-	-	(605,135)	-
Release of the Corporate Group's reserves for unrealized gains	-	-	(1,086,070)	-	-	-	-	1,086,070	-
Dividend payment (shares issued in 2011) reserve appropriation			(449,904)	-	-	-		449,904	-
Release of the Regulatory Decree 2336/95 reserves for the									
previous year	-	-	(96,695)	-	-	-	-	96,695	-
Equity method capital surplus and exchange rate adjustment	-	-	-	-	(342,109)	-	-	-	(342,109)
Net income for the year	-	-	-	-	-	-	-	14,778,947	14,778,947
Balance as of December 31, 2012	\$ 10,279,175	\$ 6,954,247	\$ 12,292,736	\$ 174,080	\$ 824,701	\$ 19,775,661	\$ (16,232)	\$ 14,456,513	\$ 64,740,881
Distribution of dividends (\$291 per share)	-	-	-	-	-	-	-	(11.964.960)	(11,964,960)
Additional paid-in capital receivable	-	45	-	-	-	-	-	-	45
Additional paid-in capital - called in guarantees	-	82	-	-	-	-	-	-	82
Valuation surplus	-					4,830,558	-	-	4,830,558
Property, plant and equipment revaluation	-	-	-	-	-	-	1,363	-	1,363
Regulatory Decree 2336/95 reserve appropriation	-	-	215,407	-	-	-	-	(215,407)	-
Release of the Regulatory Decree 2336/95 reserves for the									
previous year	-	-	(1,829,362)	-	-	-	-	1,829,362	-
Corporate Group unrealized reserve appropriation	-	-	3,461,741	-	-	-	-	(3,461,741)	-
Appropriation of reserves for new explorations	-	-	2,595,112	-	-	-	-	(2,595,112)	-
Appropriation of reserves for investment projects	-	-	2,628,877	-	-	-	-	(2,628,877)	-
Appropriation of reserves for drilling infill campaign	-	-	1,260,000	-	-	-	-	(1,260,000)	-
Release of the Corporate Group's reserves for unrealized gains									
prior years	-	-	(2,595,112)	-	-	-	-	2,595,112	-
Release transportation infrastructure integrity reserve	-	-	(605,135)	-	-	-	-	605,135	-
Release of the Corporate Group's unrealized reserves	-	-	(2,123,538)	-	-	-	-	2,123,538	-
Equity method capital surplus and exchange rate adjustment	-	-	-	-	404,504	-	-		404,504
Adjustment incorporated institutional equity	-	-	-	227	-	-	-		227
Net income for the year								13,106,503	13,106,503
Balance as of December 31, 2013	\$ 10,279,175	\$ 6,954,374	\$ 15,300,726	\$ 174,307	\$ 1,229,205	\$ 24,606,219	\$ (14,869)	\$ 12,590,066	\$ 71,119,203

The accompanying notes are an integral part of the Consolidated Financial Statements

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# ECOPETROL S.A. and Subsidiaries Consolidated Statement of Cash Flows For the years ended December 31, 2013, 2012 and 2011 (Expressed in millons of Colombian pesos)

		2013		2012		2011
Cash flows from operating activities:	¢	13,106,503	¢	14 779 047	¢	15 450 224
Net income for the year Adjustments to reconcile net income to net cash provided by operating activities:	\$	13,106,503	\$	14,778,947	\$	15,452,334
Non-controlling interest		686,866		419,359		233,377
Deferred Income tax and CREE, net		(202,733)		37,521		394,087
Property, plant and equipment depreciation		1,982,706		2,027,658		1,960,007
Exchange rate difference		(17,972)		309,130		35,367
Amortizations:				,		, i
Natural resources		2,865,778		2,682,955		2,306,269
Facility abandonment		220,238		312,252		285,814
Intangibles		344,868		291,884		295,670
Deferred charges		104,499		154,101		111,811
Allowances:				0.5.4.0.5		
Accounts receivable		31,681		87,187		32,422
Inventory		18,703		14,459		8,505
Property, plant and equipment		122,514		315,627		41,948
Legal disputes and proceedings Pension liabilities for health and education		113,194 226,244		593,028		360,351 517,345
Pension transfer		804,358		869,491		241,624
Investments		27,873		23,087		122,395
Recovery of allowances:		27,075		25,007		122,375
Accounts receivable		(2,717)		(225)		(365
Inventories		(5,254)		(11,966)		(3,263
Property, plant and equipment		(67,999)		(159,833)		(46,019
Investments		(1)		-		-
Legal disputes and proceedings		(307,493)		(258,784)		(229,345
Other		(74,823)		(283,283)		(387,117
Property, plant and equipment write-off loss		27,233		127		418
Recovery of property, plant and equipment (excess)		(152,964)		-		
Goodwill impairment		353,012		-		
Natural and environmental resource write-off loss		843,228		34,191		
Other asset write-off loss		-		-		300
Loss in investments valuation		4,728		65,096		789,635
(Profit) equity method		(120,060)		(125,277)		(141,275
Net changes in operating asset and liabilities: Accounts and notes receivables		(6,000,115)		(2,522,804)		(1 414 913
Inventories		(6,090,115) (465,611)		(2,522,804) (390,847)		(1,414,813) (561,846
Deferred charges and other assets		118,186		895,618		(2,157,080
Accounts payable and related parties		676,518		2,601,167		(172,635
Tax contributions and duties payable		2,300,118		(730,923)		5,073,370
Labor and pension liabilities		(790,808)		34,632		(85,757
Estimated liabilities and provisions		1,085,193		116,552		56,585
Other long-term liabilities		(242,930)		(998,029)		559,202
Net cash provided by operating activities	\$	17,522,761	\$	21,182,098	\$	23,679,321
Cash flows from investing activities:						
Payment and advances for the acquisition of companies, net of acquired cash		-		-		(868,954
Increase in investments		(7,567,590)		(14,911,124)		(11,685,030
Redemption and sale of investments		11,933,852		13,772,436		9,071,695
Dividends received		98,281		70,690		100,915
Investment in natural and environmental resources		(6,267,691)		(5,615,306)		(4,311,149
Additions to property, plant and equipment		(7,957,123)		(9,852,556)		(10,189,522
Proceeds from sales of natural resources		100,790		-		
Proceeds from sales of property, plant and equipment		(2,963)				
Net cash used in investing activities	<u>\$</u>	(9,662,444)	<u>\$</u>	(16,535,860)	<u>\$</u>	(17,882,045
Cash flows from financing activities:						
Non-controlling interests		-		(69,823)		1,027,567
Increase financial obligations		7,492,632		5,110,249		(109,19)
Capitalizations		82		10,390		2,228,682
Dividends paid	-	(14,570,467)		(8,419,332)		(5,907,02)
Net cash used in financing activities	<u>\$</u>	(7,077,753)	<u>\$</u>	(3,368,516)	<u>\$</u>	(2,759,963
Net increase (decrease) in cash and cash equivalents		782,564		1,277,722		3,053,159
Exchange rate difference in cash and cash equivalents		118,184		(116,969)		
Cash and cash equivalents at the beginning of the year		7,940,690	_	6,779,937		3,726,778
		8,841,438		7,940,690		6,779,937

# Ecopetrol S.A. and Subsidiaries

# For the years ended December 31, 2013, 2012 and 2011

(Amounts are expressed in millions of Colombian pesos, except amounts stated in other currencies; exchange rates and income per share, which are expressed in Colombian pesos – throughout these financial statements pesos or \$ refer to Colombian pesos and U.S. dollar refers to United States dollars)

# (1) Economic Entity and Principal Accounting Policies and Practices

# **Reporting Entity**

Ecopetrol S.A. (hereinafter Ecopetrol or the Company) was constituted by Act 165 of 1948 and transformed through Extraordinary Decree 1760 of 2003 (as well as Decree 409 of 2006) and Act 1118 of 2006 into a state-owned stock company and then into a mixed economy company of a commercial nature, at the national level, linked to the Ministry of Mines and Energy, with an indefinite life term. Ecopetrol's corporate purpose is the development, in Colombia or abroad, of commercial or industrial activities arising from or related to the exploration, production, refining, transportation, storage, distribution, and selling of hydrocarbons, their by-products and associated products, as well as subsidiary operations, connected or complementary to these activities, in accordance with applicable regulations. Ecopetrol's main domicile is Bogotá, Colombia, and it may establish subsidiaries, branches and agencies in Colombia or abroad.

Pursuant to Transformation Decree 1760 of 2003, all administration of the Colombian nation's hydrocarbon reserves, as well as the administration of nonstrategic assets represented by stocks and shares in companies, were separated from Ecopetrol. Furthermore, Ecopetrol's basic structure was changed and two entities were created: a) the *Agencia Nacional de Hidrocarburos* (National Hydrocarbons Agency, hereinafter ANH) was created to issue and develop Colombian oil policy from that point forward (formerly the responsibility of Ecopetrol), and b) *Sociedad Promotora de Energía de Colombia S.A.*, which received the non-strategic assets owned by Ecopetrol.

Act 1118 of December 27, 2006 changed the legal nature of Ecopetrol and authorized the Company to issue shares to be placed on the public market and acquired by Colombian individuals or legal entities. Once the shares corresponding to 10.1% of the authorized capital were issued and placed, at the end of 2007, the Company became a public-private entity of a commercial nature, at the national level, related to the Ministry of Mines and Energy.

Ecopetrol entered into a deposit agreement with JP Morgan Chase Bank, N.A., as depositary, for the issuance of ADSs evidenced by ADRs. Each of the ADSs represents 20 of Ecopetrol's common shares or the right to receive 20 common shares of Ecopetrol.

On September 12, 2008, Ecopetrol submitted an application to the U.S. Securities and Exchange Commission (SEC) to register and list the Company's ADSs evidenced by ADRs on the New York Stock Exchange (NYSE). The Company's ADSs began trading on the NYSE under the "EC" symbol on September 18, 2008.

On December 3, 2009, the National Oversight Commission for Entities and Securities of Peru (from the Spanish *Comisión Nacional Supervisora de Empresas y Valores del Perú* - CONASEV) approved the listing of Ecopetrol's ADRs on the Lima Stock Exchange and the registration of such securities with the Public Registry of the Securities Market. The ADRs began trading on the Lima Stock Exchange on December 4, 2009 in the Peruvian market under the "EC" symbol.

On August 13, 2010, Ecopetrol began trading its ADRs on the Toronto Stock Exchange, Canada. Thus, Ecopetrol became the first Colombian company to be listed on the Toronto Stock Exchange.

Between July 27 and August 17, 2011, Ecopetrol carried out the second placement of its public offering, authorized by Act 1118 of 2006. As a result of this process, 644,185,868 common shares were issued at a nominal price of \$3,700 per share, for a total amount of \$2,383,488. The common shares were registered with the National Registry of Securities and Issuers in accordance with Decree 2555 of 2010. Following this, the Colombian National Government's equity participation in Ecopetrol was 88.49%.



The companies consolidated by Ecopetrol S.A. are:

Subsidiary	Ecopetrol participation percentages	Activity	Subsidiaries	Date of incorporation	Country/ Domicile	Geographic area of operations
· · · · ·	<u> </u>	Hydrocarbon exploration and		· · · ·		
Ecopetrol Oleo é Gas do Brasil Ltda.	100%	exploitation.	-	12/14/2006	Brazil	Brazil
		Hydrocarbon exploration and				
Ecopetrol del Perú S.A.	100%	exploitation.	-	08/27/2007	Peru	Peru
		Hydrocarbon exploration and				
Ecopetrol America Inc.	100%	exploitation.	-	10/09/2007	USA	USA
		Reinsurer of Ecopetrol and its				
Black Gold Re Ltd.	100%	subsidiaries.	-	08/24/2006	Bermuda	Bermuda
Andean Chemicals Ltd.	100%	Investment vehicle	Bioenergy S.A., Refinería de Cartagena, Propileno del Caribe y Comai	01/30/1997	Bermuda	Bermuda
ODL Finance S.A.	65%	Pipeline transportation of crude oil.	ODL S.A.	07/15/2008	Panama	Panama
		Production and marketing of				
Propileno del Caribe. Propilco S.A.		polypropylene resin.	Comai S.A., Refineria de Cartagena	03/16/1989	Colombia	Colombia
Bioenergy S.A.	91.43%	Biofuel production.	Bioenergy Zona Franca S.A.	12/13/2005	Colombia	Colombia
Ecopetrol Global Energy	100%	Internet Maliala	Ecopetrol America Inc., Ecopetrol oleo & Gas do Brasil Ltda, Ecopetrol del Perú S.A.	03/26/2009	Quesia	Service
Ecopetrol Global Energy Ecopetrol Pipelines International	100%	Investment Vehicle	del Peru S.A.	03/20/2009	Spain	Spain
Limited	100%	Investment Vehicle	Oleoducto Bicentenario y Ocensa	05/21/1991	Bermuda	Bermuda
Oleoducto Central S.A Ocensa		Pipeline transportation of crude oil.	-	12/14/1994	Colombia	Colombia
COMAI - Compounding and	12.0376	Manufacturing of polypropylene compounds and master batches for a	-	12/14/1994	Coloniola	Colonibia
Masterbatching Industry	100%	wide range of uses.	Refinería de Cartagena	05/21/1991	Colombia	Colombia
<i>y</i> ,		Hydrocarbon refining, marketing and				
Refineria de Cartagena S.A.	100%	distribution.	-	10/11/2006	Colombia	Colombia
Hocol Petroleum Limited	100%	Investment Vehicle.	Hocol S.A.	09/29/1995	Bermuda	Bermuda
Oleoducto de Colombia S.A ODC	73%	Pipeline transportation of crude oil.		07/10/1989	Colombia	Colombia
Oleoducto Bicentenario de Colombia						
S.A.S.	55.97%	Pipeline transportation of crude oil	-	08/18/2010	Colombia	Colombia
		Financing, liquidation of funding for companies, groups or any business or				
Ecopetrol Capital AG	100%	related activity.	-	12/07/2010	Switzerland	Switzerland
		Hydrocarbon exploration, exploitation			United	
Equion Energía Limited		and production.	Santiago Oil Company, ODC	06/05/1959	Kingdom	Colombia
Ecopetrol Global Capital SL	100%	Investment Vehicle	-	01/10/2011	Spain	Spain
Cenit S.A.S.	100%	Storage and pipeline transportation of hydrocarbons	Oleoducto Bicentenario, Ocensa, ODC, ODL	06/15/2012	Colombia	Colombia

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The Company and some of its subsidiaries carry out exploration and production operations through Exploration and Production (E&P) Contracts and Technical Evaluation Contracts and Agreements (TEA) signed with the ANH, as well as through Association Contracts and other types of contracts in various forms. The following one the outstanding contracts at the close of December 2013:

No. of Contracts							
Type of contract	Ecopetrol S.A.	Hocol Petroleum Ltd.	Ecopetrol Oleo é Gas do Brazil Ltda.	Ecopetrol America Inc.	Ecopetrol del Peru S.A.	Equión Energía Limited	
Exploration							
E&P-ANH Contracts	47	15	-	-	-	3	
E&P-ANH Agreements	6	-	-	-	-	-	
TEA's – ANH	7	1	-	-	-	-	
Association Contracts	3	1	16	14	1	-	
Production							
Partnership	51	8	-	4	-	4	
E&P-ANH Contracts	-	1	-	-	-	-	
Undeveloped and Inactive							
Discovered Fields (CDNDI)	9	-	-	-	-	-	
Incremental production	5	1	-	-	-	-	
Risk participation	3	-	-	-	-	-	
Technological partnership	1	-	-	-	-	-	
Business cooperation	1	-	-	-	-	1	
Shared risk participation	1	-	-	-	-	-	
Operation	1	-	-	-	-	-	
Production services with risk	1	-	-	-	-	-	
	136	27	16	18	1	8	

The following are the outstanding contracts at the close of December 2012:

		No. o	f Contracts			
Type of contract	Ecopetrol S.A.	Hocol Petroleum Ltd.	Ecopetrol Oleo é Gas do Brasil Ltda.	Ecopetrol America Inc.	Ecopetrol del Peru S.A.	Equión Energía Limited
Exploration						
E&P-ANH Contracts	47	19	-	-	-	2
E&P-ANH Agreements	6	-	-	-	-	-
TEA's – ANH	5	1	-	-	-	-
Association Contracts	3	1	13	7	6	-
Production						
Partnership	51	8	-	1	-	4
E&P-ANH Contracts	-	1	-	-	-	-
Undeveloped and Inactive						
Discovered Fields (CDNDI)	16	-	-	-	-	-
Sole Risk	-	-	-	-	-	1
Incremental production	5	1	-	-	-	-
Risk participation	3	-	-	-	-	-
Technological partnership	1	-	-	-	-	-
Business cooperation	1	-	-	-	-	1
Services and technical						
cooperation	1	-	-	-	-	-
Shared risk participation	1	-	-	-	-	-
Operation	1	-	-	-	-	-
Production services with risk	1	<u> </u>				
	142	31	13	8	6	8

# **Principal Accounting Policies and Practices**

*The Contaduría General de la Nación* (National Accounting Office, or CGN) adopted the Public Accounting Regime (RCP) in September 2007, defining its configuration, scope and application. Pursuant to CGN Communication No. 20079-101345 of September 28, 2007, the Colombian Government Entity Generally Accepted Accounting Principles (GAAP) went into effect for Ecopetrol on January 1, 2008.

# **Consolidation Process**

The consolidated financial statements have been prepared in accordance with Articles 23 and 122 of Decree 2649 of 1993. The latter article stipulates that an economic entity that owns more than 50% of the other economic entities must present, along with its basic financial statements, the consolidated financial statements with their respective notes. The consolidation method used is the full consolidation method set out in External Circular Letter No. 005 of April 6, 2000, issued by the Superintendence of Corporations, which stipulates that consolidated financial statements must be aggregated based on the individual financial statements of the parent company and of each of its subsidiaries, identifying the effect of all of the operations among the companies in the group.

The group consolidation was carried out using the financial statements of the parent company and its subsidiaries, at the same cut-off point of December 31, 2013 and 2012, after they were standardized according to the Public Accounting Regime issued by the CGN.

# (a) **Basis of Presentation**

The consolidated financial statements were prepared in conformity with Colombian Government Entity GAAP standards and principles issued by the CGN, and other legal provisions. These principles may differ in certain respects from those established by other standards and other control authorities and CGN concepts on specific matters prevail over other regulations.

The accrual method was applied for the accounting recognition of the consolidated statement of financial, economic, social and environmental activities.

A structure was established in accordance with the rules for the inspection, supervision, and/or control of Ecopetrol and the companies that apply the Regime of Public Accounting (RCP) to record operations at the level of source documents, or for standardization purposes, to define the accounting treatment of operations not covered by the CGN. The structure involves: i) Principal and permanent inspection, supervision, and control: Superintendence of Domiciliary Public Services; ii) residual control: Superintendence of Corporations; and iii) concurrent control: Superintendence of Finance, of the activities of the Company in its capacity as issuer in the stock market. International Financial Reporting Standards (IFRS) are applied to define regulatory differences, while accounting standards under Generally Accepted Accounting Principles in the United States (USGAAP) are applied for accounting issues related to crude oil and natural gas activities.

The basic consolidated financial statements defined by the CGN, comprise the Balance Sheet, the Statement of Financial, Economic, Social and Environmental Activity, the Statement of Changes in Equity and the Statement of Cash Flows. The notes to the basic consolidated financial statements are an integral part thereof.

The consolidated financial statements include the accounts of the businesses in which the Company holds a direct or indirect share of over 50% of capital, or over which it has significant influence without being a majority shareholder. All inter-company transactions among consolidated companies have been eliminated. The attached consolidated financial statements consolidate the assets, liabilities, equity and results of the subsidiaries.

The accompanying financial statements consolidate assets, liabilities, equity and results of the subsidiary companies. The investments recorded in these companies are recognized by the equity method. The annual consolidated financial statements are submitted to the General Assembly of Shareholders and are the basis for the distribution of dividends and other appropriations.

# (b) <u>Materiality Criterion</u>

An economic fact is material whenever, due to its nature, amount and surrounding circumstances, the knowledge or ignorance of it, may significantly alter the economic decisions of users of such financial information.

As set forth by the RCP, the information disclosed in the financial statements and financial accounting reports must cover the main aspects of the Government Accounting entity in a way that must be significantly close to the truth, so that it is relevant and reliable for decision-making purposes or the required evaluations based on accounting information objectives. Materiality depends on the nature of the facts or the magnitude of the amounts disclosed or not revealed.

The consolidated financial statements include specific headings in accordance with legal requirements or for elements representing 5% or more of total assets, current assets, total liabilities, current liabilities, working capital, equity and income, as appropriate. In addition, lower amounts are shown when they are deemed to contribute to a better interpretation of financial information.

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# (c) Use of Estimates

The preparation of consolidated financial statements requires that the management of the companies in the Group make estimates and assumptions that could affect the recorded amounts of assets, liabilities, results of activities and the attached notes. These estimates are carried out based on technical criteria, judgment and tenets pursuant to the regulations and legal provisions in effect. Actual results may differ from such estimates.

# (d) Foreign Currency Transactions

Foreign currency transactions are recognized in accordance with applicable regulations and recorded at the appropriate exchange rates on the transaction date. Balances denominated in foreign currency are expressed in Colombian pesos at representative market exchange rates at the end of each period.

The exchange difference resulting from asset adjustments is recorded in results; exchange differences from adjustments to liabilities are applied to the related assets until they are ready for use or sale; the adjustment is subsequently charged to results of operations.

In accordance with Decree 4918 of December 26, 2007 issued by the Ministerio de Comercio, Industria y Turismo (Ministry of Trade, Industry and Tourism), the exchange difference generated from variable income investments in subordinated companies abroad is recorded at the higher or lower value of the shareholders' equity; when the investment is settled, this value is recorded in the results for the period.

While performing its oil industry activities, the Company can freely deal in foreign currencies, provided that it complies with the provisions of the Colombian exchange rate regime.

The conversion of financial statements of subsidiaries that use currencies other than the Colombian peso involved changing the currency first to U.S. dollars and then to Colombian pesos. The Representative Market Rate (RMR) at December 31, 2013, was used to convert asset and liability balances, the representative monthly average market rate was used to convert result figures, and the historical rates were used to convert capital figures.

# (e) Joint Venture Contracts

Joint venture contracts are entered into between Ecopetrol or the companies in the Group and third parties in order to share the risk, secure capital, maximize operating efficiency and optimize the recovery of reserves. In these joint ventures, one party is designated as the operator and each party takes its share of the hydrocarbons (crude oil or gas) produced according to its agreed participation. When Ecopetrol or one of the companies in the Group participates as a non-operator partner, it records the assets, liabilities, revenues, costs and expenses based on information reported by the operators. When Ecopetrol or one of the companies in the Group is the direct operator of the joint venture contract, it records 100% of the assets, liabilities, revenues, costs and expenses, and recognizes on a monthly basis the distribution according to the participation interests of each partner in the applicable line items corresponding to: assets, liabilities, expenses, costs and revenues for the associate.

# (f) Cash and Cash Equivalents

Cash and cash equivalents are represented by negotiable investments with maturity dates within ninety (90) days following their acquisition, and are recorded as liquidity management investments.

Cash from joint operations in which the Company is the operating partner corresponds to advances from partners (including the companies in the group) according to their contractually agreed participation percentages, and the funds are managed in a joint operation exclusive - use bank account.

# (g) Derivative Financial Instruments

Ecopetrol and the companies in the Group enter into hedging agreements to hedge international fluctuations in crude-oil prices, product prices and exchange rates. The difference between the contract value and market value, generated by hedging operations, is recognized as financial income or expense in the statements of financial, economic, social and environmental activities. The Group does not use these financial instruments for speculative purposes.

# (h) <u>Investments</u>

The investments are classified as: i) Liquidity Management Investments, ii) Investments for Policy Purposes and iii) Equity Investments.

i. Liquidity management investments correspond to resources invested in debt and participative securities with the objective of obtaining profits through short-term price fluctuations. They are initially recorded at to their historical cost and they are subsequently recorded based on valuation methods issued by the *Superintendence of Finance of Colombia*.

ii. Investments for policy purposes are made up of national or foreign debt securities acquired in compliance with the macroeconomic or internal policies of the entity, which include investments held through their maturity date and those available for sale. The latter being those which are kept for at least one (1) year, as of the first day on which they were classified for the first time, or when they were reclassified.

Investments held to maturity are updated based on the internal rate of return (IRR) as set out in the methodology adopted by the Superintendence of Finance, and the investments for the purpose of macroeconomic policy and those available for sale must be updated based on the methodology adopted by the Superintendence of Finance of Colombia for tradable investments.

iii. Equity investments are classified as being in controlled and uncontrolled entities. Equity investments in controlled entities are recognized at their acquisition cost whenever it is lower than the intrinsic value; otherwise, they are recognized at the intrinsic value, and the difference between the purchase price and the intrinsic value corresponds to goodwill.

Investments in associates in which Ecopetrol and/or its subsidiaries exert significant influence are recorded using the equity method.

Significant influence is defined as the empowerment an entity has, whether or not the percentage of ownership is 50% or lower, to participate in setting and directing the financial and operational policies of another entity for the purpose of obtaining profits from that entity.

Significant influence may be present in one or more of the following ways:

- · Representation on the Board of Directors or equivalent governing body of the associate;
- Participation in policy-making;
- Significant transactions between the investor and the associated entity;
- Secondment of officers; or
- Supplying essential technical information.

For subsidiaries abroad, the equity method must apply in Colombian legal currency after the conversion of financial statements in foreign currency.

Equity investments in uncontrolled entities include shares with a low or minimum market, or shares not listed on any stock exchange. They do not enable any type of control or significant influence and are recognized at historical cost. Their change in value arises from periodically comparing the cost of the investment to its intrinsic value or its value on the stock market.

The investments made in foreign currency are recognized using the Representative Market Rate ("TRM") at the time of the transaction. The value is periodically adjusted based on the TRM as far as the actualization methodology has not considered it.

Equity variations originating in the adjustment for conversion of the controlled entity are recognized as a surplus by the equity method, notwithstanding that the subaccount may show a debit balance; the above is in compliance with Resolution 193 of July 27, 2010 issued by the National Accounting Office.

# (i) Accounts and Notes Receivable and Allowance for Doubtful Accounts

Accounts and notes receivable are stated at their original amount or at the value accepted by the debtor, subject to periodic updating according to legal provisions in force, or according to agreed-upon contract terms.

The allowance for doubtful accounts is reviewed and updated periodically based on the age of the balances and the recovery analysis of individual accounts. The Group carries out the necessary administrative and legal steps to recover overdue accounts receivable and to collect interest from clients who do not comply with payment policies.

Accounts and notes receivable are only written off against the allowance when there is reasonable legal or material certainty of the total or partial loss of the incorporated or represented right.

# (j) <u>Inventories</u>

Inventories include assets extracted, in production process, transformed or acquired for any reason, for the purpose of being sold, transformed and consumed in the production process, or as part of services delivered. The perpetual inventory system is used.

Inventories are stated at historical cost or at purchase price, including direct and indirect charges incurred to prepare the inventory for sale or production.

The value of inventories is measured using the weighted average cost method, taking into account the following parameters:

- Inventories of oil produced by the Company at average, production cost;
- Crude oil purchases, at acquisition costs, including transportation and delivery costs incurred;
- Inventory of finished products, at total production costs;
- Inventory of products in progress, at production costs; and
- Inventory of raw materials, at weighted average cost.

Raw materials and supplies in joint ventures are controlled by the operator and reported in a joint account at the acquisition cost (recorded in the original currency at average costs). Inventory consumption is charged to the joint venture as cost, expense or investment, as appropriate.

Furthermore, inventories are valued at the lower value of market cost or average cost, and in-transit inventories are appraised at cost incurred. At the end of the fiscal year allowances are calculated to take into account impairment, obsolescence, excess, slow movement or loss of market value.

# (k) Property, Plant and Equipment and Depreciation

Property, plant and equipment are stated at inflation-adjusted historical cost until 2001. This cost includes financial expenses and the exchange rate difference for foreign currency acquisition until commissioning of the asset, as well as financial revenues from the unused portion of financial obligations acquired to finance investment projects. When an asset is sold or disposed of, the adjusted cost and accumulated depreciation are written off and any gain or loss is recorded in the year's results.

Depreciation is calculated on the total acquisition cost using the straight-line method, based on the assets' useful life which is reviewed periodically. Annual depreciation rates are as follows:

	<u> </u>
Buildings and pipelines	5.0
Plant and equipment	10.0
Transportation equipment	20.0
Calculation equipment	33.3

Disbursements for maintenance and repairs are recorded as expenses. Significant disbursements that improve efficiency of an asset or extend its useful life are capitalized as an increase in the value of that asset.

The value of property, plant and equipment is subject to periodic revaluation by comparing the net book value with the value determined through technical appraisals. When the value of an asset's technical appraisal is greater than its net book cost, the difference is recorded as an asset valuation and credited to the surplus account for equity valuation; otherwise, it is recorded as an allowance for devaluations and charged to income.

Upon termination of an association contract, the Group receives, at no cost, the property, plant and equipment, materials and materials. These transactions do not affect the Group's results. The results of the appraisal of property, plant and equipment are recognized as appraisals in the corresponding asset and equity accounts.

# (I) <u>Natural and Environmental Resources</u>

The Group follows the successful-efforts method of accounting for investments in exploration and production or development. Geological and geophysical studies are recorded as expenses as they are incurred. Acquisition costs for proved and unproved properties are capitalized when incurred. Exploration costs are capitalized until it is determined whether the exploration drilling was successful or not. If they are not successful, all of the costs incurred are charged to expenses. When a project is approved for development, the accumulated value of the acquisition and exploration costs are classified in the oil investment account. Capitalized costs also include asset retirement costs. Asset and liability balances related to asset retirement costs are updated every year. Production and support equipment is accounted for on a historical cost basis and is included in property, plant and equipment subject to depreciation.

Oil investments are amortized by applying the amortization factor based on technical units of production and proven developed reserves net of royalties, based on a field basis, estimated as of December 31 of the immediately preceding year. The amortization charged to income is adjusted at the end of December, recalculating the DD&A (Depletion, Depreciation and Amortization) as of January 1 of the current year, based on the reserve study updated at the end of the current year.

In the same way that it receives property, plant and equipment upon termination of an association contract, Ecopetrol receives, at no cost, the associate's amortizable oil investments.

Ecopetrol S.A. has established a corporate process for reserves led by the Reserves Directorate, which reports directly to the Vice President of Corporate Finance. The reserves are audited by internationally recognized external consultants and approved by the Company's Reserves Committee. Proven reserves consist of the estimated quantities of crude oil and natural gas demonstrated with reasonable certainty by geological and engineering data to be recoverable in future years from known reserves under existing economic and operating conditions, that is, at the prices and costs that apply at the date of the estimate.

Estimating hydrocarbon reserves is subject to several uncertainties inherent in determining proven reserves, including the production recovery rates, the timeliness in making the investments to develop oilfields and the degree of maturity of fields.

When it is determined that a well located in the exploration zone does not have proven reserves, it is classified as dry or non-commercial, and the accumulated costs of such well are taken to expenses in the same year in which this is determined.

Since Ecopetrol became an issuer on the Colombian Stock Exchange (*Bolsa de Valores de Colombia* - BVC) and the New York Stock Exchange - NYSE, the Company has applied the methodology approved by the SEC (Securities Exchange Commission) for estimating reserves.

Pursuant to the provisions of Resolution 494 of December 22, 2009, issued by the ANH, Ecopetrol complies with the delivery of information to the ANH using the methodology of (SPE-PRMS) Oil Resource Administration System. The reserves shown in the reports are audited by three independent reservoir engineering firms.

# (m) Deferred Charges

Deferred charges include: i) deferred income tax and deferred income tax for equality - CREE resulting from the temporary differences between the basis for determining commercial gains and taxable net income at the end of each period. The deferred tax is amortized during the periods in which the temporary differences that originated it are reversed and ii) the net equity tax, which is amortized until 2014. iii) investments made to develop collaboration contracts that are amortized based on technical units of production.

# (n) Other Assets

Other assets include goodwill, which corresponds to the difference between the purchase value of equity investments in controlled or joint-control entities, and their intrinsic value, which reflects the economic benefits expected to be achieved from the investment, created by brand name, specialized personnel, preferential credit reputation, prestige due to sale of better products and services, favorable location and the expectations of new business, among other things.

Goodwill is amortized using the straight-line method over the term for expected recovery of the investment, which is from 10 to 18 years. At the close of each accounting period, Ecopetrol must evaluate goodwill to determine whether the conditions for the generation of future economic benefits still exist; otherwise, the asset must be written off. If the book value of equity investment plus the book value of goodwill, which includes its historical cost and price adjustments and amortizations, is greater than the market value, the asset should, as a result of such difference, be written off in the related period, and charged to income, and the reasons for the said decision should be disclosed.

For local purposes, we perform the analysis of goodwill impairment conducting a fair value analysis using a discounted cash flow methodology. We compare the fair value of the investment with its carrying of the investment, including goodwill. If the carrying amount of investment is higher than its fair value, goodwill is considered impaired. On the other hand, when the carrying amount of the investment is lower than its fair value, there is not necessary to recognize an impairment.

Intangible assets such as: software, licenses and patents are recognized at acquisition, development or production cost. Intangible assets are amortized using the straight-line method over the periods during which the benefits arising from the incurred costs and expenses are expected to occur, or during the term of the legal or contractual coverage of the granted rights.

Goods acquired through financial leasing are subject to depreciation in order to recognize the loss of operational capacity by their utilization. In public accounting entities of the general government, the depreciation of goods acquired through financial leasing affects directly the equity, except for assets used in activities of production of goods and rendering of services readily individualized that must be recognized as cost or expense.

Improvements and works performed on leasehold property or third party property different from those that can be recognized as property, plant and equipment will be amortized over the shortest period between the term of the contract covering the use of the property, and the estimated useful life of the assets, as a result of the additions or improvements made, only when the cost of the works and improvements made is not reimbursable. In the case of public accounting entities of the government, amortization affects equity, except for works and improvements in Property used in activities for the production of goods and rendering of services, which must be recognized as a cost.

# (o) Valuations

# a. Investments

Valuations correspond to differences between the net book value of the investments and their intrinsic value or quoted price on the Stock Exchange.

# b. Property, plant and equipment

Valuations and the valuation surplus of property, plant and equipment correspond to the difference between the net book value and the market value for real estate or the Current Use Value (CUV) for plant and equipment, determined by specialists registered with the Colombian Real Estate Association or by suitable technical personnel, as appropriate.

The methodology used for valuation of plant and equipment is the Current Use Value (CUV), for running businesses, for the economic valuation of assets, taking into account the facilities' current conditions and their useful life in terms of production capability and ability to generate income. It is not mandatory to adjust the value of moveable property when its historical value, taken individually, is lower than 35 current minimum monthly legal wages, or of property, plant and equipment located in high risk zones.

# (p) Financial Obligations

Public credit operations correspond to any action or contract which, in compliance with legal regulations on public credit, are addressed to supply the Company with resources, goods and services under specific payment terms such as loans, issue and placement of bonds and public credit securities, and supplier's credit.

With respect to loans, public credit operations must be recorded for the actual disbursed amount, while bonds and securities placed are recorded at their nominal value. Placement costs are carried directly to expenses.

#### (q) Income Tax

The income tax provision as of December 2013 was calculated by applying to the accounting profit before taxes, the effective taxation rate calculated for December 2013. This rate includes both the income tax and the income tax for equality CREE.

The effect of temporary differences that imply the payment of a lower or higher income tax in the current year, is accounted for as deferred tax asset or liability, both for the income tax and for the income tax for equality CREE, as applicable, provided that there is a reasonable expectation that such differences will be reversed in the case of the deferred tax asset, or sufficient taxable income is generated to recover the tax in respect to the deferred tax liability. The deferred tax is calculated at the rate of 34% (25% ordinary income tax and 9% income tax for equality CREE) or of 33% (25% ordinary income tax and 8% income tax for equality CREE) as applicable.

# (r) Labor and Pension Obligations

Salaries and benefits for Ecopetrol staff are governed by the Collective Labor Agreement 01 of 1977, and in their absence, by the Substantive Labor Code. In addition to the legally mandated benefits, employees are entitled to fringe benefits which are subject to the place of work, type of work, length of service, and basic salary. Annual interest of 12% is recognized on accumulated severance amounts for each employee, and the payment of indemnities is provided for when special circumstances arise that result in the non-voluntary termination of the contract, without just cause, and in periods other than the probationary period.

The actuarial calculation includes active employees, as described in the paragraphs below, with indefinite term contracts, pensioners and heirs, for pension, health care and education plans; similarly, it includes pension bonds for temporary employees, active employees and voluntary retirements. Health care and education obligations do not comprise pension liabilities; they are part of benefit obligations.

All social benefits of employees who joined the Company before 1990 are the responsibility of Ecopetrol, without the involvement of any social security entity or institution. The cost of health services for the employee and his/her relatives registered with the Company is determined by means of the mortality table, prepared based on facts occurring during the year. Similarly, Ecopetrol calculates educational allowances according to experience, based on the annual average cost of each business, subdivided in accordance with the type of studies: Pre-school, elementary, high school and university.

For employees who joined the Company subsequent to the entry into effect of Act 50 of 1990, the Company makes periodic contributions for severance payments, pensions and occupational injuries to the funds created for these respective obligations. Similarly, Act 797 of January 29, 2003 determined that Ecopetrol employees who joined the Company as of that date would be subject to the provisions of the General Pension Regime.

Pursuant to Legislative Act 01 of 2005, enacted by the Colombian Congress, the pension regimes excludes the General Social Security System in Colombia expired on July 31, 2010. In accordance with the provisions therein, the Ministry of Social Protection's judicial pronouncement on the matter and the analysis conducted by Ecopetrol's labor advisers, it was concluded that those workers who had met the age and continuous or discontinuous service time requirements of the law, the Collective Bargaining Agreement in effect and/or Agreement 01 of 1977, prior to August 1, 2010, had consolidated their right to their pension. It was, however, mandatory for other workers, who were not covered, to join the General Pension System. The pension administrator chosen by the worker (either Colpensiones or Private Pension Fund or whichever may correspond) would be responsible for recognizing and paying the respective pension.

As set out in Decree 941 of 2002, upon approval of the actuarial calculation by the Ministry of Finance in October 2008, and upon approval of the mechanism by the Ministry of Social Protection through the Administration Act of December 29, 2008, the Company partially switched over the value corresponding to monthly pension payments from its pension liabilities, transferring the said liabilities and their underlying amounts to pension-related autonomous equities (PAP, per its acronym in Spanish). The funds transferred, and returns on those funds, cannot be redirected nor can they be returned to the Company until all of the pension obligations have been fulfilled.

The transferred liability corresponds only to pension allowances and pension bonds. The portion relating to health care and education services remains within Ecopetrol's labor liabilities.

At each period end, Ecopetrol S.A. must review the amount reported by the PAP with respect to the value of the pension liability updated based on the latest actuarial computation. In the event that the equity yields are insufficient to cover 100% of the liability, the Company must recognize an allowance for the difference, which must be funded should the contingency materialize. Ecopetrol remains materially responsible for payment of the pension liabilities.

Through Resolution 1555 of July 30, 2010, the Superintendence of Finance replaced the mortality tables used to prepare actuarial computations and stipulated that the effects of the change could be recognized gradually. Subsequently, Decree 4565 of December 7, 2010 modified the accounting standards for amortization of the actuarial calculation in effect up to that date. Pursuant to the new decree, the companies that had amortized 100% of their actuarial calculation at December 31, 2009 could gradually amortize the increase in the actuarial calculation for 2010 using the new mortality tables, up to 2029.

Given the above, in 2010 Ecopetrol modified its accounting policy for amortization of the actuarial calculation of monthly pension payments, pension quotas and bonds (transferred liabilities) and health bonds, and adopted a five-year term starting in 2010, to amortize the increase in the 2010 actuarial computation. Until 2009, the yearly increase in the actuarial calculation was recorded as expenses for the period, given that the actuarial calculation was 100% amortized.

Resolution 717 of December 2012 amended the *Manual de Procedimiento del Régimen de Contabilidad Pública* (Regime of Public Accounting Procedure Manual) with regard to the Accounting Procedure for recognizing and disclosing the pension liability, the underlying financial reserve, and related expenses, at items 5 and 44. With regard to item 5, the indications in the previous paragraph lead to the conclusion that this item has no impact on the Company's activities within its amortization plan.

With regard to item 44, its only impact is to disclose the fact that the Reserve Funds are common funds that are also under the administration of Colpensiones. There are no further implications for Ecopetrol.

# (s) Advances Received from Ecogas to cover BOMT (Build, Operate, Maintain and Transfer) Obligations.

Pursuant to the sale of Ecogas by the National Government, and following specific instructions from CGN, the net present value of the future payment scheme in connection with Ecopetrol's debt toward BOMT contractors was recognized as deferred income. These liabilities are due in 2017, the year when the contract obligations will be fulfilled.

# (t) <u>Hydrocarbon Purchases</u>

Ecopetrol purchases hydrocarbons that the ANH receives from all production in Colombia, at prices established according to section four of Act 756 of 2002 and Resolution 18-1709 of 2003 issued by the Ministry of Mines and Energy, taking into account international reference prices.

In addition, purchase of hydrocarbons from partners and other producers in Colombia and abroad to meet the Group's needs and operating plans.



# (u) <u>Revenue Recognition</u>

Revenue from crude oil and natural gas sales is recognized at the time of transfer of title to the buyer, including risks and rewards.

In the case of refined and petrochemical products, revenue is recognized when products are shipped by the refinery and subsequently adjusted in accordance with the volumes actually delivered.

Revenue from transportation services is recognized when products are transported and delivered to the buyer in accordance with sale terms.

In other cases, revenue is recognized at the time it is earned and a true, probable and quantifiable right to demand its payment arises.

Under current regulations, Ecopetrol S.A. and Sociedad Refinería de Cartagena S.A. (Reficar) sell regular gasoline and diesel at a regulated price, and the National Government recognizes for these businesses the amount of the subsidy on regular gasoline and diesel granted to local consumers, which is generated by adding the difference, for every day of the month, between the producer's regulated revenues and the daily price equivalent to the U.S. Gulf Coast reference price, calculated according to origin and multiplied by the volumes sold daily.

Resolution 182439 and Decree 4839 of December 2008 established the procedure for recognizing subsidies in the event they are negative (negative value between parity and regulated prices).

In March 2010, the Ministry of Mines and Energy issued Resolution No. 180522, which revoked provisions that were contrary to Resolutions 181496 of September, 2008, 182439 of December 30, 2008 and 180219 of February 13, 2009 and modified the formula for computing the international reference prices for gasoline and diesel.

Resolution 91658 was issued in October 2012, which modifies Resolution 180522 with regard to the subsidy procedure for refiners and importers of regular gasoline and diesel (ACPM).

# (v) Cost of Sales and Expenses

Costs are recognized at their historic value both for goods purchased for sale and for the accumulated production costs of goods produced and services rendered. Costs are disclosed according to the operation generating them.

Expenses correspond to the amounts required for the operation of ordinary activities and include those related to activities caused by extraordinary events. Expenses are disclosed in accordance with their nature and the occurrence of extraordinary events.

Costs and expenses are recognized upon receipt of goods or services or when there is certainty that the economic event will occur. Fuel shortages and losses due to theft and explosions are recorded as non-operating expenses.

# (w) Abandonment of Fields

The Group recognizes an estimated liability for future environmental obligations, and its corresponding entry as a higher asset value for natural resources and environmental assets. The estimate includes the cost of plugging and abandoning wells, dismantling facilities and the environmental recovery of areas and wells. Amortization is recorded as production costs, using the technical-units-of-production method, based on remaining proven developed reserves. Changes resulting from new estimates of the liability for abandonment and environmental restoration are accounted for under the corresponding asset.

Depending on the scope of certain association contracts, field abandonment costs are taken on by partners according to the same participation percentages set out in each contract. Ecopetrol has not allocated funds to cover these obligations, with the exception of association contracts Casanare, Orocue, Garcero, Estero, Corocora, Monas, Guajira, Tisquirama, Cravo Norte, and Opon; however, as activities linked to field abandonment take place, they will be covered by the Group.

# (x) Accounting for Contingencies

On the date of issuance of these consolidated financial statements, conditions might exist that could result in losses for the Company that will only be known if specific future circumstances arise. The nature, and probability of such situations, as well as the amounts involved are evaluated by Management, the Vice President of Legal Affairs, and legal consultants, so that decisions can be made regarding changes to amounts provisioned and/or disclosed. This analysis includes current legal suits against the Companies of the Group.

The methodology used to assess legal proceedings and any contingent obligations is based on the Nation's credit system used by the Ministry of Internal Affairs and Justice.

A provision is recorded for legal proceedings when there is a conviction at trial court or when the risk assessment outcome is "likely to lose".

# (y) Memorandum Accounts

Creditor and debtor memorandum accounts represent the estimated value of facts or circumstances that could affect Group's financial, economic, social and environmental situation. They also disclose the value of the goods, rights and obligations that require control, and also include differences between accounting information and the information used for tax purposes.

# (z) <u>Net income per Share</u>

Net income per share is calculated based on net earnings for the period, divided by the subscribed outstanding shares.

The Company does not have share-based employee incentive plans.

# (aa) Convergence to International Financial Reporting Standards

On December 29, 2012 the Ministry of Commerce, Industry and Tourism issued the Decree 2784, by which it was regulated the Act 1314 of 2009 on the technical framework for preparers of financial information for group 1: Issuers of securities, public interest entities and entities that meet the parameters set out in this provision.

This technical framework was developed based on International Financial Reporting Standards—IFRS, International Accounting Standards - IAS, SIC interpretations, IFRIC interpretations and conceptual framework for financial reporting, issued in Spanish on January 1, 2012, by the International Accounting Standards Board (IASB).

Pursuant to the schedule of implementation, 2013 has been a period of preparation and training with the initial obligation to present an implementation plan approved by the Board, including people responsible and targets for monitoring and control. 2014 will be the transition period and 2015 will be period of full implementation of the new regulatory framework.

Pursuant to Decree 2784 of 2012, amended by Decree 3024 of 2013, it is required to prepare an opening statement of financial position as of January 1, 2014 under the new standards, so that during 2014 the transition takes place, with the simultaneous application of existing and new accounting standards.

Resolution 743 of December 17, 2013 issued by the National Accounting Office (Contaduría General de la Nación - CGN) includes the schedule of the regulatory framework attached to the National Decree 2784 of 2012 and defines the implementation period as being from January 1 to December 31, 2015. During this period, the accounting will be carried out, for all purposes under the new regulatory framework.

# (2) Assets and Liabilities Denominated in Foreign Currency

Transactions and balances in foreign currencies are converted at the market representative exchange rate certified by the Superintendence of Finance of Colombia.

As of December 31, 2013 and December 31, 2012, the consolidated financial statements of Ecopetrol included the following assets and liabilities denominated in foreign currency (converted to Colombian pesos at the closing exchange rates of \$1,926.83 and \$1,768.23 per US\$1, respectively).

	As of December 31, 2013			As of December 31, 2012				
		housands of us dollars		Equivalent millions of pesos	T	housands of dollars		Equivalent lions of pesos
Assets			_		_		_	
Cash and cash equivalents	\$	1,814,012	\$	3,495,293	\$	978,367	\$	1,729,977
Investments		8,509,347		16,396,067		2,546,927		4,503,553
Accounts and notes receivable		2,222,269		4,281,935		1,861,230		3,291,083
Advances and deposits		143,544		276,584		92,210		163,048
Other assets		470,659		906,878		11,662		20,622
	\$	13,159,831	\$	25,356,757	\$	5,490,396	\$	9,708,283
Liabilities								
Financial obligations	\$	4,612,323		8,887,162		4,398,712		7,777,934
Estimated liabilities and allowances		206,443		397,781		94,677		167,411
Accounts payable and related parties		1,546,046		2,978,968		1,992,017		3,522,345
Other liabilities		247,447		476,790		282,606		499,712
	\$	6,612,259	\$	12,740,701	\$	6,768,012	\$	11,967,402
Net asset position	\$	6,547,572	\$	12,616,056	\$	(1,277,616)	\$	(2,259,119)

# (3) Cash and Cash Equivalents

The balance of cash and cash equivalents is comprised as follows:

	As of	As of December 31, 2013		As of December 31, 2012		
Banks and corporations (1)	\$	6,440,081	\$	6,119,406		
Special funds (2)		1,494,760		1,549,016		
Cash		491		757		
Investments on demand (3)		906,106		271,511		
	\$	8,841,438	\$	7,940,690		

- (1) Corresponds to advances made by partners for the exclusive use of the joint venture, in the amount of \$95,916 (2012 \$75,207) and Group's own resources in the amount of \$6,344,165 (2012 \$6,044,199).
- (2) Corresponds to savings in special funds in pesos in the amount of \$73,741 (2012 \$556,756) and in foreign currency in the amount of \$960,575 (2012 \$708,007) as well as investments in overnight operations in the amount of \$4,942 in 2012 and other investments in the amount of \$460,444 for 2013.
- (3) Represents investments on demand, fixed term deposit certificates and overnight deposits, comprised mainly of the following: \$267,202 (2012 \$108,374) from Ocensa S.A.; \$351,855 (2012 \$12,838) from Reficar; \$90,453 (2012 \$40,768) from Hocol; \$142,674 (2012 \$74,345) from Ecopetrol Óleo e Gas Do Brasil; \$13,200 (2012 \$12,504) from Equión and \$40,723 from ODC.

# (4) Investments

The balance of investments is comprised as follows:

	As of December 31, 2013			As of December 31, 2012		
Current:						
Fixed yield						
Term deposits	\$	954,704	\$ 156,28	37		
Bonds and securities of private or foreign entities		260,990	654,63	35		
Bonds issued by the Colombian Government		153,343	17,21	19		
Specific purpose fund - legal Contingencies (1)		110,427	30,30	)0		
Treasury securities – TES		-	508,57	75		
Financial hedging instruments		179,725	4,54	13		
Trust rights		119		-		
Total current investments	\$	1,659,308	\$ 1,371,55	59		
Long-term:				_		
Variable yield - Shares (2)		1,219,744	1,077,19	<del>)</del> 0		
Fixed yield						
Bonds and securities of foreign entities		13,981	2,071,95	57		
Bonds issued by the Colombian Government		86,616	1,008,43	33		
Treasury securities – TES		-	1,236,16	56		
Specific purpose fund - legal Contingencies (1)		260,960	393,91	16		
Other Investments		6,297	24,56	51		
Total long-term investments	\$	1,587,598	\$ 5,812,22	23		

(1) Corresponds to restricted resources made up of fixed-yield investments entered into based on the court rulings linked to the Derecho Comuneros -Santiago de las Atalayas and Pueblo Viejo de Cusiana proceedings, corresponding to the attachment and seizure of the royalty payments that Ecopetrol was to have paid pursuant to Royalty Contracts No. 15, 15A, 16 and 16A, declared null by statute in the State Council ruling of September 13, 1999.

# (2) The following is the detail of variable-yield investments represented in shares as of December 31:

	2013	2012
Companies:		
Significant Influence	\$ 982,847 \$	8 840,692
Non-strategic	236,897	236,498
Total	<u>\$ 1,219,744</u> \$	5 1,077,190

Summary of long-term variable yield-investments as of December 31, 2013, recognized using the equity method:

Equity Share	Number of Shares and/or Quotas	Participation Percentage	Valuation Date	I	Historical Cost						Equity Method Effect	
Significant influence												
Ecodiesel Colombia S.A.	10,500,000,000	50.00%	December	\$	10,500	\$	26,677	\$	16,177			
Invercolsa S.A.	1,213,801,146	43.35%	December		61,671		269,342		207,671			
Offshore International Group	250	50.00%	December		408,517		637,778		229,261			
Serviport S.A.	58,800,000	49.00%	December		2,081		7,319		5,238			
Transgas de Occidente S.A.	27,372,771	20.00%	October		4,051		41,731		37,680			
Total				\$	486,820	\$	982,847	\$	496,027			

Summary of long-term variable yield-investment as of December 31, 2012, recognized using the equity method:

	Number of Shares and/or	Participation	Valuation	I	Historical	Book	Equity Method
Equity Share	Quotas	Percentage	Date		Cost	Value	Effect
Significant influence							
Ecodiesel Colombia S.A.	10,500,000,000	50.00%	December	\$	10,500	\$ 19,408	\$ 8,908
Invercolsa S.A.	1,213,801,146	43.35%	October		61,671	240,555	178,884
Offshore International Group	250	50.00%	December		408,517	532,269	123,752
Serviport S.A.	58,800,000	49.00%	December		2,081	7,193	5,112
Transgas de Occidente S.A.	27,372,771	20.00%	November		4,051	41,267	37,216
Total				\$	486,820	\$ 840,692	\$ 353,872

Summary of long-term variable yield-investments as of December 31, 2013, recognized using the cost method:

Equity Share	Number of Shares and/or Ouotas	Participation Percentage	Valuation Date	Cost	Market/ Intrinsic Value		ppreciation/ epreciation)
Strategic	Quotas	Tercentage	Date	 Cust	 value	(D	epreclation)
Zona Franca de Cartagena S.A.	290	10.00%	November	\$ 394	\$ 1,478	\$	1,085
Sociedad Portuaria del Dique	200	1.00%	November	5	44		39
Sociedad Portuaria Olefinas	249,992	50.00%	November	649	1,462		813
Los Arces Group	10,001	100.00%	December	5,100	5,100		-
Amandine Holding	500	100.00%	December	6,657	6,657		-
				\$ 12,805	\$ 14,741	\$	1,937
Non-Strategic							
Empresa de Energía de Bogotá	631,098,000	6.87%	December	154,375	968,736		814,360
Interconexión Eléctrica S.A.	58,925,480	5.32%	December	69,549	536,222		466,673
Concentra Inteligencia en Energía							
S.A.S.	168,000	9.52%	November	168	150		(18)
				\$ 224,092	\$ 1,505,108	\$	1,281,015
				\$ 236,897	\$ 1,519,849	\$	1,282,952

### Summary of long-term variable yield-investments as of December 31, 2012, recognized using the cost method:

Equity Share	Number of Shares and/or Quotas	Participation Percentage	Valuation Date		Cost		Cost		Cost		Cost		Cost		Cost		Cost		Market/ Intrinsic Value	ppreciation/ Depreciation)
Strategic																				
Zona Franca de Cartagena S.A.	290	10%	November	\$	394	\$	1,163	\$ 769												
Sociedad Portuaria del Dique	200	1%	November		5		20	15												
Sociedad Portuaria Olefinas	249,992	50%	November		250		439	189												
Los Arces Group	10,001	100%	December		5,100		5,100	-												
Amandine Holding	500	100%	December		6,657		6,657	-												
				\$	12,406	\$	13,379	\$ 973												
Non-Strategic																				
Empresa de Energía de Bogotá	631,098,000	6.87%	December		154,375		801,494	647,119												
Interconexión Eléctrica S.A.	58,925,480	5.32%	December		69,549		565,683	496,126												
Concentra Inteligencia en Energía																				
S.A.S.	168,000	9.52%	November		168		159	(9)												
				\$	224,092	\$	1,367,336	\$ 1,143,236												
				\$	236,498	\$	1,380,715	\$ 1,144,209												

#### Restrictions on Long-term Investments - Variable Income:

As of January 10, 2013, regarding the legal proceedings of Invercolsa S.A.: The cessation appeal filed by AFIB S.A. and Fernando Londoño Hoyos against the judgment passed by the 28th Civil Court of the Circuit on February 8, 2007, that was confirmed by the Superior Court of the District of Bogota - Civil Court, on January 11, 2011 is currently in process. On October 22, 2012, the term for the cessation appellant AFIB S.A. to support the corresponding appeal expired, which was done in time and the term for the appellant cessation Fernando Londoño Hoyos to support his started to run, which was also done in time. Therefore, on December 5, 2012, the Court Clerk's Office indicated that having notified the appellants, the corresponding actions were filed in due time and are included in the case file, a report that was delivered to the court that same day. The notification of the complaint to the Company is pending.

The appeal sentence of January 11, 2011 ordered: i) That the purchase of 145 million shares of Invercolsa by Fernando Londoño Hoyos are to be cancelled; ii) that the cancellation of the said transaction is to be recorded in the shareholders' book, including the pledge in favor of the Pacífico Colombia y Panamá banks, as well as the payment in kind of the shares of Arrendadora Financiera Internacional Bolivariana S.A.; iii) that Fernando Londoño Hoyos and AFIB are forced to return the Invercolsa dividends, along with the new shares received as profit and/or revaluations; iv) to declare that Fernando Londoño Hoyos did not acquire or possess in good faith the 145 million Invercolsa shares; and v) that Invercolsa is to adjust its operation and the Shareholders' meeting to the declarations made in the sentence.

The economic activities for the entities in which the Group has investments are:

Company	Economic activity
Invercolsa S.A.	Investments in companies in the energy sector including activities specific to of the commercialization of hydrocarbons and mining
Serviport S.A.	Support services for loading and unloading of oil vessels, supply of equipment for the same purpose, technical inspection and cargo measurements
Ecodiesel Colombia S.A.	Production, commercialization and distribution of biofuels and oleo chemicals
Offshore International Group	Exploration, development, production and processing of hydrocarbons

#### Maturity of Fixed-yield Investments

A summary of the maturity of fixed-yield investments as of December 31, 2013, is comprised as follows:

Maturity	>1 -	3 Years	3	- 5 Years	>	- 5 Years	 Total
Bonds and other foreign securities	\$	8,251	\$	5,730	\$	-	\$ 13,981
Bonds and other government securities		-		86,616		-	86,616
Specific destination fund		217,011		1,994		41,955	260,960
Other (1)		-		6,297		-	6,297
	\$	225,262	\$	100,637	\$	41,955	\$ 367,854

(1) In 2013, others of Ecopetrol Oleo e Gas do Brasil correspond to investments available for sales with Banco Santander of \$6,297.

A summary of the maturity of long term fixed-yield investments as of December 31, 2012 is as follows:

Maturity	>]	l - 3 Years	3	- 5 Years	> 5 Years	Total
Bonds and other foreign securities	\$	1,845,673	\$	226,284	\$ -	\$ 2,071,957
Bonds and other government securities		628,816		304,048	75,569	1,008,433
Treasury securities – TES		772,747		148,949	314,470	1,236,166
Specific purpose fund		58,328		63,339	272,249	393,916
Other (1)		24,561		-	-	24,561
	\$	3,330,125	\$	742,620	\$ 662,288	\$ 4,735,033

(1) Ecopetrol Oleo e Gas do Brasil has financial investments in Citibank in the amount of \$24,492, given as a granted a guarantee to the ANP (equivalent to ANH) until it approves ECP Brazil's participation in the Vanco-BM-S-63, 71 and 72 drilling blocks. Following said approval, this amount will be transferred to the purchase of participation, and in the event that it is not approved, the amount will be returned.

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### (5) Accounts and Notes Receivable, Net

The balance of accounts and notes receivable, is comprised as follows:

			As of
	 of December 31,2013	De	cember 31, 2012
Current:			
Customers:			
National	\$ 1,121,881	\$	975,306
Foreign	2,943,686		2,402,406
Price differential to be received from the Ministry of Mines and Energy (1)	1,058,738		1,381,515
Various debtors	988,904		462,757
Reimbursements and yields on investment	439		53
Association contracts - joint ventures	-		13,002
Accounts receivable from employees	23,821		22,668
Doubtful accounts	228,899		199,216
Industrial service clients	14,594		8,517
Capivetrol - Loans to employees (2)	 50,844		31,613
Total	\$ 6,431,806	\$	5,497,053
Less - Allowance for doubtful accounts	(254,915)		(235,552)
Total current	\$ 6,176,891	\$	5,261,501
Long term:			
National	5,664		20,830
Foreign	2,506		2,300
Cavipetrol - Loans to employees (2)	393,158		359,451
Price differential to be received from the Ministry of Mines and Energy (1)	77,510		77,510
Doubtful accounts	10,227		8,520
Other	30,991		34,840
Total Long term	\$ 520,056	\$	503,451

Determination and classification of the client portfolio as of December 31, 2013, according to maturity

	Days to maturity						
		0 - 180	181 - 360		(	Over 361*	
Current portfolio	\$	3,847,147	\$	-	\$	-	
Default portfolio		217,130		1,290		8,170	
		4,064,277		1,290		8,170	
Clients		1,121,736		145		5,664	
Foreign clients		2,942,541		1,145		2,506	
	\$	4,064,277	\$	1,290	\$	8,170	

Determination and classification of the client portfolio as of December 31, 2012, according to maturity:

	 Days to maturity						
	 0 - 180	1	181 - 360	Over 361*			
Current portfolio	\$ 3,226,140	\$	20,366	\$	1,951		
Default portfolio	123,848		7,358		21,179		
	3,349,988		27,724		23,130		
National clients	948,658		26,648		20,830		
Foreign clients	2,401,330		1,076		2,300		
	\$ 3,349,988	\$	27,724	\$	23,130		

\*Client portfolio included in doubtful debts.

The following shows the movement in the allowance for doubtful accounts:

	As of ]	December 31, 2 2013	As of December 31, 2012
Opening Balance	\$	235,552	§ 138,673
Additions (new allowances)		31,681	88,441
Recovery of allowances		(2,717)	(5,945)
Accounts receivable write-off		(255)	(78)
Use of allowances and adjustments for exchange difference		(9,346)	14,461
Closing Balance	\$	254,915	<u>\$</u> 235,552

 Accounts receivable from the Ministry of Finance, arising from the calculation of the regular motor gasoline and diesel price differential pursuant to Resolution 180522 issued on March 29, 2010.

(2) By means of Leg contracts 058-80 of 1980 and 4008928 of 2006, the administration, management and control of loans granted to employees by the Company were transferred to Cavipetrol. In its capacity as administrator, Cavipetrol monitors, in its database and financial system, the details per employee of said loans and their respective conditions.

Future collection of accounts receivable from Cavipetrol as of December 31, 2013 are estimated as follows:

Year		Value
2014	<u> </u>	50,844
2015		50,640
2016 and beyond		322,156
	\$	423,640

Similarly, at December 31, 2013 loans had been made to the employees of Equión in the amount of \$10,966, Hocol in the amount of \$9,056, Propilco in the amount of \$225, Comai in the amount of \$107 and Ecopetrol Oleo e gas do Brasil Ltd in the amount \$8.

# (6) Inventories

The balance of inventories, net, is comprised as follows:

	As of	December 31, 2013	As of December 3 2012	1,
Finished products				
Crude oil	\$	1,179,509	\$ 941,84	46
Fuels		895,384	801,40	)3
Petrochemicals		87,024	95,52	22
Purchased products				
Fuels		124,269	13,61	13
Crude oil		419,203	260,42	29
Petrochemicals		21,790	11,99	<del>)</del> 5
Agricultural products		869	1,14	49
Raw materials				
Crude oil		31,854	127,27	72
Petrochemicals		36,985	30,48	35
Products in process				
Fuels		362,929	435,95	52
Petrochemicals		11,309	7,62	27
Packaging material		1,940	1,57	79
Materials for production of goods		48,973	82,08	32
Materials in transit		79,746	22,47	78
Total	\$	3,301,784		
Less - Allowance for inventories		(42,385)		
Total	\$	3,259,399		_

The movement in the allowance for inventories is comprised as follows:

	As of Decen	As of December 31, As of December 31,			
	2013				
Opening balance	\$	27,150 \$ 27,653			
Allowance increase (decrease)		15,235 (503)			
Closing Balance	<u>\$</u>	42,385 \$ 27,150			

Natural gas imbalance - The Group uses the entitlement method of accounting for gas balancing agreements, through which the amount of natural gas sold is based on the shared ownership interest. The Group had a gas imbalance as of December 31, 2013 of \$4,142 (US\$2,064,417) in its favor, equivalent to 516,436 MBTU. The Group had a gas imbalance as of December 31, 2012 of \$5,713 (US\$3,241,756) in its favor, equivalent to 574,109 MBTU. Natural gas imbalances are settled through sales or purchases to or from the partner, accounted for at the end of the period.

# (7) Advances and Deposits

The balance of advances and deposits is comprised as follows:

	As of	December 31, 2013	As o	f December 31, 2012
Current				
Official entities (1)	\$	7,845,825	\$	4,752,125
Partners in joint ventures (2)		388,276		286,474
Customs agents		3,587		2,531
Advances to contractors		12,610		17,399
Agreements (3)		19,593		18,613
Advances to employees		855		1,073
Advances to suppliers		343,304		300,711
Total current	\$	8,614,050	\$	5,378,926
Long term				
Advances and deposits		192,613		172,708
Total	\$	8,806,663	\$	5,551,634

(1) Corresponds to the National Tax and Customs Direction (from the Spanish *Dirección de Impuestos y Aduanas Nacionales - DIAN*) from advances on income tax for the 2013 tax year in the amount of \$4,699,415 (2012 - \$3,480,067), VAT credit balance in the amount of \$1,394,344 (2012 - \$303,954), and self-withholdings and others in the amount of \$1,752,066 (2012 - \$1,272,058).

<sup>(2)</sup> The detail of advances and deposits with partners in joint operations is comprised as follows:

Contracts in which Ecopetrol is not the Operator	As of Dece 201		s of December 31, 2012
Meta Petroleum Ltd.	\$	39,787 \$	
Occidental de Colombia Inc.	*	26,907	17,733
Perenco Colombia Limited		25,721	12,041
Petrobras Colombia Limited		21,770	11,213
Repsol Exploracion Colombia S.A.		16,166	-
Anadarko Colombia Company		15,245	-
Emerald Energy PLC Suc Colombia		13,375	20,893
Vanco Energy		7,352	29,739
Mansarovar Energy Colombia Ltd.		6,744	-
Occidental Andina Llc		5,559	-
CEPSA Colombia S.A.		4,484	13,118
Petrosantander Colombia Inc.		4,182	-
Petroleos del Norte S.A.		3,822	-
Chevron Petroleum Company		2,698	7,065
Anadarko Petroleum Corporation		275	-
Petrobras Energía Perú S.A.		181	197
Petrobras Internacional Braspetro B.V.		127	589
Talisman Perú BV, Sucursal del Perú		111	781
Petrominerales		78	-
Maurel et Prom Colombia B.V.		-	747
Lewis Energy Colombia		-	242
Other operations		10,546	11,484
Contracts in which Ecopetrol is the Operator:			
Block CPO-9		89,962	25,189
La Cira		23,712	38,027
Heavy Crude Oil Block CPE-4		19,137	-
Oleoducto Caño Limón		16,360	15,985
Operating Agreement TLU-3		10,028	13,477
Heavy Crude Oil Block CPE-2		8,816	15,655
Master Agreement TLU-1		5,817	11,514
JOA Caño Sur		3,838	3,619
Niscota		-	23,164
CRC 2004 – 01		-	1,935
Other operations		5,476	2,998
Total	\$	388,276 \$	286,474

(3) Represents the resources transferred to employees as an advance for the education plan.

### (8) Prepaid Expenses

The balance of prepaid expenses is as follows:

	As of December	31, As of December 31,
	2013	2012
Insurance (1)	\$ 144	890 \$ 106,257
Other (2)	3,	454 4,398
Total	\$ 148	344 \$ 110,655

(1) Insurance contracts are in effect until June 15, 2014, at a cost of \$232,385 and amortization of \$162,982, as of December 31, 2013.

As of December 31, 2013 the prepaid insurance of other companies in the Group was comprised by: Refinería de Cartagena in the amount of \$59,804, Oleoducto Bicentenario in the amount of \$33, Ecopetrol America Inc. in the amount of \$6,268, Equión in the amount of \$1,661, Propilco in the amount of \$2,035, Ocensa in the amount of \$567, Hocol in the amount of \$751, Oleoducto de Colombia in the amount of \$123, Bioenergy in the amount of \$120, Comai in the amount of \$60, Ecopetrol Perú in the amount of \$2 and Cenit in the amount of \$4,063.

(2) Include resources relating to the acquisition and maintenance of vehicles assigned to senior officials of Ecopetrol S.A. through leasing, managed by Cavipetrol under Contract No. 5203585; other prepaid goods and services, and prepaid medicine in the amount of \$2,564.

#### (9) Deposits Held in Trust

The balance of deposits given in administration included:

	ecember 31, 2013	As of ]	December 31, 2012
Abandonment funds	\$ -	\$	16,920
Corficolombiana Securitization - ODL	134,015		127,784
Administered by Cavipetrol	9,951		19,645
Pension Funds	314,114		306,651
Other	20,665		7,810
	\$ 478,745	\$	478,810

These balances correspond to trust funds for pensions and abandonment costs. They were created under Occidental de Colombia and received upon termination of the Asociación Cravo Norte - ACN contract, which came into effect in February 2011. The pension funds are administered by Fiduciaria Bancolombia. On 2013, the ownership of the abandonment fund was transferred to Cenit together with all the assets associated with such fund.

### (10) Property, Plant and Equipment, Net

The balance of property, plant and equipment, net is comprised as follows:

	As o	of December 31, 2013	As of December 31 2012		
Plant and equipment	\$	17,414,050	\$	17,835,237	
Construction in progress (1)		20,887,747		17,474,710	
Pipelines, networks and lines		22,155,218		19,799,381	
Buildings		4,370,321		4,295,597	
Equipment on deposit and in transit		1,658,992		1,394,003	
Computer equipment		552,013		580,225	
Transportation equipment and other assets		1,725,372		1,668,096	
Agricultural plantations		62,862		44,428	
Operating materials		171,107		140,237	
Land		1,210,830		745,632	
Total	\$	70,208,512	\$	63,977,546	
Less - Accumulated depreciation		(24,749,083)		(26,278,595)	
Allowance for property, plant and equipment depreciation (2)		(460,749)		(563,996)	
Total	\$	44,998,680	\$	37,134,955	

Depreciation charged to results of operations as of December 31, 2013 amounted to \$1,982,706 (2012 - \$2,027,658).

(1) Principally includes the following:

- i) Investments made for the project of expansion and modernization of the Reficar plant in the amount of \$3,137,950, as well as exploration and production investments in direct-operation production projects, such as development (Castilla, Chichimene, Apiay, Yarigui and Providencia) and the joint operation development projects (Rubiales, Piedemonte, La Cira and Quifa); major projects in refining such as the modernization of the Barrancabermeja Refinery and the Master Plan for Industrial Services; in transportation, the Master Plan for the Refinery Integration;
- ii) The capitalized portion of interests amounting to \$7,177 related to the syndicated loan; \$37,638, related to the bonds in dollars issued during 2009; \$5,606, related to bonds in pesos issued during 2009; \$84,858, related to bonds in dollars issued during 2013; \$2,014, related to Exim Bank Long Term Guarantee; and \$269, related to Exim Bank Credit Guarantee Facility.

# (2) The following details the movement in the allowance for property, plant and equipment depreciation:

		ember 31, 1 2013		,		,		,		,		,		,		,		,		,		,		,		,		,		· · · · · · · · · · · · · · · · · · ·		,		,		,		cember 31, 2012
Opening Balance	\$	563,996	\$	1,057,740																																		
Additions to new allowances		122,514		315,627																																		
Use of allowances		(154,997)		30,590																																		
Depreciation of assets		(2,765)		(680,128)																																		
Recovery		(67,999)		(159,833)																																		
Closing Balance	\$	460,749	\$	563,996																																		

Summary of property, plant and equipment as of December 31, 2013:

Type of asset	Adjusted Cost	depreciation	Appreciation	Allowance
Plant and equipment	\$ 17,414,050	\$ (10,988,634)	\$ 5,144,384	\$ (29,826)
Pipelines, networks and lines	22,155,218	(10,992,888)	14,588,429	(87,571)
Construction in progress	20,887,747	-	-	-
Agricultural plantations	62,862	-	-	-
Buildings	4,370,321	(1,468,769)	2,231,945	(208,714)
Equipment on deposit and in transit	1,658,992	-	-	-
Computer equipment	552,013	(391,669)	38,775	(5,357)
Transportation equipment and other assets	1,725,372	(907,123)	245,422	(106,157)
Land	1,210,830	-	3,429,171	(8,358)
Operating material	171,107	-	-	(14,766)
Total	\$ 70,208,512	\$ (24,749,083)	\$ 25,678,126	\$ (460,749)

Summary of property, plant and equipment as of December 31, 2012:

			Α	ccumulated				
Type of asset	Ad	ljusted cost	d	epreciation	A	opreciation	1	Allowance
Plant and equipment	\$	17,835,237	\$	(11,818,813)	\$	5,160,255	\$	(66,980)
Pipelines, networks and lines		19,799,381		(11,628,422)		8,533,118		(52,075)
Construction in progress		17,474,710		-		-		-
Buildings		4,295,597		(1,608,846)		2,267,564		(212,487)
Equipment on deposit and in transit		1,394,003		-		-		-
Computer equipment		580,225		(423,614)		35,915		(4,632)
Agricultural plantation		44,428		-		-		-
Transportation equipment and other assets		1,668,096		(798,900)		369,031		(211,831)
Land		745,632		-		3,137,790		(9,944)
Operating material		140,237		-		-		(6,047)
Total	\$	63,977,546	\$	(26,278,595)	\$	19,503,673	\$	(563,996)

There are no restrictions or pledges on assets, nor have they been offered as security.

Technical appraisals of fixed assets take place every three years in accordance with the provisions of the Regime of Public Accounting.

#### (11) Natural and Environmental Resources, Net

The balance of natural and environmental resources, net is comprised as follows:

	As of	f December 31, 2013	As of December 31, 2012
Amortizable oil investments (1)	\$	38,982,903	\$ 34,866,137
Less: Accumulated amortization (2)		(23,159,772)	(20,299,730)
	\$	15,823,131	\$ 14,566,407
Plugging and abandonment, facility dismantling and environmental recovery costs (3)		4,936,316	4,093,973
Less: Accumulated amortization (2)		(2,309,036)	(2,100,281)
	\$	2,627,280	\$ 1,993,692
Reservoirs and appraisals (4)		701,590	701,590
Less: Accumulated depletion		(642,299)	(632,941)
	\$	59,291	\$ 68,649
Exploration in progress (5)		2,946,957	1,939,982
Total	\$	21,456,659	\$ 18,568,730

 As of December 31, 2013, net capital expenditures of oil investments amounted to \$4,125,655 mainly in the following fields: Rubiales, Castilla, Chichimene, Casabe, Apiay, Quifa, Cupiagua and Caño Limón.

- (2) The total amortization charged to results related to natural resources and abandonment cost, 2013 was \$2,865,778 and \$220,238, respectively (\$2,682,955 and \$312,252, respectively in 2012).
- (3) Corresponds to the cost of abandoning production areas, updated in December 2013.
- (4) The appraisal of reserves is represented by the reservoirs received through the reverting of concession contracts in the amount of \$490,525 administered by Gerencia Magdalena Medio, \$184,208 administered by Gerencia Sur and \$26,857 administered by Gerencia Catatumbo Orinoquía.
- (5) Corresponds to explorations activity: Ecopetrol in the amount of \$1,645,390; Ecopetrol Oleo e Gas de Brasil in the amount of \$158,102, Ecopetrol America Inc. in the amount of \$481,633, Hocol Petroleum in the amount of \$428,732 and Equion in the amount of \$233,100.

### (12) Deferred Charges

The balance of deferred charges is comprised as follows:

	As of	As of December 31, As of December 31			
		2013	2012		
Other deferred charges, net (1)	\$	1,891,961 \$	2,102,874		
Deferred income tax and deferred tax on CREE *		2,112,829	1,543,209		
Deferred monetary correction charges, net		-	338		
	\$	4,004,790 \$	3,646,421		

(1) Includes investments made in developing the business cooperation contract between Ecopetrol and Schlumberger aimed at increasing production at the Casabe field. These investments are amortized based on technical units of field production. For 2013 this amortization amounts to \$115,991 (2012 - \$72,024). In addition it includes pre-operating expenses of Bioenergy for \$119,880 (2012 - \$77,960).

\* CREE does not apply for the year 2012.

### (13) Other Assets

The detail of other assets is comprised as follows:

	As of	As of December 31, As of December 31		
		2013	2012	
Goodwill (1)	\$	2,175,084 \$	2,842,518	
Intangible assets, net: (brands, licenses, patents and software)		293,286	569,320	
Trust funds (2)		217,980	126,155	
National Royalties Fund (from the Spanish Fondo Nacional de Regalías) (3)		73,469	67,815	
Other assets (4)		740,776	424,955	
	\$	3,500,595	4,030,763	

### (1) Goodwill as of December 31, 2013 is comprised as follows:

Company	Acquisition Date	Goodwill Amount	A	Amortized Amount	Pending nortization	Amortization Period (Years)
Propilco S.A. (a)	07/04/2008 \$	5 176,507	\$	(68,370)	\$ 108,137	17.8
Andean Chemicals	07/04/2008	205,541		(77,729)	127,812	17.8
IPL Enterprises (b)	17/03/2009	880,127		(196,631)	683,496	15
Offshore International (a)	06/02/2009	536,079		(194,631)	341,448	14
Hocol Petroleum Limited	27/05/2009	742,345		(204,747)	537,598	16
Equión Energía Limited (b)	24/01/2011	629,375		(253,682)	375,693	10
Bioenergy Zona Franca	30/08/2008	900		-	900	
Total	5	3,170,874	\$	(995,790)	\$ 2,175,084	

<sup>(</sup>a) As of December 31, 2013 an impairment of goodwill in the amount of \$229,876 in Propilco S.A. and \$123,136 for Offshore International Group Company was recorded, due to the economic evaluation made in accordance with Resolution 145 of 2008 provision, issued by the National Accounting Office.

Goodwill as of December 31, 2012 is comprised as follows:

Company	Acquisition Date	Goodwi Amoun		Amortized Amount	Pending nortization	Amortization Period (Years)
Propilco S.A.	04/07/2008	\$ 327	7,986	\$ (86,572)	\$ 241,414	17.8
Andean Chemicals	04/07/2008	357	7,629	(94,400)	263,229	17.8
IPL Enterprises	03/17/2009	537	7,093	(137,257)	399,836	15
Offshore International	02/06/2009	748	3,986	(186,175)	562,811	14
Hocol Petroleum Limited	05/27/2009	748	3,948	(157,334)	591,614	16
Equión Energía Limited	01/24/2011	972	2,409	(189,695)	782,714	10
Bioenergy Zona Franca	08/30/2008		900	-	900	
Total		\$ 3,693	8,951	\$ (851,433)	\$ 2,842,518	

(2) Includes in Ecopetrol S.A. the amount of \$61,748 comprised as follows: i) \$52,421 for contributions and shares in the National Hydrocarbons Fund (from the Spanish Fondo Nacional de Hidrocarburos) created to support future hydrocarbon investment, exploration and production contracts in smaller fields for projects administered by the Colombia Hydrocarbons Private Capital Fund (from the Spanish Fondo de Capital Privado de Hidrocarburos de Colombia); and ii) \$9,327 from Ecopetrol S.A. in Colpet, Cóndor and Sagoc fund to deal with potential contingencies in the liquidation of these former subsidiaries.

The amount of \$111,481 corresponds to Oleoducto Bicentenario de Colombia as follows: i) \$85,723 for the open collective portfolio into which the money for the quarterly payment of interest on the syndicated loan is paid ii) \$25,582 represents trusts to withhold the money as a guarantee, by contract, and which is returned upon completion of the work; and iii) \$176 for the administrative commercial trust and payments for building of the terrace by HGC Ingenieros; Bioenergy in the amount of \$40,795 to purchase land and Equión in the amount of \$3,409.

- (3) Corresponds to deposits to the Oil Savings and Stabilization Fund (from the Spanish *Fondo de Ahorro y Estabilización Petrolera FAEP*) in Ecopetrol's favor to address the remainder of the National Royalties Fund. It is sole purpose is the payment debts and financing developments programs and projects in hydrocarbon producing and non-producing municipalities and departments. Ecopetrol disburses amounts after the Ministry of Finance issues the corresponding approvals.
- (4) Includes mainly for Ecopetrol S.A.: i) Restricted funds in the amount of \$57,347 (2012 \$50,359), represented by judicial deposits to pay for labor, civil and tax litigations; and ii) third party property improvements on assets received through concessions for the Colorados and Tumaco wells in the amount of \$46,750 (2012 \$44,639). ODL Finance in the amount of \$141,383, mainly for BOMT contracts, (2012 \$162,806); Andean includes assets received in partial payment for the obligation of Lousina Green Fuels in the amount of \$58,477; Oleoducto Bicentenario in the amount of \$4,265; Hocol in the amount of \$934; Perú in the amount of \$640; and Others in the amount of \$122.

<sup>(</sup>b) Due to the organizational restructuring made in Ecopetrol's Group with the incorporation of Cenit in 2013, there was a reclassification in the amount of \$343,043 between the goodwill of Equion Energia Limited and IPL Enterprises corresponding to the value resulting from the acquisition of the participation of Ocensa owned by Equión.

### (14) Valuations

The valuation balance is comprised as follows:

Property, plant and equipment (1)	D	ecember 31, 2013	De	ecember 31, 2012
	-			
Plant and equipment	\$	5,144,384	\$	5,160,255
Buildings		2,231,945		2,267,564
Land		3,429,171		3,137,790
Pipelines		14,588,429		8,533,118
Transportation equipment and other assets		245,422		369,031
Communication and computer equipment		38,775		35,915
	\$	25,678,126	\$	19,503,673
Variable yield investments				
Empresa de Energía de Bogotá S.A. ESP.		814,361		647,119
Interconexión Eléctrica S.A.		466,673		496,126
Sociedad Portuaria Olefinas		813		189
Zona Franca Industrial		1,123		783
	\$	1,282,970	\$	1,144,217
Total	\$	26,961,096	\$	20,647,890

(1) As of December 31, 2013, property, plant and equipment valuations showed an update of the technical study of fixed-asset valuation, made by the firms TF Auditores for Ecopetrol S.A. and Refinería de Cartagena S.A. - Reficar, and Levin Global, for Oleoducto Central S.A. – Ocensa and Oleoducto de Colombia S.A. - ODC.

# (15) Financial Obligations

The balance of financial obligations is comprised as follows:

	As of December 2013	31, As	As of December 31, 2012		
Current					
Debt in national currency (1)	\$ 216,	360 \$	2,237,139		
Debt in foreign currency (2)	337,	967	122,349		
Bonds issued (3)	219,	732	-		
Total current	\$ 774,	559 \$	2,359,488		
Long term					
Debt in national currency (1)	4,805,	)73	2,736,339		
Debt in foreign currency (2)	14,718,	919	7,609,998		
Bonds issued (3)	1,900,	000	1,000,000		
Total long term	\$ 21,423,	992 \$	11,346,337		

 As of December 31, 2012, it corresponds to Ecopetrol's syndicated loan with eleven national banks for an initial value of \$2,220,200, intended for financing the Company's investment programs. The loan was obtained with the following conditions:

Term:	7 years, including a 2-year grace period
Payment of Interests:	Starting in November 2009
Rate:	DTF+ 4% (anticipated quarterly rate)
Amortization:	Every six Months

Guarantee: Ecopetrol S.A. granted a pledge over the stock shares owned either directly or indirectly on the following companies, thus reaching 120% coverage of the loan amount. The shares given as guarantee were replaced by another contract between some banks and Ecopetrol on November 17, 2011.

The value of guarantees according to the intrinsic value of the shares of companies and translated into Colombian Pesos with the current TRM al December 31, 2013 is as follows:

Company	Value
Hocol Petroleum Limited	2,909,073
Offshore International Group	489,533
Polipropileno del Caribe S.A.	313,010
Total	3,711,616

The loan was paid off on May 27, 2013 through a debt management and financing operation in local currency with seven Colombian banks for a value of \$1,839,000, which is made up by the following operations:

- i. Debt Management Operation: Signed with 7 local banks for a total value of \$1,554,140, whereby the balances outstanding of the 2009 syndicated loan were replaced.
- ii. New Resources Operations: Signed with 6 local banks for a total value of \$284,860 where by the investment and general corporate purposes plan is financed.

The new loan was obtained with the following conditions:

Disbursement date:	May 27, 2013
Term:	12 years with a 3-years grace period
Payment of interests:	As of November 2013
Rate:	DTF + 2.5% (anticipated quarterly rate)
Amortization:	Every Six Months
Guarantee:	No guarantees were required for the new loan

The detail of the amortization payments of long-term principal is as follows:

Year	Value
2016	\$ 102,167
2017	204,333
2018	204,334
2019	204,333
2020	204,333
2021	204,333
2022	204,334
2023	204,333
2024	204,333
2025	102,167
	\$ 1,839,000

On 25 November 2013 the first interest payment was made in the amount of \$58,907 million. Currently, Ecopetrol S.A. not anticipate any situation that may represent noncompliance of its obligations in the near future.

Furthermore, long-term payments mostly includes, other financial obligations acquired by the companies in the Group, as follows: Oleoducto Bicentenario de Colombia syndicated loan in the amount of \$2,112,669 for 10 years at an interest rate of DTF+4,54%, ODL Finance S.A. syndicated loan in the amount of \$647,029 for 7 years at an interest rate of DTF+2.50% and Bioenergy in the amount of \$411,282 for 15 years at an average interest rate of DTF+3.25%.

The following is the detail of guarantees granted by ODL as of December 31, 2013:

Irrevocable mercantile trust agreement between Oleoducto de los Llanos Orientales S.A. Sucursal Colombia and Fiduciaria Corficolombiana S.A. creating ODL – Ecopetrol Issuer of ODL securities – Ecopetrol trust funds. Garantee: Loan Securities ODL - Ecopetrol

According to the contract, "ODL will use the resources from the placement to finance the project to build and commission the pipeline, and to return capital to the pipeline sponsors, as established in the Information Prospectus". In addition, the agreement considers the creation of a Trustee Fund to administer the resources from the Financial Tariff payments for Ecopetrol, to only be used to make the debt payments.

Promissory notes were generated, with the following characteristics:

Financial Institution	Obligation	No. Promissory Note
Banco de Bogotá	\$ 416,000	7690162443-1
Banco AV Villas	56,000	001214219-9
Banco de Occidente	84,000	2630008697-3
Banco Popular	84,000	0661300944-1
Total	\$ 640,000	

At present, Bioenergy is conducting the process to pay the mortgage granted by Bancolombia through Finagro credit line is 2008, which is secured with the property "La Esperanza" whose carrying value is \$4,096.

#### (2) Issuance of International Bond 2009

On July 23, 2009, Ecopetrol S.A. issued unsecured and unsubordinated debt bonds (notes) with the right to register them with the SEC, maturing in 2019, for an amount of US\$1,500 million. The registration took place on October 6, 2009. The notes were initially issued under Rule 144A/Regulation S.

Terms of the notes were:

Coupon interests: 7,625% Make Whole Premium: 50 basis points. Interest payment dates are July 23 and January 23 of every year, starting on January 23, 2010. Maturity date: July 23, 2019.

#### Issuance of International Bond 2013

On September 18, 2013, Ecopetrol S.A. issued unsecured and unsubordinated debt bonds (notes) and registered them with the SEC for the amount of US\$2,500 million, divided into three tranches with the following terms and conditions:

Redemption Term:	5 years	10 years	30 years		
Date of Maturity	Sept 18, 2018	Sept 18, 2023	Sept 18, 2043		
Amount (US\$ million)	350	1,300	850		
Coupon:	4.250%	5.875%	7.375%		
Make Whole Call (pbs):	40	45	50		
Payment of interests:	March 18 and September 18, starting from March 18, 2014				

In accordance with the definitions contained in the issuance documents for both 2009 and 2013, the Company has complied with the various standard commitments (covenants) including the due and timely payment of interest and capital; no creation of collateral pledges by Ecopetrol and its subordinates, except for authorized pledges; and the offer to purchase the bonds in the event of repurchasing for control change.

Reficar incurred indebtedness in the amount of \$6,339,244 million with foreign banks to finance the project to expand the refinery, as follows:

Contracts	Lender	Agent	Loan D currency	ebt amount approved in US\$	Balance as of December 31 2013 in US\$
U.S. Exim Direct Loan Agreement	Export Import Bank de los Estados Unidos	BNP Paribas	US\$ \$	2,650,000,000	\$ 2,522,329,484
U.S. Exim Guaranteed Loan Agreement	HSBC	BNP Paribas	US\$	100,000,000	40,196,304
SACE Facility Agreement	Sumitomo, Bank of Tokyo,	Sumitomo			
	BBVA		US\$	210,000,000	190,889,859
EKN Facility Agreement	HSBC	HSBC	US\$	100,000,000	96,570,512
Commercial Facility Agreement	Sumitomo, Bank of Tokyo, BBVA , HSBC	Bank of Tokyo	US\$	440,000,000	440,000,000
Total			\$	3,500,000,000	\$ 3,289,986,159

The U.S. Congress approved the granting of guarantees by the U.S. Exim bank to Ecopetrol S.A., through its Long Term Guarantee Programs (LTG) and Medium Term (CGF). To have access to these programs, the Company selected 4 International banks as lenders in the LTG and 2 for the MTG.

Terms and conditions of the guarantee programs are as follows:

Financing Contract:	Long term (LTG)	Medium Term (CGF)
Amount US\$ million:	Up to 426.6	Up to 420.6
Term:	Up to 10 years	Between 2 and 7 years
Interest:	Libor of 6 months $+ 0.90\%$	Libor of 6 months $+ 0.65\%$
Commission:	0.15% E.A.R	0.15% E.A.R
	Share 0.40% Paid in each disbursement	Share 0.35% Paid in each disbursement
Guarantee:	Guarantee U.S. Exim Bank on political and trade	
	risk	
Amortizations:	Equal every six months	

As of December 31, 2013, the Company completed the disburse mounts under the LTG in the amount of US\$245 million. US\$43 million were received under the CGF program. Therefore, resources under this facility can be disbursed, valid until June.

### (3) Issuance of Local Bond 2010

Through Resolution No. 3150 of October 20, 2010, Ecopetrol was authorized by the Ministry of Finance to issue, subscribe and place internal public debt bonds for an amount of up to one billion Colombian pesos, to finance Ecopetrol's 2010 investment plan. Subsequently, through Resolution No. 2176 of November 11, 2010, the Company obtained the authorization of the Superintendence of Finance to register its internal public debt bonds at the National Register of Securities and Issuers (RNVE), and to place them through public offering.

The terms of the issuance and placement of the internal public debt bonds are as follows:

Amount placed:	\$1,000,000 million
Issuance date:	December 1, 2010
Amortization:	At maturity
Series A:	Bonds denominated in pesos at a variable rate based on the consumer price index (CPI)

Redemption Term:	5 years	7 years	10 years	30 years	
Rate:		CPI + 2.80%	CPI + 3.30%	CPI + 3.94%	CPI + 4.90%
Amount (millions)	\$	97,100 \$	138,700 \$	479,900 \$	284,300

#### Issuance of Local Bond 2013

With Resolution No. 2462 of July 30, 2013, issued by the Ministry of Finance and Public Credit, Ecopetrol was authorized to issue, subscribe and place bonds and trading securities at the Public Securities Market of Colombia amounting up to \$3 billion pesos (\$3,000,000,000,000) through public offering.

Subsequently, the Superintendence of Finance approved the registration of bonds and trading securities under the program, at the National Registry of Securities and Issuers, and authorized their public offer by Resolution No. 1470 of August 2, 2013.

The following was the result of the first issuance and placement of internal public debt bonds under the program:

Amount placed: Issuance date:	\$900,000 million August 27, 2013			
Amortization:	At maturity			
Payment of interests:	Every six months			
Series C:	Bonds denominated in C	olombian pesos at a varia	able rate based on the CPI	
Redemption Term:	5 years	10 years	15 years	30 years
Rate:	CPI -	+ 3.79% CPI	+ 4.60% CPI +	4.90% CPI + 5.15%

\$

168,600

\$

347,500

\$

262,950

120,950

#### (16) Accounts Payable and Related Parties

Amount (millions)

The balance of accounts payable and transactions with related parties is comprised as follows:

\$

	As o	As of December 31, 2013		
Dividends payable (1)	\$	1,313,596 \$	3,919,102	
Suppliers		5,459,752	5,149,354	
National Hidricarbory Agency		385,636	208,425	
Partners advances		854,884	716,379	
Deposits received from third parties		626,945	247,301	
Various creditors		416,097	530,306	
Withholding tax on Income tax and VAT		459,866	100,564	
Reimbursement of exploratory costs		23,158	33,944	
Total Current	\$	9,539,934 \$	10,905,375	
Other accounts payable		591,998	662,472	
Total Long term	\$	591,998 \$	662,472	

(1) Represents the dividends payable as decreed at the Shareholders' General Meeting held on March 21, 2013 in the amount of \$11,964,960, less payments made in 2013 in the amount of \$14,570,467. Also, dividends payable to shareholders who are in arrears in the payment of quotas generated by the purchasing of shares in the amount of \$3,744, and to whom economic and political rights have been suspended pursuant to Article 397 of the Code of Commerce. Such payments will be reinstated once the payments are up to date.

# (17) Taxes, Contributions and Duties Payable

Detail of taxes, contributions and duties payable is comprised as follows:

	As o	f December 31, 2013	As of December 31, 2012
Current			
Income tax	\$	7,872,189	\$ 7,059,715
Income tax for equality - CREE		315,218	-
National tax on gasoline and gasoline surtax (1)		224,694	-
Global tax (1)		-	135,266
Sales tax payable		24,826	34,204
Tax on Equity (2)		567,002	579,329
Industry and commerce (Municipal) tax and other minor taxes		67,331	70,780
Audit fee		87,923	-
Total Current	\$	9,159,183	\$ 7,879,294
Long term:			
Tax on Equity (2)		-	555,054
Total	\$	9,159,183	\$ 8,434,348

(1) As a result of the enactment of Act 1607 of 2012, for application the global tax was eliminated from January 2013 the National Tax on Gasoline and Diesel Oil (ACPM) was established.

(2) The last two installments of the tax on equity will be paid in 2014.

The balance of asset and liability deferred income tax and income tax for equality CREE is as follows:

	De	December 31, 2013		ecember 31, 2012*
Assets Deferred tax:				
Beginning balance	\$	1,557,224	\$	1,593,015
Movement of the year Income and CREE		583,337		(35,199)
Conversion of reporting currency		-		(592)
Ending Balance	\$	2,140,561	\$	1,557,224
Liability tax:				
Beginning balance Income tax		1,790,546		1,788,224
Movement of the year Income and CREE		411,181		2,322
Ending Balance	\$	2,201,727	\$	1,790,546

### Composition of income tax, capital gains tax, and income tax for equality - CREE expense as of December 31.

The expense on concept of income tax, capital gains tax and income tax for equality (CREE) is comprised as follows:

	cember 31, 1 013	As of December 31, 2012*	As of December 31, 2011*
Current income tax - CREE	\$ 8,283,605	\$ 7,081,647	\$ 7,552,686
Income tax of previous year	7,966	14,227	8,948
Deferred income tax assets - CREE	27,661	35,199	(49,865)
Deferred income tax liability CREE	(230,394)	2,322	443,952
Total	\$ 8,088,838	5 7,133,395	\$ 7,955,721

\* CREE does not apply for the years 2012 and 2011.

The effects of temporary differences that imply the payment of a lower or higher income tax in the current year, are accounted for as a deferred tax asset or liability, both for the income tax and for the income tax for equality - CREE as applicable, provided there is a reasonable expectation that such differences will revert, liability in case of the deferred tax assets or sufficient taxable income will be generated to recover the deferred tax liability.

The determination of the taxable basis for both income tax and income tax for equality - CREE is the result of the application of the regulations in force in each case.

#### Income Tax

Current tax provisions applicable to Ecopetrol S.A. and subsidiaries establish the following:

- (a) As from January 1, 2013, Act 1607 of December 2012 created the income tax for equality-CREE as a contribution from companies and legal entities and similar income taxpayers on behalf of workers, employment generation and social investment. The non-profit entities, individuals and companies declared as free zones with a rate of 15% are not responsible for income tax for equality - CREE.
- (b) The basis for determining income tax may net be less than 3% of its net equity on the last day of the immediately preceding fiscal year.
- (c) As from taxable year 2007, the inflation adjustments system was eliminated for tax purposes, and the tax on capital gains was reactivated. Article 109 of Act 1607 of December 2012 established a new tax rate on occasional these gains for companies and is to be applied as from 2013; such rate is equivalent to 10%.

Income tax returns can be reviewed by the tax authorities for up to two years following their filing. For Ecopetrol S.A., the date for 2012 tax return is open for review.

#### **Income Tax for Equality (CREE)**

Current tax provisions applicable to Ecopetrol S.A. establish the following:

- (a) Act 1607 of December 2012 introduced the income tax for equality CREE, effective as from January 1, 2013, as the contribution of companies, legal persons and assimilated income tax payers in order to benefit workers, employment generation and investment in social matters. Non-for-profit entities, individuals and companies classified as free trade zones are subject to the 15% tax rate are not subject to the income tax for equality CREE.
- (b) The basis for determining the income tax for equality CREE may not be lower than 3% of tax payer's net equity on the last day of the immediately preceding taxable period.
- (c) The rate for the income tax for equality CREE for 2013, 2014 and 2015 is 9%; as from taxable year 2016, such rate will be 8%.
- (d) According to Article 25 of Act 1607 of December 2012, effective as from July 1, 2013, legal persons and assimilated income tax payers, are exempted from paying payroll taxes (National Training Service - SENA and Colombian Institute for Family Welfare - ICBF). Corresponding to workers individually earning up to ten (10) minimum monthly salaries in force. This exemption does not apply to taxpayers not subject to the income tax for equality - CREE.
- (e) The taxable basis of the income tax for equality CREE will be established by subtracting returns, rebates and discounts from the gross income that may have increased equity during the taxable year and subsequently subtracting from the resulting amount the values corresponding to revenues not considered taxable income as defined in the Tax Code. From the net income so obtained, the total costs and deductions applicable to this tax will be deducted, in accordance with the provisions of Articles 107 and 108 of the Tax Code. Exempt income, as expressly determined by Article 22 of Act 1607 of 2012, will then be allowed to be deducted from that amount.

#### Tax on Equity

For taxable year 2011, the equity tax was established for income taxpayers under Act 1370 of 2009. Therefore, taxpayers owning net equity exceeding \$5,000 million should pay a 4.8% rate, and those owning net equity between \$3,000 million and \$5,000 million should pay a 2.4% rate on such equity.

A new rate for taxpayers required to pay such tax was included by means of Emergency Decree Number 4825 of December 2010. Such rates are: 1% for net equity between \$1,000 and \$2,000 million, and 1.4% for equity between \$2,000 and \$3,000 million.

In addition, a surcharge of 25% was established by such Decree on this tax, which is only applicable to equity taxpayers under Act 1370 of 2009.

Based on the above, and in accordance with accounting management decrees, Ecopetrol recognized the value of the equity tax payable, and the corresponding charge to income, for the proportional value corresponding to 2011, 2012 and 2013. The pending balance payable was registered as a deferred asset amortizable during 2014.

### **Transfer Pricing**

Since 2004, income taxpayers who had entered into transactions with related parties abroad, and/or with residents of countries considered to be tax havens, are under the obligation of determining, for income tax purposes, their ordinary and extraordinary income, costs and deductions, and assets and liabilities, taking into account the denominated market prices and profit margins for these transactions (Arm's length principles). Based on the opinion of the Company's advisor, no significant changes are expected for taxable year 2013 related to the compliance with the principle of full jurisdiction set out in Article 260-1 of the Colombian Tax Code, and there are no foreseen adjustments to the determination of income tax expenses for the said year.

To date, Ecopetrol has not completed the 2013 study; however, based on the results from the 2012 study, no adjustments to the income tax provision derived from the 2013 price analysis, affecting the results of the period, are required.

#### (18) Labor and Pension Liabilities

The balance of labor and pension liabilities is comprised as follows:

	As of	December 31, As o 2013	As of December 31, 2012	
Current:				
Leave	\$	101,241 \$	81,062	
Premiums, bonuses and allowances		91,489	100,635	
Severance payments		52,739	46,398	
Salaries and pensions payable		5,774	3,559	
Interests on severance		5,961	5,180	
Other		32,424	20,095	
Total short term	\$	289,628 \$	256,929	
Long term				
Actuarial liability for health and education (1)		4,211,288	3,992,829	
Retirement pensions, joint ventures		66,543	71,052	
Other		-	6,863	
Total Long term	\$	4,277,831 \$	4,070,744	
Total	\$	4,567,459 \$	4,327,673	

(1) The actuarial computations for health and education for Ecopetrol S.A. were prepared by applying the mortality tables updated in 2010 and using a technical interest rate of 4.8%. The value of future health and education payments, was estimated by applying an increase of 5.922% (2012 - 4.755%), which correspond to the average inflation rate registered by the National Administrative Department of Statistics (from the Spanish *Departamento Administrativo Nacional de Estadística - DANE*) during the last three years, to the year calculation, plus an additional 1.5%, taking into account the Company's real growth. As a result of the 2010 change in the accounting principle for amortization, the portion pending to be amortized is 6% at the closing of 2013 which is equivalent to \$227,416.

The amortized actuarial liability for health is as follows:

	De	cember 31,	De	cember 31,
Concept		2013		2012
Actuarial calculation of health liabilities	\$	4,053,865	\$	4,062,323
Less - Actuarial calculation pending amortization		(227,416)		(454,973)
Amortized actuarial liability	\$	3,826,449	\$	3,607,350

The difference in amortized actuarial liability is as follows:

	De	December 31, 2013		December 31, 2012		ifference
Health:						
Active personnel	\$	518,089	\$	401,883	\$	116,206
Retirees		3,308,360		3,205,467		102,893
Education:						
Active personnel		48,081		37,736		10,345
Retirees		336,758		347,743		(10,985)
Total	\$	4,211,288	\$	3,992,829	\$	218,459

# (19) Estimated Liabilities and Provisions

The balance of estimated liabilities and provisions is comprised as follows:

	 of December 31, 2013	of December 31, 2012
Current:		
Provision for legal proceedings (1) (see Note 31)	\$ 524,937	\$ 783,692
Provision for pension obligations	500	500
Provision for abandonment, facility dismantling and environmental recovery costs (2)	109,55757	60,834
Other provisions (3)	953,893	914,997
Provisions for contingencies (4)	926,118	92,966
Total current	\$ 2,515,005	\$ 1,852,989
Long term:	 	 
Provision for abandonment, facility dismantling and environmental recovery costs (2)	\$ 4,636,968	\$ 3,885,726
Provision for community members (5)	445,364	424,500
Provision for legal proceedings (1)	16,910	9,202
Other provisions	64,577	56,576
Total Long term	\$ 5,163,819	\$ 4,376,004
Total	\$ 7,678,824	\$ 6,228,993

(1) The movement in the provision for legal proceedings as of December 31, 2013 is comprised as follows:

	Numb	er of		
	Procee	dings	Provi	sion Amounts
Opening balance	\$	703	\$	792,894
Additions (new provisions)		282		107,107
Adjustment to existing provision		(617)		(358,154)
Closing balance	\$	368	\$	541,847

The movement in the provision for legal proceedings as of December 31, 2012 is as follows:

	Numb Procee		Provision Amounts
Opening balance	\$	784	\$ 688,191
Additions (new provisions)		313	412,177
Adjustment to existing provision		(410)	(310,150)
Recovery from transfer of proceedings		(5)	(6,526)
Closing balance	\$	682	\$ 783,692

(2) The following shows the movements in the provisions for short term abandonment, facility dismantling and environmental recovery costs:

	December 31, 2013	December 31, 2012
Opening balance	\$ 3,946,560	\$ 3,843,550
Additions – (Decrease)	1,016,762	392,197
Withdrawals and use	(232,813)	(273,325)
Conversion into the reporting currency	16,016	(15,862)
Closing balance	\$ 4,746,525	\$ 3,946,560

Most of the abandonment allowances were accrued mainly by Ecopetrol S.A., in the amount of \$4,559,662 (2012- \$3,804,199).

(3) Mainly includes provisions created for the purpose of anticipating potential nature-related and other events that could affect transportation facilities and have an impact on the regions where there is a presence. Starting January 2012, three large-scale projects were created: the Dosquebradas Project, the Integrity Program and the Contingency Program. Additionally, includes provisions in subsidiaries mainly such as: Refinería de Cartagena in the amount of \$397,378 for goods and services; Equión in the amount of \$116,313 for partnership agreements; Oleoducto Bicentenario in the amount of \$47,415; Ocensa in the amount of \$48,399; Hocol in the amount of \$43,384; Ecopetrol America Inc. in the amount of \$16,885; and Propilco in the amount of \$4,411.

- (4) This is represented mainly by provisions in Ecopetrol such as: (i) \$804,358 to comply with the payment of pension liability (Note 21 No 3.). (ii) \$28,364 for potential PDVSA claims for payment of work to clean up and decontaminate Lake Maracaibo in Venezuela, (iii) \$86,101 for situations with environmental implications and (iv) \$156 corresponding to the success-based fees for the representative in the litigation against Ecopetrol S.A. initiated by Industrias Crizasa.
- (5) Includes the interim relief ordered by the Council of State in its decree of June 24, 1994 in the invalidity action brought by the Ministry of Mines and Energy against Comuneros (community members) of Santiago de las Atalayas and Pueblo Viejo de Cusiana, corresponding to the attachment and seizure of the payments to be made by Ecopetrol for royalties, based on Royalty contracts No. 15, 15A, 16 and 16A, declared null and void by the Council of State in its ruling of September 13, 1999, in which it was ordered that such interim relief should be cancelled and that the attached and seized amounts should be handed over to the State the Ministry of Mines. Ecopetrol has capacity as receiver. Of said amount, \$90,752 corresponds to the value initially recognized by Ecopetrol, as well as the valuation of the fund containing the resources; \$357,903 corresponds to generated interest. In a ruling on December 12, 2012, notified by edict on January 21, 2013, the Council of State declared that the special plea for reconsideration filed by the Comuneros was dismissed.

### (20) Other Long-term Liabilities

The balance of other long-term liabilities is comprised as follows:

	As of December 31, As of December 31				
		2013	2012		
Credit deferred income tax	\$	2,177,409	\$ 1,790,546		
Advances received from Ecogas for BOMT's		335,550	369,517		
Credit for deferred monetary correction		-	493		
Other liabilities		461,817	111,288		
Total	\$	2,974,776	\$ 2,271,844		

### (21) Non-controlling interest

The balance non-controlling interest is comprised as follows:

	As of December 31	, As of December 31,
	2013	2012
Bioenergy S.A.	\$ 19,403	3 \$ 12,474
ODL Finance S.A.	377,245	5 304,584
Ocensa S.A.	2,187,766	6 866,774
Oleoducto de Colombia S.A.	299,851	84,632
Oleoducto Bicentenario S.A.S.	312,515	5 313,026
Equion Energia Ltd.	1,376,968	3 1,020,677
Total	\$ 4,573,748	3 \$ 2,602,167

### (22) Shareholders' Equity

#### Subscribed and Paid-in Capital

Ecopetrol's authorized capital amounts to \$15,000,000, and is comprised by 60,000,000 ordinary nominative shares at a \$250 pesos par value each. 41,116,698,456 of such shares have been subscribed represented by 11.51% of non-controlling interest and 88.49% held of shareholders from Government entities. The value of the reserve shares amounts to \$4,720,825 comprised by 18,883,301,544 shares.

#### Additional Paid-in Capital

Mainly corresponds to: (i) the surplus with regards to its par value derived from the sale of shares upon capitalization in 2007 in the amount of \$4,700,963; (ii) \$31,225 corresponding to the value generated by placing shares on the secondary market, arising from the execution of guarantees from debtors in arrears in accordance with the stipulations of Article 397 of the Code of Commerce; and (iii) to the surplus over the par value arising from the sale of shares awarded in the second round, which took place in September 2011, in the amount of \$2,222,443.

	December 3	I, 2013 I	December 31, 2012
Additional paid-in capital shares	\$ 6,9	54,631 \$	\$ 6,954,549
Additional paid-in capital receivable		(257)	(302)
Total	\$ 6,9	54,374	\$ 6,954,247

Effect of Applying the Government Accounting Regime-RCP (from the Spanish Régimen de Contabilidad Pública)

Corresponds to the transfer of negative balances derived from devaluations of property, plant and equipment, as established by the Public Accounting Regime as from 2008.

This heading also shows the responsibilities pending decision arising from proceedings on loss of materials, through enforcement of the process established in the above-mentioned standard.

#### Equity Reserves

The legal reserve is made up of 10% of net income and can be used to offset losses or to distribute in the event of liquidating the Company.

On March 21, 2013, the results for 2012 were considered by the General Assembly of Shareholders, at which it was decided not to increase the legal reserve since it currently represents 50% of the subscribed capital.

Increases were approved in the reserves for compliance with Regulatory Decree 2336 of 1995 (reappraisal at market prices) for \$215,406. From such amount, the reserves accumulated as of December 31, 2012 in the amount of \$1,829,362 were also released; and the reserves for executing investment projects in the amount of \$2,628,877 were increased, as well as \$1,260,000 for performing infill drilling campaigns; and \$1,338,204 for unrealized profits of the Business Group. Additionally, reserves in the amount of \$605,135 were released to strengthen transportation infrastructure.

The detail of reserves is comprised as follows:

	As of	December 31,	As of December 31,
		2013	2012
Legal	\$	5,139,587	\$ 5,139,587
Occasional reserves for investment programs		9,945,733	6,713,082
Regulatory Decree 2336 of 1995		215,406	440,067
Total	\$	15,300,726	\$ 12,292,736

### Incorporated Institutional Equity

Corresponds to the product of commercial activity mainly linked to the following associates contracts: Nare; Matambo; Garcero; Corocora; Estero; Caracara, for the Sardinas 6, Remache Norte 3, Abejas 3, Jaguar T5 and T6 wells, Orocué; the Guarilaque 7 well; Campo Rico for the Candalay, Jordán 5, Remache Norte 2 and 5, Abejas 2 and Vigia wells, and the incorporation of the Cocorná materials warehouse.



### (23) Memorandum Accounts

The detail of memorandum accounts is comprised as follows:

	As of	December 31, 2013	As of December 31, 2012		
Debtor					
Exploitation rights - Decree 727 of 2007 (1)	\$	61,016,768	\$	65,885,263	
Other contingent rights and debtor accounts (2)		42,656,068		31,953,744	
(Deductible and non-deductible) costs and expenses		34,836,502		28,941,568	
Pension-related autonomous equity (3)		11,449,876		11,866,064	
Securities given in custody and guarantee		1,447,325		5,544,415	
Implementation of investment projects		21,953		129,455	
Legal proceedings		782,209		650,918	
Total	\$	152,210,701	\$	144,971,427	
Creditor					
Legal proceedings	\$	28,804,122	\$	33,611,100	
Goods received in custody (4)		20,455,350		27,329,613	
Contractual guarantees (5)		17,434,639		14,327,340	
Pension-related autonomous equity (7)		12,254,234		11,730,386	
Non-tax liabilities		11,421,071		10,170,665	
Other contingent liabilities (6)		9,680,448		9,183,073	
Potential liabilities - pension liabilities (7)		405,769		809,596	
Non-taxed income		5,567,612		5,821,444	
Mandate agreements (8)		1,279,886		1,416,574	
Administration funds - Decrees 1939 of 2001, and 2652 of 2012		1,033,557		973,565	
Future BOMT payments		170,028		108,769	
Work Contracts		3,267,904		-	
Total	\$	111,774,620	\$	115,482,125	
	\$	263,985,321	\$	260,453,552	

- (1) Reserves valued as of December 31, 2013 based on the volumes in the audited reserves study and applying the average price set by SEC-approved regulations. On March 7, 2007, Decree 727 was issued, featuring the regulations for valuating reserves and accounting for the Nation's hydrocarbon reserves in the Company's financial statements. The decree also establishes that the value of hydrocarbon exploration and production rights it owns must recorded. Said value is recorded under memorandum accounts in accordance with the opinion provided by the National Accounts Office (CGN); however, the memorandum accounts are not part of the Company's balance sheet.
- (2) The balance corresponds mainly to the following: (i) the balance of tax memorandum accounts in the amount of \$30,224,255, which reflect the differences between the values of both equity and income statement accounts taken from the 2012 tax return, and the accounting balances. The differences are derived from concepts such as valuations, allowances not accepted for tax purposes, the difference in the amortization method for oil investments, which is done by using the units of production method for accounting purposes, and by using the straight-line method for tax purposes, and the effect of the adjustment for inflation, amongst other; and (ii) securities in custody in the amount of \$5,308,492.
- (3) Reflects the contingent right (debtor account) on resources placed in the pension-related autonomous trust, to pay transferred pension liabilities, in order to control the existence of liquid resources in the autonomous equity fund. The value transferred as of December 31, 2013 in the amount of \$11,449,876 (\$10,092,528, on the date of transfer, December 31, 2008), corresponds to the pension liability for monthly pension payments, shares and pension bonds; the amounts tied to health and education are within Ecopetrol's pension liability. The transferred resources, and their yields, cannot change destination or be returned to the Company until all pension liabilities have been fulfilled.

The detail of pension-related autonomous pension trust funds is comprised as follows:

	As of	f December 31, 2013	As of December 31, 2012		
Consorcio Ecopensiones 2011	\$	3,007,450	\$	2,855,165	
Porvenir S.A.		2,525,046		2,609,500	
Consorcio Pensiones Ecopetrol 2011		2,058,602		2,151,960	
Unión temporal Skandia-HSBC		1,813,095		2,142,634	
Consorcio Bogotá-Colpatria-Occidente		2,045,683		2,106,805	
Total	\$	11,449,876	\$	11,866,064	

- (4) Includes, the value of royalties corresponding to the balance of Ecopetrol reserves, in the amount of \$19,740,624 (2012 \$27,222,901), calculated according to SEC-approved regulations. This heading also includes the inventories of products sold and materials pending delivery to clients in the amount of \$43,453 (2012 \$37,203); goods received in concession custody: Coveñas in the amount of \$41,660; Pozos Colorados in the amount of \$21,058; and Tumaco in the amount of \$6,083 (2012 \$41,660; \$21,058 and \$6,053, respectively) and investments of Black Gold administered by Ecopetrol for \$193,658.
- (5) Includes contracts pending for execution, in pesos, dollars and euros, updated at the TRM as of December 31, 2013 in the amount of \$12,917,756 and standby letters of credit guaranteeing contracts signed by Ecopetrol S.A. in the amount of \$1,084,975.

The financial closing for awarding two contingent guarantees to Refinería de Cartagena S.A. - Reficar by Ecopetrol was carried out on December 30, 2011. Such guarantees are part of the financial support granted by a group of Export Credit Agencies and by commercial banks for the project of expansion and modernization of Reficar. The financing structure is of the Finance Project type with a maximum repayment term of 14 years, counted as of the six months following the date of the project completion. For the project financing purposes, Ecopetrol granted to Reficar: i) contingent guarantee for the resources necessary to complete the project (US\$1,447 million equivalent to \$2,788,123 million at the TRM of December 31, 2013); and ii) a contingent guarantee for the payment of eventual amounts that could be needed by Reficar for the debt service between December 2013 and December 2014 (US\$249 million equivalent to \$479,781 million at the TRM effective at December 31, 2013).

(6) Equión has two lending-rate stand-by letters of credit, which total US\$4,583,280, and seek to guarantee, to the ANH, the fulfillment and execution of contracts No. 32 and 33 of the Ronda Caribe Sector, for the RC-4 and RC-5 Blocks.

Issuing entity: Helm Bank S.A.

Letter No.	Beneficiary	Purpose	Starting Date	Completion Date	A	mount in USD	A	mount in COP
T000127	Agencia Nacional de Hidrocarburos	To ensure compliance with Contract No. 32 of Ronda Caribe Sector -for RC-4 Block.	November 28, 2010	February 28, 2014	\$	2,230,800	\$	4,298,372,364
T000126	Agencia Nacional de Hidrocarburos	To ensure compliance with Contract No. 33 of Ronda Caribe Sector -for RC-5 Block.	November 28, 2010	February 28, 2014	\$	2,352,480	\$	4,582,829,038

The risk of these guarantees being disbursed remains low.

(7) Made up of the value of the actuarial calculation of monthly pension payments, shares and bonds as of December 31, 2013 plus the percentage of amortization of the 2010 reserve that arose from the change in the accounting principle for amortization. As of December 31, 2013 the amortizable reserve was 4%, equivalent to \$405,769.

The balance of the amortized actuarial liability is comprised as follows:

	As	of December 31, 2013	As	of December 31, 2012
Concept				
Actuarial calculation of the liability for monthly pension payments and pension bonds	\$	12,660,003	\$	12,539,982
Less - Actuarial calculation pending amortization		(405,769)		(809,596)
Amortized actuarial liability	\$	12,254,234	\$	11,730,386

The balance of pension - Related autonomous funds, the value of the actuarial reserve, and the amortized value of the pension liability for monthly payments are included in memorandum accounts.

The actuarial calculation was carried out by using a technical interest rate of 4%. The increase in salaries, pensions in cash and pensions in kind was calculated by using the average inflation rate as determined by the National Statistics Administration Department (from the Spanish *Departamento Administrativo Nacional de Estadística - DANE*), during the three years immediately preceding the calculation year.

As of December 31, 2013, 13,106 people were covered in the actuarial calculation, and 13,885 were covered in pension bonds.

(8) Includes the value of assets received in custody from Refinería de Cartagena S.A. in fulfillment of obligations acquired under the mandate contract signed between Ecopetrol and that Company to operate the refinery, namely: product inventories in the amount of \$358,351 (2012 - \$429,108); and property, plant and equipment in the amount of \$921,355 (2012 - \$957,197).

# (24) Revenues

The balance of revenues for the years ended December is as follows:

	2013			2012	2011		
National sales							
Mid-distillates	\$	11,582,902	\$	11,132,983	\$	9,742,346	
Gasoline		5,968,084		5,697,178		5,206,873	
Services		2,535,867		2,077,858		1,762,060	
Other products		1,738,288		2,100,780		2,019,225	
Crude		1,421,620		572,969		230,459	
Natural gas		1,255,092		1,108,164		1,212,310	
Asphalts		392,010		369,768		402,923	
L.P.G. and propane		375,358		492,440		727,111	
	\$	25,269,221	\$	23,552,140	\$	21,303,307	
Recognition of price differential (1)		938,678		809,773		2,251,322	
	\$	26,207,899		24,361,913	\$	23,554,629	
Foreign sales							
Crude	\$	35,726,701	\$	35,884,535	\$	33,418,191	
Fuel oil		4,463,237		4,283,814		4,447,657	
Plastic and rubber		857,397		-		-	
Natural Gas		586,687		563,412		508,066	
Propylene		272		-		-	
Agricultural products		-		-		-	
Gasoline and turbo fuel		789,071		1,182,367		1,663,222	
Diesel		1,195,704		1,223,159		1,482,625	
Other products		601,746		1,352,802		893,124	
	\$	44,220,815	\$	44,490,089	\$	42,412,885	
	\$	70,428,714	\$	68,852,002	\$	65,967,514	

(1) Corresponds to the application of Decree 4839 of December 2008, which defined the procedure for price differentials (value generated by the difference between parity price and regulated price which can be positive or negative).

# (25) Cost of Sales

The balance of cost of sales for the years ended December 31, is as follows:

		2013	2012		2011
Variable cost:	-				
Services contracted in association	\$	603,011	\$	512,138	\$ 445,203
Hydrocarbon purchases - ANH (1)		7,808,844		8,646,762	8,048,981
Imported products (2)		11,862,265		9,447,041	8,840,450
Purchase of crude in association and concession contracts		5,805,854		7,207,707	6,701,500
Amortization and depletion		3,202,007		3,000,758	2,642,132
Hydrocarbon transportation services		1,610,287		1,106,649	938,036
Purchases of other products and gas		598,035		618,715	673,545
Electric Power		308,927		306,942	257,110
Processing materials		310,657		276,550	263,329
Volume adjustments and other allocations		(72,837)		(296,434)	(387,046)
Depreciation by production units		94,760		105,805	 125,482
	\$	32,131,810	\$	30,932,633	\$ 28,548,722
Fixed costs:					
Services contracted in association	\$	1,691,656	\$	1,519,143	\$ 1,340,366
Maintenance		2,240,543		1,921,008	1,569,669
Labor costs		1,260,436		1,095,495	1,001,102
Depreciation		1,828,228		1,886,620	1,809,546
Contracted services		1,356,452		1,127,284	863,442
Non capitalized project costs		469,926		561,416	461,757
Operating materials and supplies		364,554		388,673	329,055
Tax and contributions		625,272		401,576	387,788
Amortization of deferred charges, intangible assets and insurance policies		27,727		171,902	73,070
General costs		450,922		402,672	251,327
Hydrocarbon transportation services		2,257		-	-
Amortization of the actuarial calculation for health and education		104,499		127,086	68,740
	\$	10,422,472	\$	9,602,875	\$ 8,155,862
	\$	42,554,282	\$	40,535,508	\$ 36,704,584

(1) Corresponds to Ecopetrol's crude oil and gas purchases from the ANH derived from domestic production, both by the Company in direct operations and by third parties.

(2) Corresponds mainly to Ecopetrol S.A. in the amount of \$8,882,280 for the importation of very low-sulphur diesel, to improve the quality of local products and diluting agents to help transport heavy crude. It also includes purchases from Reficar in the amount of \$2,008,101 (imported Acem, Gasoline Ron 95, Gasoline Ron 92 and Diesel); Propilco in the amount of \$945,463 and Comai in the amount of \$26,421 (titanium dioxide and polyethylene).

# (26) Operating Expenses

The balance of operating expenses for the years ended December 31 is as follows:

	2013		2012	2011
Administration				
Amortizations (1)	\$ 344,868	\$	313,344	\$ 283,304
Labor expenses	412,586		321,643	269,828
General expenses	221,666		172,735	203,431
Depreciation	35,169		35,233	24,979
Rentals and leases	16,025		12,441	10,878
Amortization of the actuarial calculation for health and education	1,770		8,896	4,715
Maintenance	6,794		5,756	5,294
Taxes	63,827		4,932	216,488
Loss in goodwill withdrawal	353,012		-	-
	\$ 1,455,717	\$	874,980	\$ 1,018,917
Operation and projects				
Project expenses (2)	\$ 183,784	\$	237,280	\$ 293,478
Exploration expenses (3)	1,355,007		1,419,530	959,938
General expenses	921,949		678,022	570,321
Labor expenses	231,454		277,430	190,166
Taxes	924,620		957,407	834,011
Transportation via gas pipeline	17,287		136,573	122,780
Maintenance	8,485		19,018	5,488
Gas supply default	(29)		764	2,511
Provisions and provisions recovery (4)	650,660		318,629	141,137
Amortizations	-		6	1,058
Previous periods, net (5)	50,189		(124,167)	(49,591)
Audit installment	95,062		55,786	49,884
Loss of fuel	100,857		83,039	78,816
Contributions and donations	44,661		39,293	-
	\$ 4,583,986	\$	4,098,610	\$ 3,199,997
	\$ 6,039,703	<u>\$</u>	4,973,590	\$ 4,218,914

(1) During 2013 at Ecopetrol S.A. the amount of \$282,400 (2012 - \$291,884), was amortized corresponding mainly to the goodwill of the following companies: Propilco, Ocensa, Hocol, Andean, Offshore International Group and Equión; and Reficar in the amount of \$43,670 and Equion in the amount of \$10,554 for software licenses amortization.

- (2) Project expenses corresponds mainly to the consulting of acquisition projects with the Colombian Institute of Petroleum Directorate Effectiveness Unit in Ecopetrol in the amount of \$85,835; administration of projects in the Administrative Shared Services Center and the Colombian Institute of Petroleum Management in the amount of \$43,283.
- (3) Exploration expenses during 2013 correspond to feasibility studies in the amount of \$95,853; G&G studies in the amount of \$12,198; non-capitalized items for projects in the amount of \$199,409; dry wells by \$27,704; and seismic studies in the amount of \$201,193 (offshore \$57,654).

# (4) The detail of operation provisions for the years ended December 31 is as follows:

	2013		2012		2011
Operation Provisions					
Property, plant and equipment	\$ 122,514	\$	315,627		41,948
Investment portfolio	31,681		87,186		8,505
Inventory of products and materials	18,703		14,459		32,423
Legal proceedings	113,194		593,028		330,468
Transfer of pension liabilities and others	833,248		23,087		393,902
	\$ 1,119,340	\$	1,033,387	\$	807,246
Recovery of operation provisions					
Property, plant and equipment	\$ 67,999	\$	171,102	\$	46,019
Inventory of products and materials	5,254		11,966		3,263
Investment portfolio	2,717		225		365
Legal proceedings	307,493		259,450		229,345
Other	85,217		272,015		387,117
	\$ 468,680	\$	714,758	\$	666,109
Net	\$ 650,660	\$	318,629	\$	141,137

(5) The detail of income and expenses from previous years, net for the years ended December 31, is as follows:

	2013		2012		2011
Income previous years:					
Other	\$ (10,646)	\$	77,596	\$	93,986
Fixed assets	7,708		2,785		-
Expenses recovery	469		182		13,031
	\$ (2,469)	\$	80,563	\$	107,017
Expenses previous years					
Losses in subsidiaries	\$ -	\$	-	\$	16,460
General expenses	15,374		(16,104)		-
Expenses non-capitalized projects	-		(36,135)		-
Interests	6,959		-		1,327
Depreciation of fixed assets	24,549		-		(52,761)
Dry wells	838		2,192		69,070
Royalties adjustment	-		6,443		23,330
	\$ 47,720	\$	(43,604)	\$	57,426
Net	\$ 50,189	\$	(124,167)	\$	(49,591)

## (27) Financial Income (Expenses), Net

The detail of financial income (expenses), net for the years ended December 31 is as follows:

	2013	2012	2011
Income			
Foreign exchange gain (1)	\$ 3,219,704	\$ 4,087,029	\$ 7,783,658
Equity method earnings	120,060	125,474	141,647
Dividends in cash	66,635	32,541	10,135
Yields and interest	461,303	383,795	193,087
Hedging transactions (2)	2,847	20,906	88,317
Others	8,328	5,647	5,144
Investment portfolio valuation earnings	59,609	178,076	100,373
	\$ 3,938,486	\$ 4,833,468	\$ 8,322,361
Expenses:			
Foreign exchange loss (1)	\$ 3,201,732	\$ 4,396,159	\$ 7,819,025
Interests	592,643	581,597	415,222
Hedging transactions (2)	14,148	4,253	890,008
Other minor expenses	84,310	19,092	57,621
Equity method loss	-	197	372
Administration and issuance of securities	 -	 59	 44,415
	\$ 3,892,833	\$ 5,001,357	\$ 9,226,663
Net	\$ 45,653	\$ (167,889)	\$ (904,302)

(1) The accumulated loss due to the exchange rate differences as of December 2013 was \$17,972 (December 2012 - \$309,130), mainly due to the devaluation of the Colombian peso of 8.97%. The accumulated revaluation of the exchange rate as of December 2012 was of 8.98%. As of December 2011 there were an income of \$35,367 as a result of accumulative devaluation of 1.50%.

(2) The results of hedging transactions as of December 31, 2013 correspond to those derived from the exchange rate in Ocensa in the amount of (\$7,466), Hocol in the amount of (\$4,377) and Ecopetrol in the amount of \$542.

### (28) Pension Expenses

The detail of pension expenses for the year ended December 31, is as follows:

	2013		2012		2011
Amortization of actuarial calculation and pensions	\$ 196,747	\$	688,693	\$	443,890
Health care services	226,643		204,269		205,928
Education services	55,347		55,493		56,480
	\$ 478,737	\$	948,455	\$	706,298

#### (29) Inflation gain

Corresponds to the net amortization of the deferred monetary correction in the amounts of \$155, \$97,663 and \$21,836 for 2013, 2012 and 2011, respectively.



## (30) Other Income (expenses) net

The detail of other income (expenses), net for the years ended December 31, is as follows:

	2013		2012		2011
Other income:					
Recovery of expenses	\$	285,723	\$	61,443	\$ 127,580
Other minor income		221,361		132,714	65,850
Deferred BOMT income		130,690		125,542	129,148
Earnings from the sale of materials and property, plant and Equipment		111,760		5,052	9,443
Recovery of exploration expenses		-		23,722	25,543
Compensation received		14,326		19,512	10,045
Income from services		20,792		18,551	6,720
Recovery of services to associates		-		4,743	219,952
Income from ceded rights		73,494		725	30,396
	\$	858,146	\$	392,004	\$ 624,677
Other expenses:					
Other minor expenses	\$	241,927	\$	274,897	\$ 246,180
Gas pipeline availability under BOMT contracts		102,819		108,134	141,174
Loss from fixed assets write-off		32,993		1,495	 51,143
	\$	377,739	\$	384,526	\$ 438,497
	\$	480,407	\$	7,478	\$ 186,180

# (31) Contingencies

#### **Ecopetrol**

The following is a summary of the most significant legal proceedings with claims above \$10,000 million pesos, for which allowances have been recognized, in accordance with the evaluations of the Company's internal and external advisors, as of December 31, 2013 and December 31, 2012:

Proceeding	Allowance Amo as of December 2013		Allowance Amount as of December 31, 2012	
Municipality of Arauca	Class action suit. Contributions to the solidarity and electric-power-generation revenues redistribution fund, pursuant to Act 142 of 1994.	\$ 28	3,010	\$ 283,010
Municipalities of Aguazul, Tauramena	Class action suit. Contributions to the solidarity and electric-power-generation income redistribution fund, pursuant to Act 142 of 1994.		-	220,044
Association Contract	Class action suit from Luis Enrique Olivera Petro against Ecopetrol, the Nation, the Ministry of Mines and others, on the extension of the Garcero association contract.	15:	5,184	155,184
Offshore Exploration and Production, LLC	International Arbitration Court - In the framework of the purchase of Offshore International Group, the Seller (Offshore Exploration and Production LLC) filed a lawsuit to the Buyers (Ecopetrol and KNOC) in an international arbitration court before the International Center of Dispute Resolution, seeking to establish the liability limits acquired and established in the Purchase Agreement, in order to reject the claims and compensation requirements that Ecopetrol and KNOC have submitted to the Seller. Ecopetrol and KNOC filed a counterclaim lawsuit.	2	3,122	_
16 Claims Salary Impact - saving - stimulus suit	Apply the salary impact to the amounts paid under the saving stimulus scheme and consequently reassess fringe benefit payments (legal and extralegal) and monthly pension payments, from the date at which Ecopetrol S.A. began recognizing it.	\$ 1	3,689	\$ 18,689

As of December 31, 2013, the balance of the allowance for legal proceedings amounts to \$516,446 (2012 - \$770,922).

#### **Other companies in the Group**

The following is a summary of the most significant legal proceedings of other companies in the Group as of December 31, 2013 and 2012.

Group Company Proceeding Suit		Suit	Allowance amount December 31, 2013	Allowance amount December 31, 2012
Refinería de Cartagena S.A.	Subsequent suspension of a service contract to provide maintenance	Contractual action	\$ 100	\$ -
Refinería de Cartagena S.A.	Class action suit – pro-Culture stamp	Lower court - Awaiting decision.	_	166
Refinería de Cartagena S.A.	Class action suit –Contribution for power self-generation	Lower court – Beginning evidentiary phase.	_	154
Oleoducto de los Llanos ODL	Administrative investigation before the Superintendence of Corporations	Appeal for reversal of the Resolution issued by the Superintendence of Corporations, pursuant to which the Company received a sanction for late presentation of Form No. 13 for investments over assigned capital.	-	3,587
Hocol S.A.	Special appeal in cassation, Sole risk San Jacinto, La Hocha Contract	The appeal was admitted in April and the applicant was transferred. Hydrocarbon Services fired the appeal in cassation. In September, the Company presented the respective appeal. It is awaiting decision.	1.500	1,500
Hocol S.A.	Regular / Labor	Resolved favorably by the Court. The applicant presented an appeal on the grounds that the amount taken into account for the claim did not match the sentence. The Company ordered the main sentence to be paid by the pension fund, in the amount set by the Court; the proceeding is awaiting decision regarding the liquidation of payment.	1,040	1.040
Hocol S.A.	Regular/Labor	Through which the Court declared that the work accident suffered by claimant Blanco Motta was the fault of the employer, San Antonio Internacional, sentencing the Company to pay full compensation for damages to the applicant and other claimants – family members	1,040	1,000
Hocol S.A.	Regular/Labor	Sentence declaring that in the events of the work accident that took place on July 21, 2008, in which Mr. Oswald Andrade Sánchez lost his life, there was Employer culpability on the part of Profesionales Técnicos S.A.S., and declaring the other defendants, Hocol S.A., Héctor Ramón Castañeda Mayor and Hugo Arenas Parrado joint and severally liable for payment.	\$ 643	\$ 643

## (32) Commitments

#### Ecopetrol S.A. Gas Supply Contracts

In addition to existing contracts, the Company has entered into new gas sale or supply contracts with third parties, such as, Gas Natural S.A. E.S.P., Gecelca S.A. and Empresas Públicas de Medellín E.S.P. At June 2013, Ecopetrol had sold an average of 541.98 GBTUD in the amount of \$818,263 (2012 - \$1,519,631) (including exports).

### Ecopetrol S.A. and ODL Finance S.A. Ship or Pay Contracts

Ecopetrol S.A. and ODL Finance S.A. have signed the following Ship or Pay contracts: i) the first contract is an agreement that supports the five-year debt obligation (Financial Tariff) with Grupo Aval. All payments are collected in a trust, from which the debt amortization payments are made. This contract was replaced by a new one, subscribed in May 2010, for a seven-year term, to reflect the new terms agreed with Grupo Aval, and ii) the second contract backs a securitization process (securities-related autonomous trust) for a seven-year term. The securities are administered from their issuance date by an autonomous trust fund structured for that purpose, to which the rights for invoicing, collecting and paying the securities have been assigned.

Under the first ship or pay contract, ODL Finance S.A. is committed to transporting 75,000 barrels of crude a day during the two-year grace period for the facility, and 90,000 barrels of crude oil per day during the subsequent five years. Under the second contract, ODL Finance S.A. is committed to transport 19,500 barrels of crude during the first phase of the construction project (which began operations in September 2009) and 39,000 barrels of crude oil a day from the beginning of the second phase, which took place in the first quarter of 2010.



#### Bicentenario Ship or Pay Contract for Crude Oil Transportation

In order to finance the construction Stages 0 and 1 of the Bicentenario oil pipeline, crude oil transportation contracts were signed, creating the obligation on the part of the respective shareholder or affiliate to ship crude oil under its ownership: (i) from the Araguaney station to Coveñas, (ii) under the 'ship or pay' modality, and (iii) up to the capacity of the shareholder, determined by its share in Bicentenario, which will depend on the contracted capacity of all Bicentenario's shareholders and/or affiliates, and which shall not be less than 110,000 bpcd.

In exchange for the shipping service, the shareholder or its affiliate must pay a fixed monthly fee, even if no barrels at all are shipped, from one of the following dates, whichever comes first: (i) The date at which the oil pipeline begins operation or (ii) 12 months from the date of the first disbursement of the syndicated loan, namely July 5, 2013. The right to receive the fee under the ship or pay modality was assigned to an autonomous trust created for the purpose of administrating and making payments.

The contracts will initially be in effect from the date of the first payment of the fee, or the date of the beginning of service, whichever takes place first, and will end on either (a) 12 years after the beginning of the period, or (b) the day on which all of the obligations under the contract have been discharged, whichever comes last. Once the above period has been completed, the contract will be in effect for an additional period of 20 years.

#### Hocol S.A.

On May 2013, Hocol S.A. and Surtigás S.A. E.S.P. signed a "Take or Pay" contract for gas production from Bonga and Mamey field. Hocol as the seller has signed a guarantee in the amount of US\$32,700,000 in favor of Surtigás, in order to comply with the obligations under the contract. This guarantee must be in effect during the term of the contract or until the Energy and Gas Regulatory Commission "CREG" (from the Spanish Comisión Reguladora de Energía y Gas) approve all the investments required to expand the capacity of the transportation system of the Atlantic coast in the Mamey, San Mateo, Sincelejo and Cartagena stretches. The expiration date of guarantee is November 30, 2014 (second year) and according to the contract it should be renewed and updated thirty days before its expiration and have a term of one year. Hocol should recognize no liability associated with this transaction.

In addition, the company has 2 bank guarantees of US\$34,253,000 and 24 Letters of Credit of US\$51,662,671, to ensure the various commitments that Hocol has with the National Hydrocarbons Agency (ANH) in exploration and production contracts. These guarantees have an effective date between 2014 and 2016.

#### Ecopetrol del Perú letters of guarantee

Article 21 of the Organic Act of Hydrocarbons of Perú requires that:

"For all Contracts, each period of the exploration phase must feature a mandatory minimum work program. Each of said programs shall be guaranteed by a bond, the amount of which shall be agreed with the Contracting Party, and which shall be joint and several, unconditional, irrevocable, automatically enforced in Perú, without benefit of discussion, and issued by a Financial System entity that is duly qualified and domiciled in the country."

Pursuant to said Law, Ecopetrol del Perú maintains a series of guarantee letters in effect to guarantee the Company's undertakings to fulfill the mandatory minimum work programs at the various sup-stages of exploration of the various oil lots provided in the following list:

#### ECOPETROL DEL PERÚ S.A. GOODS AND AMOUNTS DELIVERED (Expressed in USD)

	Detail			Amount Of				
				Expiration		Letter Of	Participation	
Starting Date	Number	Description	Beneficiary	Date		Guarantee	%	USD
07/06/2010	CF No. 00110586 50 98001434	License Contract - Lot 117	INTERBANK	10/30/2013	\$	1,400,000	25%	\$ 350,000
	CF No. 00110586 52							
08/24/2011	980018597	License Contract - Lot 101	SCOTIABANK PERU SAA	03/15/2014		1,521,850	30%	456,555
	CF No. 00110586 52		MINISTERIO DE ENERGIA Y					
12/28/2012	980024342	License Contract - Lot 158	MINAS	12/25/2013		66,507	100%	66,507
	CF No. 00110586 55							
12/28/2012	980024343	License Contract - Lot 134	SCOTIABANK PERU SAA	02/10/2014		99,760	45%	44,892
	CF No. 00110586 52							
10/02/2013	980027168	License Contract - Lot 109	PERUPETRO S.A.	03/26/2015	\$	2,100,000	30%	630,000
TOTAL LETTERS OF G	UARANTEE							\$ 1,547,954

## (33) Presentation

Certain line items from the financial statements as of December 31, 2012 and 2011 were reclassified in order to make the presentation of such financial statements comparable to that of the financial statements as of December 31, 2013.

# (34) Subsequent Events

# Dry well

As disclosed in note xiv. Ecopetrol charged to expense an amount of \$110,677 of capitalized exploratory cost regarding the Logan #1 dry well declared during first quarter of 2014.



### (35) Differences between Colombian Governmental Entity accounting principles and U.S. GAAP

The Company's consolidated financial statements are prepared in accordance with Colombian Government Entity GAAP (RCP). These principles and regulations differ in certain significant aspects from accounting principles generally accepted in the United States of America (U.S. GAAP), and therefore this note presents reconciliations of net income and shareholders' equity determined under Colombian Government Entity GAAP to those same amounts as determined according to U.S. GAAP. Also presented in this note are those disclosures required under U.S. GAAP but not required under Colombian Government Entity GAAP.

A) Reconciliation of net income attributable to Ecopetrol:

The following table presents the reconciliation of consolidated net income under Colombian Government Entity GAAP to consolidated net income under U.S. GAAP attributable to Ecopetrol for the years ended December 31, 2013, 2012 and 2011:

			2013		2012		2011
	Consolidated net income under Colombian Government Entity GAAP	\$	13,106,503	\$	14,778,947	\$	15,452,334
i.	Investment securities:		- , - ,	·	·····		- 3 - 3
	a. Unrealized gain (loss)		75,458		(45,199)		(224)
	b. Impairment		65,921		(34,657)		21,423
ii.	Investments in non-marketable securities:		, , , , , , , , , , , , , , , , , , ,				í í
	a. Equity method		66,558		(109,749)		(27,825)
	b. Variable interest entity (VIE)		13		-		-
	c. Impairment		(51,664)		9		13,136
iii.	Derivatives		(3)		(4,709)		(768)
iv.	Exchange of non-monetary assets		-		-		425,521
v.	Deferred charges		476,091		493,159		(1,710,944)
vi.	Employee benefit plans		(40,439)		(157,893)		288,616
vii.	Provisions and contingencies		802,341		141,755		335,983
viii.	Assets and liabilities present value		(39,029)		(99,188)		126,861
ix.	Deferred income taxes		(685,981)		(392,593)		(647,139)
X.	Revenue recognition:		()		()		( , )
	a. Cost of sales – over and under deliveries		296,317		208,644		(449,225)
	b. Other income		28,242		6.100		70,658
xi.	Inflation adjustment		46,283		165,867		289,470
xii.	Inventories		30,289		(16,699)		76,126
xiii.	Lease accounting		(50,101)		(75,203)		(47,372)
xiv.	Property, plant and equipment:		() - )		()		( ) - )
	a. Interest		(480,513)		(607,200)		(122,177)
	b. Impairment		(188,615)		(43,609)		(120,225)
	Capitalized expenses		(53,987)		17,685		7,472
	Exchange difference		(17,953)		28,793		(5,769)
XV.	Depreciation, depletion and amortization		(33,177)		239,571		462,333
xvi.	Asset retirement obligations		(41,964)		(117,988)		(217,430)
xvii.	Equity contributions:		(1-3,2 0 1)		(,,)		(,,,)
	a. Incorporated institutional equity		9,113		14,195		29,446
	b. Reversal of concession rights contributed as capital		2,280		2,725		2,464
xviii.	Public offering cost and discount on issuance of shares		_,0		_,, _0		103,949
xix.	Indebtedness cost		1,385		(36)		(652)
XX.	Business combinations:		1,505		(50)		(002)
AA.	a. Goodwill		403,460		275,271		229,646
	b. Fair value adjustments to assets and liabilities acquired		-		273		89,387
xxi.	Non-controlling interest		147,177		227,514		(7,015)
xxii.	Cumulative translation adjustment		72,850		(199,863)		149,147
	Consolidated net income under U.S. GAAP attributable to Ecopetrol	\$	13,946,855	\$	14,695,649	\$	14,817,207
	Consolitation net income under U.S. OAAr autoutable to Ecopetion	¢	13,340,033	Φ	17,075,049	Φ	14,017,207



B) Reconciliation of shareholders' equity attributable to Ecopetrol:

The following table presents the reconciliation of Ecopetrol shareholders' equity under Colombian Government Entity GAAP to Ecopetrol shareholders' equity under U.S. GAAP attributable to Ecopetrol for the years ended December 31, 2013 and 2012:

			2013	 2012
	Consolidated shareholders' equity under Colombian Government Entity GAAP	\$	71,119,203	\$ 64,740,881
i.	Investment securities:		. , . ,	- ,- ,
	a. Unrealized gain		1,248,863	1,111,085
ii.	Investments in non-marketable securities:		, ,	, ,
	a. Equity method		(1,639,221)	(1,616,529)
	b. Variable interest entity (VIE)		320,600	320,587
	c. Valuation surplus		(1,282,966)	(1,144,221)
	d. Impairment		(104,699)	(53,036)
iii.	Derivatives		(2)	-
iv.	Exchange of non-monetary assets		1,135,175	1,135,175
v.	Deferred charges		(597,966)	(1, 140, 342)
vi.	Employee benefit plans		(2,177,494)	(3,229,160)
vii.	Provisions and contingencies		1,294,564	492,223
viii.	Assets and liabilities present value		(39,737)	(708)
ix.	Deferred income taxes		(3,722,236)	(2,729,013)
x.	Revenue recognition:			()))))
	a. Over and under deliveries - cost of sales		117,650	(177,762)
	b. Other income		27,112	(1,128)
xi.	Inflation adjustment		(3,022,227)	(3,071,684)
xii.	Inventories		(18,410)	(55,078)
xiii.	Lease accounting		190,612	240,726
xiv.	Property, plant and equipment:		,	
	a. Interest		(1,403,746)	(912,619)
	b. Impairment		(1,046,498)	(851,991)
	c. Revaluation of property, plant and equipment and public accounting effect	(	25,678,134)	(19,503,673)
	Capitalized expenses	,	(616,023)	(525,995)
	Exchange difference		(180,764)	(129,515)
XV.	Depreciation, depletion and amortization		5,357,117	5,402,349
xvi.	Asset retirement obligations		93,320	135,412
xvii.	Equity contributions:			
	a. Incorporated institutional equity		(28,613)	(37,499)
	b. Reversal of concession rights contributed as capital		(14,733)	(17,013)
xix.	Indebtedness cost		7,828	6,443
XX.	Business combinations:		ý	
	a. Goodwill		1,061,806	658,346
	b. Fair value adjustments to assets and liabilities acquired		(1,405,659)	(1,405,659)
xxi.	Non-controlling interest		2,775,478	1,184,780
xxii.	Cumulative translation adjustment		105,025	(1,177,030)
	Consolidated Ecopetrol shareholders' equity under U.S. GAAP	\$	41,875,225	\$ 37,648,352



C) Supplemental condensed consolidated financial statements under U.S. GAAP

1. Supplemental condensed consolidated balance sheets of the Company as of December 31, 2013 and 2012 in conformity with under U.S. GAAP are presented below:

		2013		2012
Assets				
Current assets:				
Cash and cash equivalents	\$	8,750,039	\$	7,972,335
Investments		- , ,		
Available for sale		743,987		1,331,665
Held to maturity		99,007		5,054
Trading securities		569,119		-
Accounts and notes receivable, net		8,139,457		6,076,043
Inventories		3,209,523		2,670,226
Prepaid expenses and other assets		593,550		326,760
Deferred income taxes		683,140		1,748,302
Restricted assets		123,031		32,440
Total current assets	\$	22,910,853	\$	20,162,825
Long term assets				
Investments				
Available for sale		1,748,497		5,595,745
Held to maturity		-		87,988
Equity method		1,119,981		1,014,251
Accounts and notes receivable, net		541,019		514,526
Restricted assets		605,915		546,246
Property, plant and equipment, net		41,041,256		32,997,535
Natural and environmental resources, net		20,698,651		17,730,899
Goodwill		1,095,047		1,264,470
Deferred charges and other assets		1,018,401		1,032,330
Deferred income taxes		405,840		102,284
Capital lease		502,456		470,233
Total assets	\$	91,687,916	\$	81,519,332
Liabilities and shareholders' equity				
Current liabilities:				
Financial obligations	\$	759,703	\$	970,479
Accounts payable and related parties		8,141,818		7,233,313
Taxes payable		2,975,099		3,738,483
Dividends Payable		1,313,596		3,919,102
Labor and pension plan obligations		289,629		256,930
Estimated liabilities and provisions		2,047,490		1,564,562
Capital lease liability		126,695		109,000
Other short-term liabilities		25,170		-
Total current liabilities	\$	15,679,200	\$	17,791,869
Financial obligations, long-term		21,192,120		12,784,167
Accounts payable, long-term		56,230		6,173
Capital lease liability		772,273		593,144
Taxes payable		512,099		534,078
Pension plan obligation and other labor obligations, long-term		6,459,947		7,304,395
Estimated liabilities and provisions		2,020,030		2,322,280
Other long-term liabilities		305,460		100,426
Total long term liabilities		31,318,159		23,644,663
Total liabilities		46,997,359	_	41,436,532
Shareholders' equity of Ecopetrol		41,875,226	_	37,648,352
Non-controlling interest		2,815,331		2,434,448
Total equity	\$	44,690,557	\$	40,082,800
Total liabilities and shareholders' equity	\$	91,687,916	\$	81,519,332
- the matrice and share conducts equity	<b>—</b>	71,007,710	Ψ	01,019,002

# 2. Supplemental consolidated statements of income

The consolidated statements of income of the Company for the years ended December 31, 2013, 2012 and 2011 in conformity with under U.S. GAAP are presented below:

		2013		2012		2011
Revenue:						
Local sales	\$	26,425,495	\$	24,918,476	\$	23,109,208
Foreign sales		42,007,150		41,948,661		39,606,607
Total revenue		68,432,645		66,867,137		62,715,815
Cost of sales		40,173,040		38,353,685		33,519,507
Gross income		28,259,605		28,513,452		29,196,308
Operating expenses:						
Administration		1,457,994		2,057,796		3,826,298
Selling and projects		3,481,675		2,898,693		1,696,223
Operating income		23,319,936	_	23,556,963		23,673,787
Non-operating income, net		(58,573)		(1,143,481)		(217,102)
Income before income tax		23,261,363		22,413,482		23,456,685
Ta a sur a dana						
Income tax: Current income tax		8,291,571		7,095,874		7,501,002
Deferred income tax		483,248		430,114		898,084
		8,774,819		7,525,988		8,399,086
Net income		14,486,544		14,887,494		15,057,599
Less: Net income attributable to non-controlling interest		(539,689)		(191,845)		(240,392)
Net Income attributable to Ecopetrol	\$	13,946,855	\$	14,695,649	\$	14,817,207
Earnings per share (Basic) attributable to Ecopetrol common shareholders		339.20	\$	357.41	\$	364.64
Weighted-average shares outstanding (Basic)	<b>3</b>	1,116,698,456	-	1,116,698,456	-	0,634,882,725
weighted-average shares outstanding (Dasie)	4	1,110,070,430	+	1,110,070,430	4	0,034,002,723

## 3. Supplemental consolidated comprehensive income

	 2013		2012		2011
Net income	\$ 14,486,544	\$	14,887,494	\$	15,057,599
Other comprehensive income, net of tax:					
Unrealized gain (loss) on investment securities, net of tax:	44,293		18,088		(529,956)
Unrealized actuarial gain (loss), net of tax	731,709		(57,500)		(990,918)
Translation gain (loss) adjustment	1,556,233		(943,192)		150,424
Total other comprehensive income	 2,332,236		(982,604)		(1,370,450)
Comprehensive income	 16,929,458		13,904,890		13,687,149
Comprehensive income attributable to the non-controlling interest	(627,438)		(141,999)		(271,039)
Comprehensive income attributable to Ecopetrol	\$ 16,191,692		13,762,891	\$	13,416,110

A reconciliation of accumulated other comprehensive income attributable to Ecopetrol, including the related income tax effects, is presented below:

	2013						
	Before-Income Tax Amount		Income Tax (Expense) Benefit			t of Income x Amount	
Unrealized gain on securities available for sale	\$	1,239,347	\$	1,457	\$	1,240,804	
Pension liability – net unamortized actuarial gain (loss)		(3,111,731)		1,026,871		(2,084,860)	
Cumulative translation adjustment		(7,144)		-	_	(7,495)	
Other comprehensive income (loss)	<u>\$</u>	(1,879,528)	\$	1,028,326	\$	(851,552)	
	2012						
				Income Tax			
	<b>Before-Income</b>			(Expense)		Net of Income	
	T	ax Amount		Benefit	Tax Amount		
Unrealized gain (loss) on securities available for sale	\$	1,242,990	\$	(46,437)	\$	1,196,553	
Pension liability – net unamortized actuarial gain (loss)		(4,203,835)		1,387,265		(2,816,570)	
Cumulative translation adjustment		(1,476,022)		-		(1,476,022)	
Other comprehensive income (loss)	\$	(4,436,867)	\$	1,340,828	\$	(3,096,039)	
				2011			
				Income Tax			
	<b>Before-Income</b>		Before-Income (Expense)		Net of Income		
	Ta	ax Amount		Benefit	Ta	x Amount	
Unrealized gain (loss) on securities available for sale	\$	1.197.304	\$	(18,718)	\$	1,178,586	
Pension liability - net unamortized actuarial gain (loss)	ψ	(4,118,015)	φ	1,358,945	φ	(2,759,070)	
Cumulative translation adjustment		(582,797)		-		(582,797)	
Other comprehensive income (loss)	\$	(3,503,508)	\$	1,340,227	\$	(2,163,281)	

The following table explains the reclassifications out of Accumulates Other Comprehensive Income for the period ended December 31, 2013, 2012 and 2011

# Unrealized Gains and Losses on available-for-sale

	Securities					
	 2013	2012		2011		
Beginning Balance	\$ 1,196,553	\$	1,178,586	\$	1,708,453	
Other Comprehensive income before reclasifications	 180,951		49,918		(494,408)	
Amounts reclassified from accumulated other comprehensive income (a)	 (136,701)		(31,951)		(35,459)	
Net current-period other comprehensive income	 44,250		17,967		(529,867)	
Ending Balance	\$ 1,240,803	\$	1,196,553	\$	1,178,586	

(a) Affected line item in the statement where net income is presented: Realized gain / (loss) on sale of securities.

4. Supplemental condensed consolidated statements of cash flows

The statements of cash flows of the Company for the years ended December 31, 2013, 2012 and 2011 under U.S. GAAP are presented below:

		2013		2012		2011
Cash flows provided by operating activities:	¢	10.046.055	<i><b></b></i>	14 605 640	<i>ф</i>	14015005
Net income	\$	13,946,855	\$	14,695,649	\$	14,817,207
Adjustments to reconcile net income to cash provided by operating activities:		520 (90		101.945		240.202
Non-controlling interest Equity method in non-marketable securities		539,689		191,845		240,392
Depreciation, depletion and amortization		(185,514) 4,849,461		(15,528) 4,977,009		(545,421) 5,109,820
Accretion Expense		177,545		148,593		133,796
Capitalized exploratory well costs charged to expense		939,419		278,254		378,959
Impairment		377,792		276,147		116,154
Provisions		(219,692)		431,293		481,191
Deferred income tax		483,248		428,559		898,084
Exchange gain (loss)		(84,783)		267,125		58,380
Loss on retirement of property, plant and equipment		19,678		64,385		418
Losses in retirement of natural and environmental resources		19,438		358,599		-
Other asset write-offs		-		-		300
Net changes in operating assets and liabilities:						
Accounts and notes receivable		(3,922,852)		(1,099,884)		(2,056,410)
Inventories		(472,975)		(423,073)		(642,888)
Deferred charges and other assets		(231,681)		(1,060,411)		76,208
Accounts payable and related parties		1,186,615		2,668,864		(235,888)
Taxes payable		(785,356)		(2,890,533)		3,857,834
Labor obligations		165,724		888,708		631,036
Estimated liabilities and provisions		(41,752)		(58,268)		(1,069,585)
Bargain purchase gain		-				(89,387)
Net cash provided by operating activities		16,760,859	-	20,127,333	-	22,160,200
Cash flows from investing activities:						
Payment for purchase of companies, net of cash acquired		-		-		(262,009)
Dividends received		73,501		32,541		61,900
Purchase of investment securities		(7,656,234)		(15,281,566)		(11,685,030)
Redemption of investment securities		11,933,853		14,458,913		12,019,376
Proceeds from sales of property, plant and equipment Investment in natural and environmental resources		(103,753) (6,278,439)		(5,872,995)		(4,637,881)
Additions to property, plant and equipment		(0,278,439) (7,226,860)		(9,350,074)		(10,100,158)
Net cash used in investing activities		(9,050,426)		(16,013,181)		(14,603,802)
Cash flows from financing activities:		(9,030,420)		(10,013,181)		(14,003,002)
Repayment of financial obligations		(3,207,566)		(1,203,309)		132,542
Proceeds from financial obligations		10,727,037		5,995,738		(217,383)
Proceeds from issuance of shares		82		171,582		2,499,062
Cash paid to acquire a non-controlling interest		-		(1,917)		(884,946)
Dividends paid		(14,570,466)		(8,419,331)		(5,907,021)
Net cash used in financing activities		(7,050,913)		(3,457,237)		(4,377,746)
Effect of exchange rate changes on cash		118,184		241,870		(15,847)
Net increase (decrease) in cash and cash equivalents		659,520		656,915		3,178,652
Cash and cash equivalents at beginning of year		7,972,335		7,073,550		3,910,745
Cash and cash equivalents at end of year	\$	8,750,039	\$	7,972,335	\$	7,073,550
	ф ==	0,700,007		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>—</b>	1,070,000
Supplemental cash flows information						
Cash paid during the year						
Interest	\$	581,541	\$	732,335	\$	509,177
Income taxes	\$\$	7,289,682	\$	8,320,779	\$	3,631,331
	<u> </u>	.,_0,,00_	4	0,020,777	4	
Non-cash transactions						
Liabilities assumed in business combinations	\$	-	\$	-	\$	382,456
Assets acquired through capital lease contracts	\$	8,460	\$	260,648	\$	72,784
Increase of natural and environmental resources through asset retirement obligations	\$	417,238	\$	(156,871)	\$	655,240
	¥	,==0		(100,071)	-	

Under Colombian Government Entity GAAP as in effect from 2007, some deposits with banks were considered as short-term investments since they produced yields and the Company has defined them to be used for specific purposes. Under U.S. GAAP, these deposits are considered cash and are valued at fair value. The amounts reclassified as of December 31, 2013 was \$119, as of December 31, 2012 there were not any amount reclassified and as of December 31, 2011 was \$487,922.



5. Supplemental consolidated statements of shareholders' equity.

The statements of shareholders' equity of the Company for the years ended December 31, 2013, 2012 and 2011 under U.S. GAAP as follows:

		Commo	on Stock													
		lillions Of hares	Value	Additional paid- in-capital	Co	mprehensive Income	Retained earnings	Сог	ccumulated Other mprehensive come (loss)	Ecopetrol's Equity	Non- Controlling Interest	Total Equity				
Balance at December 31, 2010		40,473	\$ 10,118,128	\$ 4,044,053			\$ 13,775,291	\$	(762,184)	\$ 27,175,285	\$ 309,351	\$ 27,484,636				
Business combination		-	-	-		-	-		-	-	1,425,702	1,425,702				
Acquired non-controlling interest		-	-	(792,440)		-	-		-	(792,440)	(92,506)	(884,946)				
Issuance of shares		644	161,047	1,963,687		-	-		-	2,124,734	374,328	2,499,062				
Distribution of dividends		-	-	-		-	(5,868,515)		-	(5,868,515)	-	(5,868,515)				
Comprehensive income:																
Net income		-	-	-	\$	15,057,599	14,817,207		-	14,817,207	240,392	15,057,599				
Other comprehensive income, net of tax:																
Unrealized earnings on investment securities, net of tax effect of																
\$7,086		-	-	-		(529,751)	-		-	(529,867)	116	(529,751)				
Actuarial (loss), net of tax effect of \$488,064		-	-	-		(990,918)	-		-	(990,918)	-	(990,918)				
Translation adjustment		-	-	-	\$	150,424	-		-	119,688	30,736	150,424				
Total other comprehensive income		-	-	-	-	(1.370.245)	-		(1,401,097)	-	-	-				
Comprehensive income		-	-	-	\$	13,687,354	-		-	-	-	-				
Balance at December 31, 2011	\$	41,117	\$ 10.279.175	\$ 5,215,300	_		\$ 22,723,983	\$	(2,163,281)	\$ 36,055,173	\$ 2,288,119	\$ 38.343.292				
Acquired non-controlling interest		-	-	-		-	(689)		-	(689)	(1,125)	(1,814)				
Other non-controlling interest		-	-	-		-	(103)		-	(103)	-	(103)				
Spin-off		-	-	-		-	-		-	-	(37)	(37)				
Issuance of Company shares		-	-	166,090		-	-		-	166,090	5,492	171,582				
Distribution of dividends		-	-	-		-	(12,335,009)		-	(12,335,009)	-	(12,335,009)				
Comprehensive income:																
Net income		-	-	-	\$	14,887,494	14,695,648		-	14,695,648	191,845	14,887,493				
Other comprehensive income, net of tax:																
Unrealized earnings on investment securities, net of tax effect of																
\$(27,734)		-	-	-		18,088	-		-	17,967	121	18,088				
Actuarial (loss), net of tax effect of \$27,522		-	-	-		(57,500)	-		-	(57,500)	-	(57,500)				
Translation adjustment		-	-	-		(943,192)	-		-	(893,225)	(49,967)	(943,192)				
Total other comprehensive income		-	-	-	\$	(982,604)	-		(932,758)	-	-	-				
Comprehensive income		-	-	-	\$	13,904,890	-		-	-	-	-				
Balance at December 31, 2012	\$	41,117	\$ 10,279,175	\$ 5,381,390	_	-	\$ 25,083,830	\$	(3,096,039)	\$ 37,648,352	\$ 2,434,448	\$ 40,082,800				
Other non-controling interest		-	-	-		-	14		-	14	-	14				
Issuance of Company shares		-	-	127		-	-		-	127	9,164	9,291				
Distribution of dividends		-	-	-		-	(11,964,960)		-	(11,964,960)	(255,719)	(12,220,679)				
Net income		-	-	-	\$	14,486,544	13,946,855		-	13,946,855	539,689	14,486,544				
Other comprehensive income, net of tax:					_											
Unrealized earnings on investment securities, net of tax effect of																
\$47.885			-	-		44.293	-		-	44.251	43	44.293				
Actuarial (loss), net of tax effect of \$(360,396)		-	-	-		731,709	-		-	731,709	-	731,709				
Translation adjustment		-	-			1,556,584			-	1,468,878	87,706	1,556,584				
Total other comprehensive income		_	-	-	S	2.332.586	-		2.244.837	-		,,				
Comprehensive income					5	16,819,130			2,2,007							
1	e	41 117	6 10 270 177	6 5 201 517		10,017,150	e 27.0(5.7.10	¢.	(951.202)	6 41 975 226	\$ 2.815.332	\$ 44.690.558				
Balance at December 31, 2013	3	41,117	\$ 10,279,175	\$ 5,381,517			\$ 27,065,740	\$	(851,202)	\$ 41,875,226	\$ 2,815,332	\$ 44,090,558				

D) Summary of significant differences between Colombian Government Entity GAAP and U.S. GAAP and required U.S. GAAP disclosures

# i. INVESTMENT SECURITIES

The Company's investments include both marketable and non-marketable securities. Under Colombian Government Entity GAAP, the Company classifies investment securities based on the form of their investment return, either as fixed-yield investment or as variable-yield investments. Fixed-yield investments generally represent debt securities and are initially recorded at cost with subsequent adjustments to fair value recorded in the income statement. Variable-yield investments generally represent equity securities or interests in other entities and are initially recorded at cost. Subsequent adjustments to fair value are made with increases in fair value resulting in an increase to equity, while decreases in fair value are charged to the income statement. Fair values are determined using quoted market prices, if and when available. In the absence of quoted market prices, these investments are recorded at Management's estimate of fair value using discounted cash flow techniques.

Under U.S. GAAP, the Company has classified its investment securities as held to maturity or available for sale, as defined in ASC 320-10-25, Accounting for Certain Investments in Debt and Equity Securities. Debt security investments for which the Company has demonstrated its ability and intent to hold until maturity are classified as held-to-maturity. Such investments are reported at amortized cost. Investments classified as available-for-sale are reported at fair value, with unrealized gains and losses reported, net of taxes, as a component of other comprehensive income. Investment held for trading securities are recorded at fair value with unrealized holding gains and losses included in net income.

In the event that any other than temporary impairment of the investments value occurs, the impairment loss is recorded in net income.

The Company's short-term and long-term investments at December 31, 2013, 2012, and 2011 consist of the following:

	Aggr	regated Fair		ss Unrealized		ss Unrealized	Gross Recognized		
As of December 31, 2013		Value	Holding Gains		Holding Losses		Losses		Cost Basis
Short-term Investments – available for sale securities:									
Securities issued or secured by Colombian government	\$	100,299	\$	130	\$	(825)	\$ -	\$	100,994
Securities issued or secured by financial entities		643,688		7		-	-		643,681
Other debt securities		-		-		-	-		-
Total short-term investments classified as available for sale		743,987		137		(825)	-	_	744,675
Long-term investments - available for sale securities:								_	
Securities issued or secured by Colombian government		110,195		-		(1,668)	-		111,863
Securities issued or secured by government sponsored enterprise (GSEs)		42,129		13		(29)	-		42,145
Securities issued or secured by financial entities		8,136		-		(1)	-		8,137
Securities issued or secured by the U.S. government		73,794		76		-	-		73,718
Other debt securities		9,286		-		(108)	-		9,394
Securities issued by mixed- economy governmental entities		1,504,957		1,243,959		-	-		260,998
Total long-term investments classified as available for sale		1,748,497		1,244,048		(1,806)	-		506,255
Total available for sale	\$	2,492,484	\$	1,244,185	\$	(2,631)	<u>s                                    </u>	\$	1,250,930

	Ag	gregated Fair Value	Gross Un Holding		Gross Unrealized Holding Losses	Net Carrying Amount
Short-term investments – held to maturity securities:						
Securities issued or secured by Colombian government	\$	98,039	\$	3,950	\$ -	\$ 94,089
Other debt securities		1,692		-	(3,226)	4,918
Total short-term investments classified as held to maturity		99,731		3,950	(3,226)	99,007
Total held to maturity	\$	99,731	\$	3,950	\$ (3,226)	\$ 99,007
		2(	2013		2012	2011
Short-term Investments – Trading securities:						
Other debt securities or mixed/economy governmental entities		\$	569,119	\$	- \$	-
Total Short-term Investments classified as Trading		\$	569,119	\$	- \$	

As of December 31, 2012	Aggregated Fair Value		Gross Unrealized Holding Gains					Gross Recognized Losses	Cost Basis
Short-term Investments – available for sale securities:			_						
Securities issued or secured by Colombian government	\$	844,764	\$	29,365	\$	(41)	\$	(27,899)	\$ 843,338
Securities issued or secured by government sponsored enterprise (GSEs)		92,536		-		(57)		-	92,594
Securities issued or secured by financial entities		197,933		989		(5)		(734)	197,683
Other debt securities		196,432		1,000		(90)		(967)	196,490
Total short-term investments classified as available for sale	\$	1,331,665	\$	31,354	\$	(193)	\$	(29,600)	\$ 1,330,105
Long-term investments – available for sale securities:							_		
Securities issued or secured by Colombian government		2,156,611		59,719		(1,059)		(17,363)	2,115,315
Securities issued or secured by government sponsored enterprise (GSEs)		1,545,377		3,466		(401)		(2,865)	1,545,178
Securities issued or secured by financial entities		18,112		362		-		(309)	18,059
Securities issued or secured by the U.S. government		44,265		18		-		-	44,247
Other debt securities		464,202		5,103		(283)		(2,466)	461,847
Securities issued by mixed- economy governmental entities		1,367,178		1,106,181		-		-	260,998
Total long-term investments classified as available for sale	\$	5,595,745	\$	1,174,849	\$	(1,743)	\$	(23,003)	\$ 4,445,644
Total available for sale	\$	6,927,410	\$	1,206,203	\$	(1,936)	\$	(52,603)	\$ 5,775,749

Short-term investments – held to maturity securities:	Aggregated Fair Value		Gross Unrealized Holding Gains		s Unrealized ling Losses	Carrying mount
Other debt securities	\$ 2,411	\$	-	\$	(2,642)	\$ 5,054
Total short-term investments classified as held to maturity	\$ 2,411	\$	-	\$	(2,642)	\$ 5,054
Long-term investments- held to maturity securities:	 					
Securities issued or secured by Colombian government	96,791		8,803		-	87,988
Total long-term investments classified as held to maturity	\$ 96,791	\$	8,803	\$	-	\$ 87,988
Total held to maturity	\$ 99,202	\$	8,803	\$	(2,642)	\$ 93,042

					Gross					
As of December 31, 2011			Gross Unrealized Holding Gains				R	Recognized Losses		Cost Basis
Short-term investments – available for sale securities:	-									
Securities issued or secured by Colombian government	\$	496,184	\$	17,151	\$	(279)	\$	(10,257)	\$	489,569
Securities issued or secured by government sponsored enterprise (GSEs)		48,672		270		-		-		48,402
Securities issued or secured by financial entities		293,111		1,613		(36)		(1,430)		292,964
Other debt securities		71,194		338		(10)		(136)		71,002
Total short-term investments classified as available for sale	\$	909,161	\$	19,372	\$	(325)	\$	(11,823)	\$	901,937
Long-term investments – available for sale securities:										
Securities issued or secured by Colombian government		806,961		22,083		(9,075)		(9,397)		803,350
Securities issued or secured by government sponsored enterprise (GSEs)		2,100,055		7,422		(1,374)		(56)		2,094,063
Securities issued or secured by financial entities		259,745		100		(1,818)		-		261,463
Securities issued or secured by the U.S. government		700,237		503		(16)		(60)		699,810
Other debt securities		208,334		631		(153)		-		207,856
Securities issued by mixed- economy governmental entities		1,401,506		1,140,507		<u> </u>		<u> </u>		260,999
Total long-term investments classified as available for sale	\$	5,476,838	\$	1,171,246	\$	(12,436)	\$	(9,513)	\$	4,327,541
Total available for sale	\$	6,385,999	\$	1,190,618	\$	(12,761)	\$	(21,336)	\$	5,229,478

	Aggregated Fair Value		 Unrealized			Carrying Amount
Short-term investments – held to maturity securities:						
Other debt securities	\$	3,477	\$ -	\$	(3,322)	\$ 6,798
Securities issued or secured by Colombian government		12,285	81		-	12,204
Total short-term investments classified as held to maturity	\$	15,762	\$ 81	\$	(3,322)	\$ 19,002
Long-term investments- held to maturity securities:						
Securities issued or secured by Colombian government		109,629	11,257		-	98,372
Total long-term investments classified as held to maturity	\$	109,629	\$ 11,257	\$	-	\$ 98,372
Total held to maturity	\$	125,391	\$ 11,338	\$	(3,322)	\$ 117,374



The maturities of fixed-income investments as of December 31, 2013 and 2012 are as follows:

### As of December 31, 2013

		Available	e for	Sale		Held to 1	Matur	ity
	Cost Basis			air Value	C	ost Basis	Fa	nir Value
Due in one year or less	\$	744,674	\$	743,987	\$	99,007	\$	99,731
Due in one to five years		506,256		1,748,497		-		-
Total	\$	1,250,930	\$	2,492,484	\$	99,007	\$	99,731

# As of December 31, 2012

		Availabl	e for	Sale		Held to 1	Maturity			
	Cost Basis Fair Value			C	ost Basis	Fair Value				
Due in one year or less	\$	1,330,105	\$	1,331,665	\$	5,054	\$	2,411		
Due in one to five years		4,070,503		5,205,708		87,988		96,791		
Due in five to ten years		375,141		390,037				_		
Total	\$	5,775,749	\$	6,927,410	\$	93,042	\$	99,202		

.. . . .

Amounts recorded in other comprehensive income in prior years realized on available for sale securities sold during 2013, 2012 and 2011 were:

	 2013	 2012	 2011
Losses	\$ 1,566	\$ 2,004	\$ 5,837
Gains	\$ 138,268	\$ 33,955	\$ 41,331

### Foreign exchange gains and losses on available for sale securities

Under Colombian Government Entity GAAP, changes in account balances resulting from variations in foreign currency exchange rates are reflected in the Company's net income. Under U.S. GAAP, any change in value of available-for-sale debt securities as a result of changes in foreign currency exchange rates is reflected in equity as required under the guidance in ASC 320-10-35. The amount reclassified from earnings under Colombian Government Entity GAAP purposes to other comprehensive income for U.S. GAAP purposes includes \$36,627, \$(112,060) and \$197,664 in 2013, 2012 and 2011, respectively that correspond to exchange rate differences.

# a. Unrealized gain (loss)

Available-for-sale securities in an unrealized loss position as of December 31, 2013 and 2012 are as follows:

### As of December 31, 2013

	Less than 12 months				12 Months	or Gr	eater					
	Unrealized						U	nrealized			Ur	realized
Descriptions of Securities	Fa	ir Value		Losses	Fa	air Value		Losses	F	air Value		Losses
Securities issued or secured by Colombian government	\$	90,089	\$	825	\$	110,195	\$	1,668	\$	200,284	\$	2,492
Securities issued or secured by financial entities		25,308		-		1,840		1		27,147		1
Securities issued or secured by government sponsored enterprise (GSEs)		-		-		24,470		29		24,470		29
Other debt securities		-		-		9,286		108		9,286		108
Total	\$	115,397	\$	825	\$	145,791	\$	1,806	\$	261,187	\$	2,630

#### As of December 31, 2012

	Less than 12 months				12 Months or Greater					Total			
			U	nrealized			U	nrealized			Un	realized	
Descriptions of Securities	Fair Value		Losses		Fair Value		Losses		Fair Value		Losses		
Securities issued or secured by Colombian government	\$	33,317	\$	41	\$	262,014	\$	1,059	\$	295,331	\$	1,100	
Securities issued or secured by financial entities		11,273		5		-		-		11,273		5	
Securities issued or secured by government sponsored enterprise (GSEs)		92,536		57		942,131		401		1,034,667		459	
Other debt securities		71,320		90		80,368		283		151,688		372	
Total	\$	208,446	\$	193	\$	1,284,513	\$	1,743	\$	1,492,959	\$	1,936	

# **Restricted Assets**

Under U.S. GAAP the Company classifies as restricted assets, those assets where their availability depends on a court decision, contractual or legal restrictions, such as cash, trust funds or investments. The detail of restricted assets as of December 31, 2013 and 2012 is as follows:

Concept	2013	2012
Investment securities	\$ 371,386	\$ 448,705
Specific destination funds	299,703	79,497
Cash	57,857	50,483
Total	<u>\$ 728,946</u>	\$ 578,685

In Specific destination funds the most significant items are resources intended to guarantee contractual obligations of our subsidiaries Equión \$3,409, ODL Finance \$7,378, Oleoducto Bicentenario \$111,481, Ocensa \$960 and Cenit \$20,210 related to the abandonment cost of Caño Limon pipelines.

Other significant restricted assets are related to Santiago de las Atalayas Fund which is detailed in the chart below:

Concept	2013	2012
Investments available for sale	\$ 371,387	\$ 424,213
Specific destination funds *	73,467	163
Cash	510	124
Total	\$ 445,364	\$ 424,500

\*This fund receives the coupons and principal payments of Santiago de las Atalayas investments in U.S. dollars.

The investments related to Santiago de las Atalayas at December 31, 2013 and 2012 consist of the following:

	Gross								
			Gross		Unrealized	Gross			
					Holding		Recognized		
F٤	air Value	Hol	ding Gains		Losses		Losses	C	ost Basis
				_					
\$	9,118	\$	23	\$	(45)	\$	-	\$	9,140
	16,064		-		(24)		-		16,088
	65,889		133		(15)		(133)		65,904
\$	91,071	\$	156	\$	(84)	\$	(133)	\$	91,132
	62,123		174		(1,272)		-		63,221
	162,130		22		(70)		-		162,178
	36,888		340		(1,273)		-		37,821
	19,175		-		(37)		-		19,212
\$	280,316		536		(2,652)		-		282,432
\$	371,387	\$	692	\$	(2,736)	\$	(133)	\$	373,564
		16,064 65,889 <b>\$ 91,071</b> 62,123 162,130 36,888 19,175 <b>\$ 280,316</b>	Fair Value         Hol           \$ 9,118         \$           16,064         65,889           \$ 91,071         \$           62,123         162,130           36,888         19,175           \$ 280,316	Aggregated Fair Value         Unrealized Holding Gains           \$ 9,118         \$ 23           16,064         -           65,889         133           \$ 91,071         \$ 156           62,123         174           162,130         22           36,888         340           19,175         -           \$ 280,316         536	Aggregated Fair Value         Unrealized Holding Gains           \$ 9,118         \$ 23           \$ 9,118         \$ 23           \$ 16,064         -           65,889         133           \$ 91,071         \$ 156           62,123         174           162,130         22           36,888         340           19,175         -           \$ 280,316         536	Aggregated Fair Value         Gross Unrealized Holding Gains         Unrealized Holding Losses           \$ 9,118         \$ 23         \$ (45)           16,064         - (24)         (5)           65,889         133         (15)           \$ 91,071         \$ 156         \$ (84)           62,123         174         (1,272)           162,130         22         (70)           36,888         340         (1,273)           19,175         - (37)         (37)           \$ 280,316         536         (2,652)	Aggregated Fair Value         Gross Unrealized Holding Gains         Unrealized Holding Losses           \$ 9,118         \$ 23         \$ (45)         \$ 16,064           65,889         133         (15)           \$ 91,071         \$ 156         \$ (84)         \$           62,123         174         (1,272)         \$           162,130         22         (70)         \$           36,888         340         (1,273)         \$           19,175         -         (37)         \$           \$ 280,316         536         (2,652)         \$	Aggregated Fair Value         Gross Unrealized Holding Gains         Unrealized Holding Losses         Gross Recognized Losses           \$ 9,118         \$ 23         \$ (45)         \$ - (24)           16,064         - (24)         - (15)           \$ 91,071         \$ 156         \$ (84)         \$ (133)           \$ 91,071         \$ 156         \$ (84)         \$ (133)           62,123         174         (1,272)         - (36,888         - (37)           19,175         - (37)         -         -           280,316         536         (2,652)         -	Aggregated Fair Value         Gross Unrealized Holding Gains         Unrealized Holding Losses         Gross Recognized Losses         Comparison Comparison           \$ 9,118         \$ 23         \$ (45)         \$ -         \$ (16,064         -         \$ (12)         \$         \$ (133)         \$           \$ 91,071         \$ 156         \$ (84)         \$ (133)         \$         \$           62,123         174         (1,272)         -         -           162,130         22         (70)         -         -           36,888         340         (1,273)         -         -           19,175         -         (37)         -         -           \$ 280,316         536         (2,652)         -         -

As of December 31, 2012	gregated ir Value	Gross nrealized lding Gains		Gross Unrealized Holding Losses		Gross Recognized Losses		Cost Basis
Short-term Investments – available for sale securities:	 	 	_				_	
Securities issued or secured by Colombian government	\$ 30,297	\$ 6,903	\$	(6)	\$	(6,896)	\$	30,296
Total Short-term Investments classified as available for sale	 30,297	 6,903		(6)	_	(6,896)		30,296
Long-term Investments – available for sale securities:								
Securities issued or secured by Colombian government	378,819	31,759		(7)		(6,555)		353,622
Other debt securities	15,098	106		-		-		14,992
Total Long-term Investments classified as available for sale	\$ 393,917	\$ 31,865	\$	(7)	\$	(6,555)	\$	368,614
Total Available for Sale	\$ 424,214	\$ 38,768	\$	(13)	\$	(13,451)	\$	398,910

The unrealized gains and losses of the restricted assets are recognized in other comprehensive income.

### b. Impairment

Impairment of investment securities are reported differently under Colombian Government Entity GAAP and U.S. GAAP. Under Colombian Government Entity GAAP, impairment is charged to income in the current period, but recoveries in value can be recorded up to the amount that was originally impaired. Under U.S. GAAP, other-than-temporary impairments should be charged to income in the current period and a new cost basis for the security is established. Subsequent increases in the cost basis of an impaired investment as a result of a recovery in fair value are included in other comprehensive income.

The Company has a policy under which they conduct periodic reviews of marketable securities to assess whether other-than-temporary impairment exists. A number of factors are considered in performing an impairment analysis of securities. Those factors include:

- a) The length of time and the extent to which the fair value of the security has been less than cost;
- b) The financial condition and near-term prospects of the issuer, including any specific events which influence the operations of the issuer (such as changes in technology that may impair the earnings potential of the investment, or the discontinuance of a segment of a business that may affect the future earnings potential); and
- c) The analysis as instructed in ASC 320-10-65-1, which includes the comparison of the fair value and the amortized cost, evaluates the Company's intention to sell the security. If it is more-likely-than-not, the company will be required to sell the security prior to recovery, including the existence of a credit loss.

The Company also takes into account changes in global and regional economic conditions and changes related to specific issuers or industries that could adversely affect these values.

Ecopetrol's marketable security portfolio consists only of debt securities, such as treasury investments, bonds, and commercial papers. For this reason, the Company has an internal policy to limit the ratings of their investments and issuers as follows:

	Short – Term	Long – Term
Credit Rating Agency	Credit Rating	Credit Rating
Standard & Poor's	A-1	A
Moody's Investors Services	P-1	A2
Fitch Ratings	F-1	А

The Company recognized impairments on its investment securities amounting to \$133, \$50,126 and \$116 in 2013, 2012 and 2011, respectively.

## ii. INVESTMENTS IN NON-MARKETABLE SECURITIES

# a. Equity Method and Valuation Surplus

Under Colombian Government Entity GAAP, equity securities for which prices are unquoted, or for which trading volume is lower, and the Company does not control the investee, are accounted for under the cost method and subsequently are valued by the equity method. Under the equity method, the Company accounts for the difference between its proportionate share of shareholders' equity of the investee and its acquisition cost, adjusted for inflation through 2001, in a separate valuation account in the assets and equity (valuation surplus), if the proportionate share of shareholders' equity of the investee is higher than its cost or as an allowance for losses, affecting net income, if the cost is higher than the proportionate share of shareholders' equity of the investee. Under this method, the Company only records dividends as income when received. From 2008 the Colombian Government Entity GAAP incorporated the concept of significant influence for the recognition of investments in associated entities and established the equity method to update these investments.

Under U.S. GAAP, an investment in a non-marketable equity security is recorded using the equity method when the investor can exercise significant influence over the investee, or the cost method when significant influence cannot be exercised. Under the equity method of accounting for U.S. GAAP the carrying value of such an investment is adjusted to reflect (1) the Company's proportionate share of earnings or losses from the investee and (2) additional investments and distributions of dividends. The Company's proportionate share of loss is reported in earnings however any dividends or additional investments are reported only as an adjustment of the carrying amount of the investment.

The differences between the application of the cost and the equity method under U.S. GAAP were:

- □ Reversal of valuations and allowances for losses recorded under Colombian Government Entity GAAP
- Reversal of inflation adjustments recorded under Colombian Government Entity GAAP
- □ Reversal of Goodwill amortization and impairment
- □ Inclusion of share of earnings or losses under U.S. GAAP, net of inter-company eliminations
- □ Inclusion of share in Other Comprehensive Income under U.S. GAAP
- □ Recognition of impairment under U.S. GAAP

The summary of the investments valued by the equity method for U.S. GAAP purposes is shown in the following table:

## For the Year Ended December 31, 2013

Company	Percentage of Voting Interest	Equity Calculated under U.S. GAAP	Equity Under Colombian GAAP	Assets Under Colombian GAAP	Liabilities Under Colombian GAAP	Net Income (Loss) Under Colombian GAAP	Investment Under U.S. GAAP Equity Method	Equity Method Accounting Adj (*)	Impairment Under U.S. GAAP	Total Equity Method Investment
Invercolsa S.A.	43.35%	\$ 252,973	\$ 621,319	\$ 622,105	\$ 785	\$ 51,644	\$ 109,664	s -	s -	\$ 109,664
Serviport S.A.	49.00%	15,525	14,938	47,222	32,284	2,511	7,607	-	-	7,607
Offshore International										
Group	50.00%	1,076,347	1,076,347	2,049,502	973,155	109,925	538,174	472,094	51,671	958,597
Ecodiesel S.A.	50.00%	52,976	53,353	137,384	84,031	22,765	26,488	-	-	26,488
Sociedad Portuaria de Olefinas	50.00%	1,022	1,299	1,518	219	198	511		_	511
Transgas de Occidente	50.0070	1,022	1,277	1,510	21)	170	511	-		511
S.A.	20.00%	149,189	211,622	308,655	97,024	12,525		(12,724)		17,114
							\$ 712,282	\$ 459,370	\$ 51,671	\$ 1,119,981

## For the Year Ended December 31, 2012

Company	Percentage of Voting Interest	Equity Calculated under U.S. GAAP	Equity Under Colombian GAAP	Assets Under Colombian GAAP	Liabilities Under Colombian GAAP	Net Income (Loss) Under Colombian GAAP	Investment Under U.S. GAAP Equity Method	Equity Method Accounting Adj (*)	Total Equity Method Investment
Invercolsa S.A.	43.35%	\$ 208,648	\$ 554,914	\$ 571,945	\$ 17,031	\$ 82,570	\$ 90,449	\$-	\$ 90,449
Serviport S.A.	49.00%	6,660	14,679	47,919	33,240	2,181	3,263	-	3,263
Offshore International Group	50.00%	914,845	914,845	1,794,451	879,606	122,287	457,422	433,516	890,938
Ecodiesel S.A.	50.00%	30,938	38,817	129,258	90,441	17,455	15,469	-	15,469
Sociedad Portuaria de Olefinas	50.00%	452	878	1,224	346	112	226	-	226
Transgas de Occidente S.A.	20.00%	127,912	206,382	356,244	149,862	7,285	25,582	(11,676)	13,906
							\$ 592,411	\$ 421,840	\$ 1,014,251

(\*) Represents the purchase price allocation adjustments

Concept	2013	2012
Fair value of property, plant and equipment	\$ (9,946)	\$ (8,847)
Goodwill	469,316	430,687
Total	\$ 459,370	\$ 421,840

The number of shares which the Company owns with respect to its investment in Invercolsa S.A. has been subject to a legal dispute with another Invercolsa shareholder. Lower court decisions had ruled in favor of both the Company and the other shareholder and a final court decision in January 2011 determined that 324 million shares, equivalent to 11.58% of the capital stock of Invercolsa should be returned to Ecopetrol. As a result Ecopetrol controls 43.35%. The dividends paid relating to the shares returned to Ecopetrol are still in dispute, as well as the ownership of shares constituting 8.53% of Invercolsa. The resolution of these matters is still pending.

# b. Variable Interest Entity (VIE)

Under U.S. GAAP, ASC 810-10-15-10 requires that consolidated financial statements include subsidiaries in which the Company has a controlling financial interest, i.e., a majority voting interest. However, application of the majority voting interest requirement to certain types of entities may not identify the party with a controlling financial interest because that interest may be achieved through other arrangements. Thus, the U.S. GAAP rules also require a Company to consolidate a variable interest entity if that company is the primary beneficiary of the VIE, with that has the power to direct the activities of the VIE that most significantly affect the entity's economic performance and will absorb a majority of the entity's expected losses, receive a majority of the entity's expected residual returns, or both. In determining whether it is a primary beneficiary of a variable interest entity, a company shall treat variable interests in that same entity held by the Company's related parties as its own interest. Under Colombian Government Entity GAAP, consolidated financial statements only include subsidiaries in which the Company has the majority voting interest.

In October 2009, the subsidiary Oleoducto de los Llanos Orientales (hereinafter "ODL") assigned its rights under a "Ship or Pay" contract for the completion of a securitization for the purpose of obtaining funds required to finish the second phase of the project, the refund of capital to the associates, and maintaining the capital structure initially agreed. The structure of this issuance was made through assets in a trust fund (hereinafter "Fideicomiso P.A. ODL - ECOPETROL") administered by Corficolombiana S.A., who has to pay the security holder on the due dates. Additionally, each month, the trust company must report to ODL income and expenses that are generated in this process and that are paid, if applicable, to ODL as advances.

Based on the ASC 810, ODL determined that it must consolidate Fideicomiso P.A. ODL - ECOPETROL, since it is a VIE and ODL is the primary beneficiary.

The adjustments of Fideicomiso P. A. ODL – ECOPETROL, according to financial information under U.S. GAAP as of and for the years ended December 31, 2013 and 2012, are as follows:

	 2013	2012
Assets	\$ (93,076) \$	(92,103)
Liabilities	93,076	92,090
Equity	\$ - \$	(13)
Net income	\$ - \$	-

The financial information summary of Fideicomiso P. A. ODL - ECOPETROL according to U.S. GAAP as of and for the years ended December 31, 2013 and 2012, are as follows:

	 2013	 2012
Assets	\$ 433,560	\$ 539,506
Liabilities	(306,923)	(411,722)
Equity	\$ 126,636	\$ 127,784
Net income	\$ 106,675	\$ 109,204

### c. Impairment

Under Colombian Government Entity GAAP it is not mandatory to perform impairment tests of the Equity Method Investments unless positive evidence is identified.

Under U.S. GAAP ASC 323-10-35-31 to 33 and 325-20-35 1A and 2, assets held at cost, including non-marketable equity investments, should be evaluated for impairment if the Company is aware of any events or changes in circumstances that may have significant adverse effects on the fair value of the investment. If the Company believes such circumstances exist, the Company would estimate the asset's fair value and compare that to cost to determine if any impairment is necessary. During 2013 and 2012 the Company evaluated its investments and concluded that there were recorded an impairment of \$51,671.

### iii. DERIVATIVES

Ecopetrol is exposed to market risk from changes in foreign currency exchange rates, interest rate risk of its financial obligations and to commodity price risk, resulting from the fluctuations of international crude oil prices which affect its earnings, cash flows and financial condition. Ecopetrol manages and constantly monitors its exposure to these market risks through its regular operating and financial activities and, when appropriate, through the use of derivative financial instruments.

Ecopetrol has established control activities to assess, approve and monitor derivative financial instrument operations. Ecopetrol does not buy, hold or sell derivative financial instruments for trading purposes. Ecopetrol's primary foreign currency exposures relate to the U.S. dollar; however, Ecopetrol manages and constantly monitors its foreign currency risk position internally, using non-deliverable forwards, according to the size of the mismatches between its asset-liability position in U.S. dollars and its asset-liability position in Colombian pesos. If no mismatches occur, Ecopetrol has a perfect natural hedge. Ecopetrol may utilize other derivative agreements to mitigate changes in the fair value of commodities or foreign exchange. None of the derivatives were designated or documented for hedge accounting. In addition, only the subsidiary Hocol S.A. is exposed to foreign currency fluctuations due to the expenditures are denominated in currencies other than its functional currency, which is the U.S. dollar.

According to the Company's risk policy, for international negotiations the minimum required credit rating of each counterparty shall be "A" for long term, and "A1/P1/F1" in short term. For local negotiations minimum required credit risk of each counterparty shall be "AAA" for long term, and "F1+/BRC1+" for short term.

These derivatives are recognized at their fair value as either a financial asset or obligation with corresponding income or expense recognized.

Total results recognized related to derivative activities during the years are as follows:

	2013					20		2011				
	Realized		Unrealized		Realized		Unrealized		Realized		Unrealized	
Options (1)	\$	467	\$	(45)	\$	4,315	\$	4,619	\$	(199,402)	\$	(2,370)
Swaps		-		-		-		-		(613,387)		-
Forwards		542		-		695		-		2,549		14
Total	<u>\$</u> 1	,009	\$	(45)	\$	5,010	\$	4,619	\$	(810,240)	\$	(2,356)

(1) Amounts include premiums paid

Under RCP, each derivative has its own accounting treatment depending on the type of derivative. Option premiums paid are recorded as deferred charges and amortized to the income statement as financial expense on a straight-line basis over the life of the contract, the option contract is recognized in memo accounts unless it is likely to be exercised, and the gain is recognized as an investment. Swap and forward contract net results are recorded as an investment. In all cases, gains and losses are recognized in earnings as financial income or expense. Amounts receivable or payable upon maturity resulting from net payments are recorded using current rates for the period.

U.S. GAAP requires that all derivative instruments be recorded on the balance sheet at fair value. Changes in the fair value of derivatives are recorded each period in earnings. The fair value of derivatives instruments is recorded as other assets and other liabilities.

Under U.S. GAAP, embedded derivative instruments shall be separated from the host contract, and accounted for using different measurement attributes, if certain conditions are met. In the case of the Company, some contracts to which the Company a counterparty include embedded foreign exchange derivatives. According to ASC 815-15-10 through 13 these contracts do not require separate accounting for the embedded derivative and the host contract because contract payments are made in the functional currency of a party to the contract or contract payments are made in a currency in which the price of the good or service delivered is routinely denominated in international commerce.

# iv. EXCHANGE OF NON-MONETARY ASSETS

During 2007, the Company exchanged a refinery business with a book value of \$234,371 for a 49% interest in Refinería de Cartagena S.A. The Company estimated the fair value of the 49% investment as \$1,369,546. Under Colombian Government Entity GAAP, this difference between the cost of the assets given and the fair value of the assets received was recorded as an increase to asset revaluation and equity. However, under ASC 845-10-30, 51% of the difference between the book value of the Refinery and the fair value of the assets received, which the Company determined to be a more reliable indicator of the value of the exchange, was recorded in the results of operations as a gain in the amount of \$578,939. The remaining 49% of unrealized gain was recorded as a deferred gain with a corresponding increase to the investment, equivalent to a deferred gain of \$556,236, to be amortized over the expected useful life of the equipment. In 2011, the Company determined that in 2009, as a result of the acquisition of the remaining participation in Reficar S.A., the unamortized unrealized gain should have been recorded at fair value since the Company obtained the remaining 51% of Refinería de Cartagena S.A. in 2009 in line with the acquired entity's fair value of the assets and liabilities acquired as of May 27, 2009. However, according to ASC 250 and SAB 108, we do not consider such amount significant and decided to fully amortize the remaining balance as of 2011. As a result, the net income reconciliation includes amortized income of \$425,521 in 2011.

# v. DEFERRED CHARGES

Under Colombian Government Entity GAAP, the Equity Tax is recognized as a deferred charge for the total amount due payable during the years 2011 through 2014. The deferred charge is amortized as an expense of the year based on the payments made. The local regulatory entities also allowed companies that applied inflation adjustments and still have outstanding balances in the Equity Revaluation account to reduce such balance instead of recognizing a deferred charge. Under U.S. GAAP Equity Tax was fully expensed in 2011 since amortization of certain expenses is not allowed under ASC 350.

Other deferred assets recognized under Colombian Government Entity GAAP are related to certain pre-operating expenses and other charges that include normal recurring maintenance and fees. Under U.S. GAAP ASC 730 forbids namely capitalization of pre-operating expenses and thus established that these are expensed as incurred.

For U.S. GAAP purposes, the amount of the adjustment in the Company's net income related to deferred expenses amounting to \$476,091 in 2013, \$493,159 in 2012, 1,710,944 in 2011.

# vi. EMPLOYEE BENEFIT PLANS

Under Colombian Government Entity GAAP, the Company estimates the net present value of its actuarial obligation for all pension plans and other post-retirement obligations. Annually, the Company estimates the net present value of the actuarial obligation and adjusts it accordingly. The amounts of the adjustments related to health care, education and severance plans are reflected in the Company's net income. However, the amounts related to the pension and bonds plans are recorded in memorandum accounts.

For other post-retirement benefits, the payments are made according to seniority and the salary at the time of retirement, as stipulated in the Collective Labor Convention and Agreement No. 01.

Under the post-retirement benefits plan those workers who had met the age and continuous or discontinuous service time requirements of the law, the Collective Bargaining Agreement in effect and/or Agreement 01 of 1977, prior to August 1, 2010, had consolidated their right to their pension with Ecopetrol. However, it was mandatory for other workers, who were not covered, to join the General Pension System. The pension administrator chosen by the worker (either Colpensiones or Private Pension Fund or whichever may correspond) would be responsible for recognizing and paying the respective pension.

Under the post-retirement benefits plan for Ecopetrol personnel, the Company covers 90% of educational expenses for children of employees, including enrollment fees, tuition and other associated costs. A fixed annual sum, depending on education level, is also provided for the acquisition of textbooks. Educational coverage includes kindergarten, elementary school, high school and college. Ecopetrol's financial statements must also show the cost of post-retirement educational benefits for children of retired employees, since benefits continue irrespective of retirement or death.

According to the Collective Labor Agreement and Agreement No. 01, the Company will pay for health services for employees and enrolled family members. Health services include: office visits and required laboratory services, drugs, diagnostic examinations, ambulatory treatment, hospitalization due to illness or accident, surgery due to illness or accident, maternity and rehabilitation treatments and orthopedic parts. Therefore, such post-retirement health benefit costs are recorded in the consolidated financial statements of the Company prepared in accordance with Colombian Government Entity GAAP, since retired workers and enrolled family members continue to receive full medical coverage. The same is true for deceased non-retired employees.

Collective Labor Agreement expires in June 2014. Currently Ecopetrol is negotiating with the Union representatives the new terms on this agreement. As of the filing date there has not been any official agreement or relevant unfavorable conditions on this topic that need to be disclosed.

Under U.S. GAAP, the Company applies the provisions of ASC 710, 715 and 835 as amended. Accordingly, the Company accrues fot its obligations under its employee defined benefit plans, net of plan assets. The cost of defined benefit pensions and other post-employment benefits is actuarially determined using the projected benefit method based on length of service and reflects Management's best estimate of salary escalation, retirement ages of employees and expected future health care costs. The expected return on plan assets is based on historical and projected rates of return for assets in the investment plan portfolio. The actual return is based on the fair value of plan assets. The projected benefit obligation is discounted using the market interest rate on high-quality corporate debt instruments as at the measurement date. Actuarial gains and losses related to the change in the over-funded or under-funded status of the defined benefit pension plan and other post-employment benefit plans are recognized in other comprehensive income.

Under Colombian law, employees are entitled to one month salary for each year of service. This benefit is known as the "severance obligation" or "cesantias". This benefit accumulates during the time of employment and is paid to employees upon their termination or retirement from Ecopetrol. However, employees may request advanced benefit payments at any time. In 1990, the Colombian government revised its labor regulations to permit companies, subject to employee approval, to pay the severance obligation to their employees on a current basis. Law 50 of 1990 also enabled each employee to freely choose which trust fund would manage the amount accrued during each year in which they are eligible for severance payments. This amount must be transferred by the company to the trust fund no later than February 14<sup>th</sup> in the subsequent year.

In addition, under Colombian law the Company must pay pension bonds for certain employees when they leave Ecopetrol. Those bonds payable accrue interest at the DTF rate, according to the class of bonds, as follows:

- 1) For pension bonds type B, DTF + 4%;
- 2) For pension bonds type A, with date of transfer before December 31, 1998, DTF + 4%;
- 3) For the remaining pension bonds type A, DTF + 3%.

The economic assumptions used in the determination of pension obligations under U.S. GAAP differ from those used under RCP since the latter are established by Colombian regulations.

The combined costs for the above mentioned benefit plans, determined using U.S. GAAP, for the years ended December 31, 2013, 2012 and 2011 are summarized below: (all obligations were measured at year-end)

			2013		2012						2011						
			Other		Other					Other							
Components of net periodic benefit costs:	Pension	1	Benefits (*)	Total		Pension	Be	enefits (*)		Total		Pension	B	enefits (*)		Total	
Service cost	\$	\$	63,742	\$ 63,742	\$		\$	44,089	\$	44,089	\$		\$	788	\$	788	
Interest cost	739,816	i	402,817	1,142,633		840,944		525,628		1,366,572		830,411		371,698		1,202,109	
Expected return on plan assets	(592,897	)	(38,922)	(631,819)		(720,034)		(45,265)		(765,299)		(714,757)		(164,644)		(879,401)	
Amortization of net actuarial gain or loss	31,605		69,126	100,731		18,531		81,589		100,120		592,582		24,564		617,146	
Net periodic pension cost under U.S. GAAP	178,524		496,763	675,287		139,441		606,041		745,482		708,236		232,406		940,642	
Net periodic pension cost under Colombian GAAP (gain) or loss			500,855	500,855		(83,776)		849,961		766,185		565,725		663,536		1,229,261	
Difference to be recognized under U.S. GAAP (income) loss	\$ 178,524	\$	(4,092)	\$ 174,432	\$	223,217	\$	(243,920)	\$	(20,703)	\$	142,511	\$	(431,130)	\$	(288,619)	

(\*) Other benefits include education, health care, pension bonds and accrued retroactive severance.

In 2008, Ecopetrol was approved by Colombian Government to partially transfer its pension net liability to an autonomous trust fund. According to Colombian Government Entity GAAP (RCP), the assets and liabilities transferred shall be accounted for in memorandum accounts, off balance sheet. This implies that the net liability transferred is not part of the assets and liabilities of Ecopetrol instead a pension trust fund, a separate entity not controlled by the Company. In 2012, we found a misstatement in our reconciliation to U.S. GAAP, due to we considered the transferred assets and liabilities to be a part of the Company's balance sheet, when reconciling our financial statements to U.S. GAAP. According to ASC 250, we analyzed the effect of this error and conclude it did not have a material effect on previously issued financial statements. As of December 2012, this error had a net effect on the net actuarial liability of \$89,775, net after tax. Since this is not a material misstatement, we corrected it prospectively in our 2013 financial statements.

The changes in the benefit obligations and in plan assets for the above mentioned benefit plans, determined using U.S. GAAP, for the years end December 31, 2013 and 2012, are summarized below:

	Pension Plan				Other Benefits				
		2013		2012		2013		2012	
Reconciliation of project benefit obligation:									
Project benefit obligation as of January 1	\$	(12,179,576)	\$	(11,196,520)	\$	(6,770,823)	\$	(6,628,739)	
Service cost		-		-		(63,742)		(44,089)	
Interest cost		(739,816)		(840,944)		(402,817)		(525,628)	
Actuarial gain (loss)		826,026		(802,355)		541,090		155,978	
Benefit payments		670,512		660,243		283,314		271,656	
Projected benefit obligation as of December 31	\$	(11,422,854)	\$	(12,179,576)	\$	(6,412,978)	\$	(6,770,822)	
Reconciliation of plan assets :									
Fair value of plan assets as of January 1		11,122,471		10,631,832		743,593		671,346	
Fund contribution		-		-		281,561		269,048	
Actual return on assets		240,030		1,150,882		16,047		74,855	
Benefits paid		(670,512)		(660,243)		(283,314)		(271,656)	
Fair value of plan assets as of December 31	\$	10,691,989	\$	11,122,471	\$	757,887	\$	743,593	
Net liability		(730,865)		(1,057,105)		(5,655,091)		(6,027,230)	
Net liability under Colombian Government Entity GAAP				(865,328)		(4,208,462)		(2,989,847)	
Net effect under pension plan and other benefits	\$	(730,865)	\$	(191,777)	\$	(1,446,629)	\$	(3,037,383)	
Amounts recognized in other comprehensive (income)		(1,353,502)		(1,858,266)		(1,758,229)		(2,345,570)	

Net liability of employee benefit plans, net of other employee benefits, is classified as follows:

	 Pension Plans		Other Benefits					TOTAL				
	2013		2012		2013		2012		2013		2012	
Current portion	\$ -	\$	-	\$	(281,019)	\$	(264,076)	\$	(281,019)	\$	(264,076)	
Long-term portion	(730,865)		(1,057,105)		(5,374,072)		(5,763,154)		(6,104,937)		(6,820,259)	
Net liability	\$ (730,865)	\$	(1,057,105)	\$	(5,655,091)	\$	(6,027,230)	\$	(6,385,956)	\$	(7,084,335)	

As of December 31, 2013 and 2012, net obligation amounts recognized in the balance sheet related to pension, health, education, bonds and severance obligations consist of:

	2013	2012
Long-term liability		
Pension	\$ (730,865)	\$ (1,057,105)
Health care	(4,910,787)	(5,183,081)
Education	(449,269)	(476,507)
Bonds	(13,183)	(102, 148)
Severance	(833)	(1,418)
Total long-term liability	\$ (6,104,937)	\$ (6,820,259)

As of December 31, 2013, 2012 and 2011, the amounts recognized in accumulated other comprehensive income, related to pension, health and education obligations consist of:

	2013	2012	2011
Other comprehensive income			
Actuarial income (loss)			
Pension	\$ (1,353,502)	\$ (1,858,266)	\$ (1,505,289)
Health care	(2,671,715)	(3,239,842)	(3,795,848)
Education	(215,252)	(213,816)	(109,493)
Bonds	1,124,927	1,102,706	1,284,430
Severance	3,811	5,382	8,185
Total other comprehensive income (loss)	(3,111,731)	(4,203,836)	(4,118,015)
Deferred income tax effect	1,026,871	1,387,266	1,358,945
Total	\$ (2,084,860)	\$ (2,816,570)	\$ (2,759,070)



The significant variation in other comprehensive income from 2012 to 2013 relates to Health and Pension plans due to changes in actuarial assumptions since the last actuarial valuation.

The Company expects the following amounts in other comprehensive income to be recognized as components of net periodic pension cost during 2014:

	Amortization
	Gain (loss)
Pension	\$ (10,989)
Health Care	(111,345)
Education	(8,457)
Bonds	100,752
Severance	-
Total	<u>\$ (30,039</u> )

As of December 31, 2013 and 2012, the amounts of gain (loss) in the year and accumulated related to pension, health, education bonds and severance consist of:

		2013				2012			
	Gain (loss) in		Cumulative Gain		Gain (loss) in		-	umulative	
	th	e year		(loss)		the year	8	ain (loss)	
Pension	\$	473,159	\$	(1,353,502)	\$	(371,507)	\$	(1,858,266)	
Health care		434,236		(2,671,715)		394,226		(3,239,842)	
Education		(9,437)		(215,252)		(107,551)		(213,816)	
Bonds		(94,583)		1,124,927		(98,915)		1,102,706	
Severance	\$	(1,167)	\$	3,811	\$	(2,192)	\$	5,382	

The economic assumptions adopted are shown below in nominal terms. Those assumptions were used in determining the actuarial present value of the pension obligation and the projected pension obligations for the plans:

			2013					2012		
-	Pension	Health	Education	Bonds	Severance	Pension	Health	Education	Bonds	Severance
Discount rate	7.00%	7.00%	6.50%	6.25%	5.50%	6.25%	6.25%	5.50%	5.50%	5.50%
Rate of compensation										
and pension increases	4.50%	10.40%	4.00%	4.50%	4.00%	4.00%	11.20%	4.00%	4.00%	4.00%
Expected rate of return	5.50%	-	-	5.50%	-	7.00%		-	7.00%	-
Mortality table	*	*	*	*	*	*	*	*	*	*

\* Colombian Mortality Table ISS, male and female, 2005-2008.

The actuarial assumptions of the Health Plan have changed since the last actuarial valuation as of December 31, 2012. In 2012 we used a health cost trend rate starting at 11.20% and grading down to general inflation +1% over 10 years. In 2013 trend rate starts at 10.40% and grades down to inflation +1% in 10 years, since the most recent analyses by the health department shows a decrease tendency related to costs control initiatives from management.

The 2011 pension bond liability was calculated assuming that if a retired participant had not claimed his bond there was a likelihood that we would never claim it of: a) 100 % after 15 years b) 50% among 10 and 15 years, c) 25% among 5 and 10 years; and d) 0% for less than 5 years. For years 2012 and 2013 this assumption was revised assuming there was a 100% likelihood after 3 years and 0% for less than 3 years.

# Estimated future benefit payments

The benefit payments, which reflect expected future service, as appropriate, are expected to be paid as follows:

Period	 Pension Benefits	]	Health Care benefits	 Education benefits	Р	ension Bonds_	 Severance Plan
2014	\$ 694,364	\$	223,937	\$ 65,563	\$	54,593	\$ 7,942
2015	711,887		244,095	69,632		4,308	485
2016	730,665		263,490	69,082		6,799	112
2017	749,151		282,293	69,265		20,444	131
2018	767,599		300,450	67,682		31,901	154
Years 2019 – 2023	\$ 4,100,967	\$	1,719,823	\$ 215,127	\$	227,395	\$ 4,253

All of the benefits estimated in the table above are to be paid from plan assets. The Company does not have any insurance policies that are intended to cover benefits that plan participants are to receive in the future.

Furthermore, the Company does not intend to contribute to the fund in the upcoming fiscal year. Management believes that the plan assets will provide for a sufficient return to cover any payments that are necessary to be made in the upcoming year.

Assumed health care cost trend rates have an effect on the amounts reported for the health care plans. A one percentage point change in assumed health care cost trend rates would have the following effects:

		1% Percer	itage	e Point
	1	ncrease		Decrease
Effect on total of service and interest cost components	\$	63,861	\$	(51,070)
Effect on postretirement benefit obligation	\$	782,004	\$	(630,997)

The discount rate is a critical assumption on the actuarial calculation. The effect of variations in the projected benefit obligation by plan is as follows:

	% point		
	variation	Increase	Decrease
Pension plan	0.5% \$	(646,611) \$	714,772
Medical plan	1.0%	(637,237)	802,291
Education plan	0.5%	(13,198)	13,872
Pension Bonds plan	0.5%	(42,398)	45,836
Severance plan	0.5% \$	(152) \$	211

### Plan assets

Medical, Education and Severance plans are unfunded. Pension and pension bonds plans are covered by assets in five trust funds with the following investment allocation:

Investment	201	2012			
Colombian Government treasury bonds (TES)	\$ 4,311,575	38%	\$ 4,435,360	37%	
Non-governmental entity bonds	3,567,065	31%	3,833,794	32%	
Other securities in COP	2,038,017	18%	2,237,421	19%	
Other bonds	864,917	8%	821,542	7%	
Other securities in foreign currency	389,416	3%	376,714	3%	
Foreign countries government treasury bonds	196,404	1%	163,569	1%	
Variable yield investments and other	82,948	1%	389	0%	
Total	\$ 11,450,342	100%	\$ 11,868,790	100%	

The plan assets do not contain any shares of stock of Ecopetrol or any of its related parties. However it includes bonds issued by the Company, representing 1.0% of fund investments. There is no significant risk concentrations within the plan assets.

The fair value of plan asset is calculated using quoted market prices in active markets. The company obtains these quoted prices from renowned trustworthy financial data providers in Colombia or abroad depending on the investment. For those portfolio items not having a quoted price the Company uses an income approach technique capturing observable market data. Our fair value measurements do not use any unobservable inputs for significant valuations.

Decree 1861 of 2012 establishes the investment regime for trust funds guaranteeing pension plans of governmental entities, whose precepts are intended to bear a moderate risk. Assets fund investment decisions are made accordingly, following, among other, the following restrictions:

- Investments in public debt shall not exceed 50% of fund assets value.
- Investments in joint portfolios, limited to 5% of fund assets value, are allowed only if its index is representative of general market behavior, and is not related to specific economic sectors or specific issuers.
- Investments in funds representing a foreign index are limited to 5% of fund assets.
  - Investments in Ecopetrol S.A. shares are allowed.
- Forbidden investments:
  - o Shares of foreign companies or securities representing these shares.
  - o Asset-backed securities different from mortgage-backed securities.
  - o Private capital funds.
  - o Investments regarding related parties of the trust fund manager.

# vii. PROVISIONS AND CONTINGENCIES

For U.S. GAAP, Accounting for Contingencies (ASC 450), provides guidance for recording contingencies. Under ASC 450, there are three levels of assessment of contingent events – probable, reasonably possible and remote. The term probable in ASC 450 is defined as "the future event or events that are likely to occur". The term reasonably possible is defined as "the chance of the future event or events occurring is more than remote but less than likely". While the term remote is defined as "the chance of the future event or events occurring is slight".

Under ASC 450, an estimated loss related to a contingent event shall be accrued by a charge to income if both of the following conditions are met:

- Information available prior to issuance of the financial statements indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements
- The amount of loss can be reasonably estimated.

The amount recorded is an estimate of the amount of loss at the date of the financial statements. If the contingent event is evaluated to be reasonably possible, no provision for the contingent event may be made, but disclosure of the event is required with amount of loss that is reasonably possible.

As a result of the difference in the definition of "probable" between Colombian Government Entity GAAP and U.S. GAAP, and the general interpretation of the definition in practice in Colombia, there is a difference in the amount of the provision for legal proceedings.

Under Colombian Government Entity GAAP, it is required to recognize additional provisions regarding to capitalize the pension assets. According to Colombian actuarial assumptions, we estimate the difference between pension assets and liabilities, and accrued a provision due to capitalize the five trusts funds during 2014. Under U.S. GAAP, the estimates is write-off due to the explanation showed at note vi. Employee benefit plans. The effects of these adjustments in the reconciliation of income were \$802,341; \$141,755 and \$335,983 in December 2013, 2012 and 2011, respectively.

The effects of these adjustments in the reconciliation of consolidated shareholders' equity were \$1,294,564 and 492,223 in December 2013 and 2012, respectively.

### viii. ASSETS AND LIABILITIES PRESENT VALUE

Under Colombian government Entity GAAP, accounts receivable and payable are recognized at amortized cost, represented by any uncollected or unpaid balances, regardless if such balances are due within the year or not. For U.S. GAAP purposes, the Company measures the long-term balances at present value by discounting future cash flows at the appropriate discount rate. Such balance is amortized using the effective interest method.

The estimated discount rate for long-term liability is based on the Colombian Government Treasury bonds as it was considered that the Company has a similar credit risk.

As a result of the measurement of the Equity Tax liability and after minor adjustments recognized by Ecopetrol and its subsidiaries in the year 2013, 2012 and 2011, an adjustment for \$39,029, \$(99,188), and \$126,861 respectively was recorded.

## ix. DEFERRED INCOME TAXES

Under U.S. GAAP a valuation allowance is provided for deferred tax assets to the extent that it is more likely than not that they will not be realized.

Under Colombian Government Entity GAAP, deferred income taxes are calculated using the current statutory tax rate. Under U.S. GAAP, deferred income taxes are calculated based on rates and tax laws enacted at the reporting date considering the future tax rate that will apply when the deferred income tax difference will be realized.

All of the income tax effects in the U.S. GAAP reconciliation are the tax effect of pretax adjustments, and none relate to differences between the accounting for income tax standards.

The Company and its subsidiaries file separate income tax returns since tax regulations do not allow consolidated income tax returns. There are no requirements to file tax returns by segments. Tax returns for each legal entity are required. The tax rate of Refineria de Cartagena S.A. Bioenergy and Comai is 15% because they are located he free trade zone until 2023, 2025 and 2021, respectively. The tax savings for the last three years has not been significant.



Taxable loss carry forwards will be deductible in future years, and will depend on the countries' specific tax regulations. As of December 31, 2013, Ecopetrols' subsidiaries had accumulated tax loss carry-forwards and excesses of presumptive income generated in previous years, as follows:

Expiration date	Loss carry-forwards	Deferred Income Tax	Excess of presumed income	Deferred Income Tax
2012	\$ -	\$ -	\$ 369	\$ 55
2013	-	-	63,677	9,552
2014	7,964	30	77,982	13,637
2015	-	-	59,092	8,864
2016	-	-	37,407	5,703
2017	-	-	33,896	5,278
2018	-	-	29,234	5,816
2019	-	-	3,258	500
With no Maximum expiry date	4,264,932	1,247,914	-	-
	\$ 4,272,896	\$ 1,247,944	\$ 304,915	\$ 49,405

# Tax reform

The Colombian Congress of the Republic adopted Law 1607 of December 26, 2012, which introduces significant reforms to the Colombian tax system, in particular, the income tax rate was reduced from 33% to 25% starting in 2013, and the Equality Income Tax (Impuesto de Renta para la Equidad - CREE), was created with a rate of 9% from 2013 to 2015 and 8% starting in 2016; there are some differences between the treatment used to determine this tax and the one used to determine ordinary income tax.

The following information regarding income taxes has been prepared under U.S. GAAP:

## Income Taxes

Total income taxes for the years ended December 31, 2013, 2012 and 2011 were comprised as follows:

	2013	2012	2011
Income tax expense	\$ 8,774,819	\$ 7,525,988	\$ 8,399,086
Income tax effects based on items of other comprehensive income:			
Pension plan liability	360,395	28,321	488,064
Available-for-sale securities	(47,894)	(27,721)	7,086
	\$ 9,087,320	\$ 7,526,588	\$ 8,894,236

Income tax expense attributable to income from continuing operations consists of:

	20	)13	2012	2011
Current provision	\$	8,291,571	\$ 7,095,874	\$ 7,501,002
Deferred tax		483,248	430,114	898,084
	\$	8,774,819	\$ 7,525,988	\$ 8,399,086

In 2013, 2012 and 2011, there are foreign subsidiaries that do not pay income taxes and therefore do not generate income tax expense or deferred tax effects. The entities that paid taxes and currently do not generate taxable income recorded valuation allowances against any deferred tax asset previously recorded.

Amount of foreign and domestic pretax income:

	2013	2012	2011
Domestic pretax income	\$ 22,692,204	\$ 21,083,067	\$ 22,470,684
Foreign pretax income	569,160	1,330,415	986,001
Income before income tax	\$ 23,261,364	\$ 22,413,482	\$ 23,456,685

Unremitted earnings accumulated as of December 31, 2013 of certain international subsidiaries totaling \$1,841,175 are permanently invested. No deferred tax liability was recognized for the remittance of such earnings. The income tax liability that might be incurred if such earnings were remitted to Colombia is not practicable to estimate.

# Tax Rate Reconciliation

Income tax expense attributable to income from continuing operations was \$8,774,819, \$7,525,988, and \$8,399,086, for the years ended December 31, 2013, 2012 and 2011, respectively, and differed from the amounts computed by applying the statutory income tax rate for Colombian entities that is 34% in 2013 and 33%, in 2012 and 2011, to pretax income from continuing operations as follows:

	2013	2012	2011
Statutory income tax	34.00%	33.00%	33.00%
Non – taxable income (exempt domestic dividend income)	(0.36)%	0.04%	(1.59)%
Non – deductible expenses	3.03%	0.28%	3.66%
Other exempt income	-	(0.30)%	(0.24)%
Income taxable at other tax rate	0.19%	0.60%	(0.02)%
Changes in tax rate	(0.03)%	0.11%	-
Others	0.89%	(0.15)%	1.00%
Effective income tax under U.S. GAAP	37.72%	33.58%	35.81%

Ecopetrol S.A. has no unrecognized tax benefits. The tax years open to the taxation authorities' reviews by major components are as follows:

Company	Tax years
Bioenergy	2010 to 2013
Cenit	2012
Comai	2011 to 2013
Equion	2010 to 2012
Hocol	2010 to 2012
Propilco	2011 to 2013
Reficar	2007 to 2012
Oleoducto de los Llanos	2009 to 2012
Oleoducto Bicentenario	2010 to 2012
Oleoducto de Colombia	2008 to 2013
Ocensa	2010 to 2013
Perú	2009 to 2013

The Company is subject to income taxation in many jurisdictions around the world. Unrecognized tax benefits reflect the difference between positions taken or expected to be taken on income tax returns and the amounts recognized in the financial statements.

We recognize interest accrued related to an underpayment of income taxes in interest expense. Penalties, if recognized, would be presented as a component of other expense.

# Deferred Taxes

The significant components of deferred income tax expense attributable to income from continuing operations for the years ended December 31, 2013, 2012 and 2011 are as follows:

	2013	2012	2011
Deferred income tax expense (exclusive of the effects of other components below):			
Accounts payable	\$ (64,485)	\$ 100,511	\$ (129,334)
Inventories	314	(5,967)	35,226
Property, plant and equipment, principally due to DD&A	(123,172)	78,201	(36,884)
Deferred charges	(13,357)	(11,185)	(580)
Prepaid expenses	161	(75)	62,930
Capital lease asset	(43,086)	83,829	(39,109)
Monetary correction and other	84,370	(275,294)	150,603
DD&A and inflation adjustments	191,961	310,351	(305,288)
Investment	(236,500)	(352,018)	164,276
Direct finance lease	44,847	(39,922)	39,922
Estimated liabilities and provisions	(101,425)	(73,955)	(58,663)
Accounts and notes receivable	(80,492)	(6,194)	2,337
Carry forward loss	(914,601)	(159,549)	(43,515)
Pension and benefits obligations	363,630	(56,941)	(390,205)
Deferred income	-	-	140,422
Natural and environmental resources capitalized expenses	667,635	381,072	1,069,749
Valuation allowance	304,623	604,394	27,079
Additional tax discount on the acquisition of productive assets according to ASC 740 (1)	(15,114)	534	6,939
Excess in presumptive income tax	641,773	(373,085)	14,225
Other	(88,861)	37,608	(18,565)
Amortization of actuarial loss recorded in OCI	(360,395)	28,321	488,064
Unrealized loss in available for sale securities	47,894	(27,721)	7,086
Amortization of fiscal goodwill according to ASC 350	177,527	187,199	(288,631)
	\$ 483,247	\$ 430,114	\$ 898,084

(1) This value corresponds to the deferred tax generated by the calculation of ASC 740, due to the implementation of the special deduction for investment in real productive assets.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2013 and 2012 are presented below:

	2013	2012
Deferred income tax assets and liabilities		
Deferred income tax assets:		
Inventories	\$ 39,572	\$ 39,886
Investments	195,808	1,390,880
Accounts and notes receivable	97,920	6,896
Property, plant and equipment, principally due to DD&A	3,263,018	2,991,078
Deferred charges	41,706	28,348
Prepaid expenses	9	169
Financial obligation, principally due to capitalized leasing	105,882	62,797
Pension obligations	740,525	1,104,155
Accounts payable	234,561	170,076
Carry forward loss (1)	1,247,945	333,344
Excess in presumptive income tax (2)	49,406	691,179
Other	(7,813)	1,295
Amortization of fiscal goodwill according to ASC 830	206,734	385,800
Estimated liabilities and provisions	 1,020,194	 918,770
Total gross deferred income tax assets	7,235,467	8,124,673
Less valuation allowance (3)	(1,131,236)	(826,612)
Deferred income tax assets	6,104,231	7,298,061
Deferred income tax liabilities		
Accounts and notes receivable	10,532	-
Natural and environmental properties due to the difference between the methods of amortization	2,582,791	1,915,156
Monetary correction and other	590,158	505,788
DD&A and inflation adjustments	1,383,011	1,191,049
Investments	403,910	1,835,482
Direct finance lease	44,847	-
Deferred income tax liabilities	 5,015,249	 5,447,475
Net deferred income tax assets	\$ 1,088,982	\$ 1,850,586

The realizability of the net deferred tax assets detailed above is expected given that it is more likely than not that the results of future operations will generate sufficient taxable income to realize the deferred tax. For those which realizability is in question valuation allowances have been provided.

- (1) Carry forwards losses are generated by subsidiaries and according to local tax laws, these losses do not expire.
- (2) The excess in presumptive income tax are generated by subsidiaries and will expire in 5 years.
- (3) The changes in the valuation allowances are mainly due to 2013 tax losses originated by Ecopetrol do Brazil, Ecopetrol America Inc., Ecopetrol del Perú, Bioenergy and Refineria de Cartagena \$1,092,621 as detailed bellow:

	2013	V	ariation	2012
Ecopetrol do Brazil	\$ 306,215	\$	57,224	\$ 248,991
Ecopetrol del Peru	57,223		10,330	46,893
Bioenergy	463		-	463
Ecopetrol America Inc.	746,000		225,138	520,861
Refineria de Cartagena	21,335		11,931	9,404
	\$ 1,131,236	\$	304,623	\$ 826,612

### x. REVENUE RECOGNITION

### a.1 Over and under deliveries

Under Colombian Government Entity GAAP, the Company recognizes receivables from or payables to partners and to pipeline companies based on the cost of the inventory.

For U.S. GAAP purposes, the Company utilizes the entitlement method of accounting for over and under positions by which the amount of crude oil sold is based on its shared interest in the properties, and revenue is recognized based on market prices. The pipeline imbalances determined through volume allocation are recorded as either receivables or payables as per ASC 932-10-S99-5 valued at selling prices.

The Company's crude oil under balance position at December 31, 2013 was \$119,010 and at December 31, 2012 was \$221,350 and at December 31, 2011 was \$659,535 equivalent to 662,545, 968,656 and 4,184,690 barrels, respectively.

## a.2 Cost of Sales

Under U.S. GAAP, the related cost of sale in the reconciliation of net income for over and under deliveries transactions described at a.1 above amounted to \$296,317, \$208,644 and \$(449,225) during 2013, 2012 and 2011, respectively, in comparison with the amount recognized under Colombian Government Entity GAAP.

## a.3 Net vs. Gross sales

The Company the sales transactions where it transports crude oil, from the supplier to the customer, using its pipelines. For U.S. GAAP purposes, when price is fixed, there are no changes made to the product and the Company has no physical inventory loss risk, among other criteria, the Company records such sales on a net basis. Under Colombian Government Entity GAAP, such crude oil sales are recognized gross.

### xi. INFLATION ADJUSTMENTS

The Colombian Government Entity GAAP consolidated financial statements were adjusted for inflation based on the variation in the IPC (Colombia's equivalent to the consumer price index in the United States) for middle income-earners from January 1, 1992 to December 31, 2001 for Ecopetrol S.A. and from January 1, 1992 to December 31, 2006 for Oleoducto de Colombia S.A. (ODC), Hocol S.A., Oleoducto Central S.A. (Ocensa), Equion, and Reficar S.A. The adjustment was applied monthly to non-monetary assets, equity (except for the valuation surplus) and memorandum accounts.

Under U.S. GAAP, the aforementioned adjustments under Colombian Government Entity GAAP are not applicable and have been reversed.

## xii. INVENTORIES

Under Colombian Government Entity GAAP, inventories are valued at the lower of average cost or sale price. Under U.S. GAAP, inventories are valued at the lower of average cost or market value, the determination of which can be made using several different methods acceptable under U.S. GAAP. An adjustment has been recorded to reflect the difference in the method used to determine the valuation of inventories that arises from using sale price instead of market value, as defined by U.S. GAAP. Inventories are also affected by the effect of adjustments to cost of sales included in this reconciliation. These adjustments are related to depreciation, capitalized expenses in property, plant and equipment, asset retirement cost and impairment of long-lived assets.

The effects of this adjustment (loss) gain in the reconciliation of income were \$30,289, \$(16,699) and \$76,126 in December 2013, 2012 and 2011, respectively.

The effects of these adjustments in the reconciliation of equity and the corresponding effect in inventory were \$(18,410) and \$(55,078) at December 31, 2013 and 2012, respectively.

## xiii. LEASE ACCOUNTING

Under both Colombian Government Entity GAAP and U.S. GAAP there are, lessee accounting for capital leases and operating leases. However, the tests used to determine if a lease is a capital or an operating lease differs between Colombian Government Entity GAAP and U.S. GAAP. In applying the tests in accordance with Colombian Government Entity GAAP, the Company has determined that all leases are operating leases. Under U.S. GAAP some of these leases should be accounted for as capital leases in accordance with ASC 840-10. As a result, adjustments were recorded to reflect the related assets and liabilities, and to recognize interest expense and de-recognize operating expenses associated with the lease payments.

### Embedded Leasing

Under Colombian Government Entity GAAP, there is no requirement to identify whether the arrangements or contracts contain leases.

Under U.S. GAAP, an arrangement contains a lease if both of the following criteria are met:

- 1. The arrangement depends on a specific fixed asset, either identified contractually or implicitly identified as no alternative item could feasibly be used.
- 2. The purchaser has the right to control the use of the underlying fixed asset, such control demonstrated by the existence of any of the following qualitative conditions:
  - a) The purchaser can operate the asset or direct others to operate the asset while obtaining or controlling more than a minor amount of the asset's output;

- b) The purchaser can control physical access to the asset while obtaining or controlling more than a minor amount of the asset's output; or
- c) Probability is remote that another party will take more than minor amount of the asset's output and the price is not fixed per unit.

Under U.S. GAAP, if the arrangement contains a lease, ASC 840 is applied by both purchaser and supplier for recognition, measurement, classification and disclosure purposes.

# Build, Operate, Maintain and Transfer (BOMT)

Future Payments	_]	Ecogas (1) - ECP			Termo ERB (2) - ODLTermo Servicios (2) - ODLTermo					mo Pro Ol	-	tos (2) -			
Year		JSD illion)		Pesos	(n	USD nillion)		Pesos		USD nillion)	Pesos		JSD illion)		Pesos
2014	\$	17.0	\$	32,731	\$	2.7		5,207	\$	2.7	\$ 5,160	\$	2.7	\$	5,178
2015		17.0		32,731		2.7		5,205		2.7	5,174		2.7		5,160
2016		16.2		31,269		2.7		5,219		2.7	5,160		2.7		5,174
2017		10.4		19,993		2.7		5,205		2.7	5,160		2.7		5,160
Payments after 2018		-		-		8.8		16,911		9.2	17,657		10.5		20,230
	\$	60.6	\$	116,724	\$	19.6	\$	37,749	\$	20.0	\$ 38,311	\$	21.3	\$	40,902

In 2010, we entered in a new BOMT, corresponding to the gas treatment plant located in the Dina-Tello field with an estimated value of construction US\$28 million. This BOMT is accounted as capital lease in accordance with ASC 840 such as the contracts described previously, this contract had an original term of 8 years, ending in 2017.

Ecopetrol entered into a contract with Unión Temporal Gas Gibraltar firm to advance the design, build, operation and maintenance of a treatment plant with 30 mpcd capacity. Likewise, we entered into a contract with Natural Gas E.S.P for marketing purposes. The Gibraltar gas processing plant is located between the cities of Toledo (Norte de Santander) and Cubará (Boyacá). This BOMT is accounted as a capital lease in accordance with ASC 840. This contract had original term of 15 years, ending in 2026.

Since 2012, the gas treatment plant located in Dina- Tello field, and the contracts with Unión Temporal Gas Gibraltar were recognized in our local financial statements, as a result of an internal consistency process between local and U.S. GAAP requirements.

- (1) Three original leases that were accounted for as capital leases under U.S. GAAP are BOMT contracts, the use of which are specifically required under Colombian law for projects that involve the building, operating, maintaining and transferring of natural gas pipelines for the transportation of natural gas. These contracts had original terms of 20 years, no renewal provisions, and a purchase option. The rights to the leased assets were subsequently transferred to a related Company (ECOGAS) that was sold, but Ecopetrol was not relieved of the primary obligation under the original lease. This transfer was considered a sublease accounted for as a direct finance lease. In 2007, Ecopetrol received a prepayment of all amounts to be received during the term of the sublease contract.
- (2) ODL signed three agreements for the acquisition of energy conversation assets to meet the needs of power consumption of the booster stations ER1, ER2 and Rubiales field.

The assets will be owned by ODL if the purchase option is exercised during the term or at the end the contract. However, ODL has the alternative of not exercising the purchase option, in which case the assets will be removed by the Contractor.

Under U.S. GAAP these contacts were accounted for by ODL as finance leases registering the present value of the corresponding assets and liabilities net of amortization

### xiv. PROPERTY, PLANT AND EQUIPMENT

Under Colombian Government Entity GAAP, property, plant and equipment are recorded at cost and are adjusted for inflation until 2001. The cost includes administrative expenses until 2004, financial expenses and exchange differences from foreign currency financing until the asset is placed in service. Normal disbursements for maintenance and repairs are charged to expense and those significant costs that improve efficiency or extend the useful life are capitalized. Under U.S. GAAP, cost includes expenditures until the asset is placed in service such as installation cost, freight, interest, retirement cost; construction cost and other direct expenses are capitalized, with exception of adjustment for inflation and foreign currency loss. For U.S. GAAP purposes, administrative expenses capitalized were eliminated from property, plant and equipment. In addition, a deferred income tax asset resulted from the application of the provisions of ASC 740-10, *Accounting for Acquired Temporary Differences in Certain Purchase Transactions that are not Accounted for as Business Combinations*, since the investment in real productive assets creates an additional tax deduction of 30% in 2010. Starting in January 2011, income tax deductions from investments in said asset are no longer be available.

The following table reflects the net changes in capitalized exploratory wells during 2013 and 2012. It does not include amounts that were capitalized and recorded as expenses during the same period under the successful efforts method.

	2013	2012
Opening balance at January 1	\$ 1,427,947	\$ 928,857
Additions to capitalized exploratory well costs	1,456,994	915,771
Reclassifications to wells, facilities and equipment based on the determination of proved reserves	(136,747)	(138,427)
Capitalized exploratory well costs charged to expense*	(394,372)	(278,254)
Ending balance at December 31	\$ 2,353,822	\$ 1,427,947

\* Includes \$110,327 and \$10,748 of capitalized exploratory well costs at December 31, 2013 and 2012 respectively, which were declared as dry wells during 2014 and 2013, respectively.

# Accounting For Suspended Exploratory Wells

The following table represents a classification by ages for constructions in progress based on the drilling completion date and the number of projects that are in ongoing drilling for a period exceeding one year as from the completion date.

	 2013	2012
Between 1 and 3 years (a)	\$ 400,276	\$ 471,640
Between 3 and 5 years (b)	53,028	17,338
More than 5 years (c)	33,521	30,769
Total suspended exploratory wells	\$ 486,825	\$ 519,747
No. of projects exceeding 1 year	 26	 30

- (a) Corresponds to 9 projects of Ecopetrol, 3 projects of Ecopetrol America Inc. and 14 projects of Hocol that are pending project tradability statement or that are temporarily closed due to environmental issues.
- (b) For 2013, it corresponds to well Oripaya 1 which was temporarily abandoned. It will be reactivated when required as a producing well after conducting workover procedure. For 2012, it corresponds to well Rio Zulia West 3 which is a producing well and was pending license from the National Hydrocarbons Agency.
- (c) Corresponds to Huron-1 well closed because it is not connected to production facilities. There is a currently development project to connect at the facilities of the Piedemonte contract, because the size and Huron's economy do not support an independent development. We expect to start production in 2016.

### a. Interest

Under Colombian Government Entity GAAP, all interest paid net of interest income is subject to capitalization regardless of the utilization of the funds. Exchange rate differentials are also capitalized as part of the asset. The Company's assessment of the methodology followed to determine the capitalization amount under U.S. GAAP considered more detailed information available to estimate the interest to be capitalized. The Company obtained detail of the assets associated to the debt and is able to apply the analysis and calculations based on each project, providing further detail of interest capitalized.

The total interest capitalized during 2013 under Colombian Government Entity GAAP was \$637,043 and the total interest capitalized under U.S. GAAP was \$156,530. The effect of this adjustment in the reconciliation of income was \$480,513 The total interest capitalized during 2012 under Colombian Government Entity GAAP was \$761,199 and the total interest capitalized under U.S. GAAP was \$153,999. The effect of this adjustment in the reconciliation of income was \$207,514 and the total interest capitalized under U.S. GAAP was \$85,337. The effect of this adjustment in the reconciliation of income was \$207,514 and the total interest capitalized under U.S. GAAP was \$85,337. The effect of this adjustment in the reconciliation of income was \$122,177.

### b. Impairment

Under Colombian Government Entity GAAP, technical appraisals for property, plant and equipment are performed at least every three years. If the technical study is lower than the carrying value, the difference is recorded in equity as a reduction of the property, plant and equipment carrying value even if it reduces the valuation surplus below zero. Under U.S. GAAP, in accordance with ASC 360-10, Property, Plant, and Equipment - Impairment or Disposal of Long-Lived Assets (ASC 360-10), property, plant, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset to be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by the asset to the carrying value of the asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying value exceeds its fair value. Fair value is determined through discounted cash flow models. For U.S. GAAP purposes, the Company reviewed property, plant and equipment for impairment as of December 31, 2013, 2012, 2011, and recorded impairment losses when required.

For U.S. GAAP purposes, the Company recorded an impairment loss of \$45,620 in 2013 related to the decrease of reserves estimate revision. In 2012, the company recognized an impairment loss of \$276,145, \$80,242 corresponding to production fields and \$195,903 related to pipeline transportation systems. \$136,357 in 2011, as additional impairment charges to reduce the net book value of certain field assets and pipelines to their estimated fair values.

### c. Revaluation of property, plant and equipment and public accounting effect

Under Colombian Government Entity GAAP valuation surplus of property, plant and equipment and public accounting effect correspond to the difference between net book value and the market value for real estate or the current value in use for property, plant and equipment, determined by specialists. These accounts are reflected as valuations and as valuation surplus from reappraisals of assets and the public accounting effect (components of equity) in the Company's consolidated balances sheets. The last valuation was in December 2013. Technical appraisals are valid for three years.

Under U.S. GAAP, the valuation surplus of assets and the public accounting effect are not permitted.

## xv. DEPRECIATION, DEPLETION AND AMORTIZATION

Under Colombian Government Entity GAAP, all tangible equipment, including those used in crude oil and natural gas, exploration and development, are depreciated on a straight-line basis over the related estimated useful lives. Intangible crude oil and natural gas assets reflected on the Company's consolidated balance sheets as natural and environmental resources are depleted on a units-of-production basis.

In the case of HOCOL, all tangible and intangible assets used in the production of crude and natural gas production are depreciated or depleted using the units of production method, using developed proved reserves, except for the pipeline asset which is depreciated on a straight-line basis over the related estimated useful life (20 years). For REFICAR, in the case of the unit "Viscorreductora", this is depreciated based on a 4 year life on a straight line basis, ending in December 2013. For BIOENERGY, in relation to agricultural sugarcane crops, the company develops the plantations that it will use as base for the production of Bioethanol. The cost of the agricultural plantations will be amortized during productive cycle time frame, using a method at recognized technical value.

Under U.S. GAAP, all assets, including tangible equipment, used in crude oil and natural gas producing activities are required to be depreciated or depleted using a units-of-production method, using proved reserves calculated in accordance with SEC requirements. Therefore, an adjustment to net income per U.S. GAAP has been recorded to account for the difference in depreciation, depletion and amortization expense based on the above-described differences in the methods used. In addition, the financial statements reflect the amortization of those assets affected by the application of ASC 740-10, *Accounting for Acquired Temporary Differences in Certain Purchase Transactions That Are Not Accounted for as Business Combinations*. Therefore, an adjustment to net income per U.S. GAAP has been recorded to account for the difference in depreciation, depletion and amortization expense.

#### xvi. ASSET RETIREMENT OBLIGATIONS

Under Colombian Government Entity GAAP, the Company updates annually the analysis of the estimated liability for future asset retirement obligations as of each balance sheet date. The liability is adjusted to the current value and an offsetting amount is recorded as an adjustment to the asset cost.

For purposes of U.S. GAAP reporting, the Company follows the provisions of Accounting Standards Codification ASC 410-20 *Asset Retirement Obligations*. ASC 410-20 requires the Company to recognize a liability for the present value of all legal obligations associated with the retirement of tangible, long-lived assets as of the date when the legal obligation began and capitalize an equal amount as an asset retirement cost (asset). Each period the liability is accreted using the effective interest rate method. The accretion is included as an operating expense. The cost associated with the abandonment obligation, is included in the computation of depreciation, depletion and amortization.

An adjustment has been recorded in the consolidated financial statements to reflect accretion expense, and the related obligation and assets in accordance with ASC 410-20.

For Pipeline systems there is insufficient information to reasonably determine the timing and/or method of settlement for estimating the fair value of the asset retirement obligation. In these cases, the asset retirement obligation cost is considered indeterminate because there is no data or information that can be derived from past practice, industry practice, our intentions or the estimated economic life of the asset. Useful lives of most pipeline systems are primarily derived from available supply resources and ultimate consumption of those resources by end users. Variables can affect the remaining lives of the assets which preclude us from making a reasonable estimate of the asset retirement obligation. Indeterminate asset retirement obligation costs will be recognized in the period in which sufficient information exists to allow us to reasonably estimate potential settlement dates and methods.

In addition to the aforementioned situation, it is not possible at this time to reasonably estimate the amount of any obligation for asset retirement obligation related to refineries. In addition, The Company believes there is not sufficient information available to estimate the fair value of the asset retirement obligation because the settlement date or the range of potential settlement dates have not been specified by others and information is not available to apply an expected present value technique.

# The following table presents the changes in asset retirement obligations for 2013 and 2012 as is required by ASC 410-20.

	2013		2012
Balance at beginning of year	\$ 2,219,651	\$	2,125,900
Liabilities incurred in the current year	25,097		72,340
Revisions in estimated cash flows	426,727		(23,389)
Liabilities settled in the current period	(94,950	)	(103,793)
Accretion expense	177,545		148,593
Balance at end of year	\$ 2,754,070	\$	2,219,651

### xvii. EQUITY CONTRIBUTIONS

### a. Incorporated Institutional Equity

At the end of association contracts that were signed prior to January 1, 2004, private companies are required to transfer, without cost, to Ecopetrol, all producing wells, facilities and other real estate and assets acquired in executing the contracts. Under Colombian Government Entity GAAP, the Company accounts for the receipt, using the relinquishing Company's reported historical cost, by recording an increase to assets and equity. The assets are then depreciated in accordance with the Company's previously disclosed accounting policies. For U.S. GAAP reporting purposes, these balances and their related impacts on accumulated depreciation, depletion and amortization, and cost of production have been removed from the financial statements, based on the fact that the cost of these assets is zero.

The adjustment to conform to U.S. GAAP in 2013 was a reduction in equity of \$28,300 (original value of \$149,923 net of \$121,623 in accumulated depreciation for the assets received).

The adjustment to conform to U.S. GAAP in 2012 was a reduction in equity of \$37,088 (original value of \$149,695 net of \$112,607 in accumulated depreciation for the assets received).

The adjustment to conform to U.S. GAAP in 2011 was a reduction in equity of \$50,479 (original value of \$148,999 net of \$98,520 in accumulated depreciation for the assets received).

### b. Reversal of Concession Rights Contributed as Capital

Under Colombian Government Entity GAAP, the Company recorded as reservoirs the contributions of the Nation represented by crude oil and natural gas reserves deriving from the reversion of concessions of oilfield areas in favor of the Nation, given before the effectiveness of Decree 1760 of 2003. Reserves were valued by means of the technical-economic model where the value per barrel resulted from the relation of the net present value obtained at a discount rate and the total proved reserves on the contribution date.

For U.S. GAAP purposes, these reversions were considered a transfer of assets between entities under common control. Ecopetrol, the entity that received the net assets, recognized the assets transferred at their carrying amounts in the accounts of the transferring entity at the date of transfer which was zero value. The unamortized amount reverted at December 31, 2013 and 2012 was \$14,733 and \$17,013, respectively. Since 2003 (creation of the *Agencia Nacional de Hidrocarburos* - ANH) there have not been reversals of concessions.

# xviii. PUBLIC OFFERING COST AND DISCOUNT ON ISSUANCE OF SHARES

In August 2011, the Company issued shares in a second public offering in Colombia. Under Colombian Government Entity GAAP, all related costs of this issuance were expensed as well as a discount granted to shares fully paid in cash. For U.S. GAAP purposes, direct costs incurred in public offerings and cash discounts are recorded as a reduction of the proceeds received and, consequently, a reduction in equity. An adjustment in the amount of \$103,949 was recorded to recognize the effect of these amounts. There were not any public offering Shares during 2013 and 2012.

# xix. INDEBTEDNESS COST

Under Colombian Government Entity GAAP, the borrowing costs correspond to interest paid, lender commissions and other costs related to the debt transactions, the exchange difference for the interest rate to be paid, the amortization of premiums and discounts in the placement of bonds and securities, and any income results earned on the temporary investment of such loans.

Under U.S. GAAP, the borrowing costs correspond to interest paid, lender commissions and other costs related to the debt transactions, the amortization of premiums and discounts in the placement of bonds and securities, should not offset interest expense with interest income, unless the financing transaction involves restricted, tax-exempt borrowings. Unlike Colombian Government Entity GAAP, the cost of borrowing does not include the exchange difference for the interest rate to be paid, unless such difference forms part of the negotiation of the interest rate for the transaction.

The total indebtedness cost incurred during 2013 under Colombian Government Entity GAAP was \$1,022,774 and the total indebtedness cost incurred under U.S. GAAP was \$1,021,389. The effects of this adjustment in the reconciliation of income were \$1,385. The total indebtedness cost incurred during 2012 under Colombian Government Entity GAAP was \$820,821 and the total indebtedness cost incurred under U.S. GAAP was \$820,856. The effects of this adjustment in the reconciliation of income were \$1,385. The total indebtedness cost incurred during 2011 under Colombian Government Entity GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,261 and the total indebtedness cost incurred under U.S. GAAP was \$608,912. The effects of this adjustment in the reconciliation of income were \$652.

# xx. BUSINESS COMBINATIONS

#### a. Goodwill

Under Colombian Government Entity GAAP, goodwill corresponds to the difference between the acquisition price and the book value of the acquired company and is recognized as an intangible asset. Separate intangibles are not identified under Colombian Government Entity GAAP nor are assets stepped up to fair values as a result of acquisitions; if the book value is higher than the acquisition price, the resulting difference is recorded as a gain. The amount recognized as goodwill is amortized during the period in which the Company expects to receive future benefits; in addition, it is subject to an annual impairment test.

Under U.S. GAAP ASC 350-20-35-3, we first assess qualitative factors to determine whether to perform the goodwill impairment test. If determined necessary, we use the two step impairment test in order to identify potential goodwill impairments and to measure the amount of impairment loss to be recognized. In the first step, we compare the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of a reporting unit exceeds its fair value of the reporting unit, goodwill of the reporting unit is considered impaired; thus, the second step of the impairment test is necessary.

The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss shall be recognized in an amount equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill.

After a goodwill impairment loss is recognized, the adjusted carrying amount of goodwill shall be its new accounting basis.

The following table shows, by Company, the goodwill balance as of December 31, 2013 and 2012, and the translation adjustment:

Company	 ance before pairment 2012	Goodwill acquired dur 2013			Exchange rate effect		Deferred acome tax	llance before mpairment 2013	cumulated irment 2013	Bal	lance 2013
Propilco	\$ 636,018	\$	-	\$	52,859	\$	(1,540)	\$ 687,337	\$ (327,183)	\$	360,154
Refineria de Cartagena S.A.	666,150		-		59,750		-	725,900	-		725,900
Bioenergy	8,993		-		-		-	8,993	-		8,993
Total	\$ 1,311,161	\$	-	\$	112,609	\$	(1,540)	\$ 1,422,230	\$ (327,183)	\$	1,095,047
				ng Exchange		Deferred					
	nce before pairment	Goodwill acquired dur			8			 llance before mpairment	cumulated		
Company					Exchange rate effect		Deferred ncome tax	 	cumulated irment 2012	Bal	lance 2012
Company Propilco	pairment	acquired dur			8			 mpairment		Bal \$	lance 2012 589,327
	pairment 2011	acquired dur			ate effect		ncome tax	 mpairment 2012	irment 2012	Bal \$	
Propilco	pairment 2011 694,387	acquired dur	ing 		rate effect (56,829)		ncome tax	 mpairment 2012 636,018	irment 2012	Bal \$	589,327

Under Colombian Government Entity GAAP, the following table shows the amounts deductible for income tax purposes for 2013 and 2012.

					2013		
		A	cumulated				Remaining
Company	Goodwill	A	nortization		Balance	Net Effect	time-years
Propileo	\$ 176,506	\$	(68,370)	\$	108,137	\$ 36,766	13.8
Andean Chemicals Ltd	205,541		(77,729)		127,812	43,456	13.8
IPL Enterprises	880,127		(196,631)		683,496	232,389	11
Offshore International Group – "OIG"	536,079		(194,631)		341,448	116,092	10
Hocol	742,345		(204,747)		537,598	182,783	12
Equion	629,375		(253,682)		375,693	127,736	7.3
Total	\$ 3.169.973	\$	(995,790)	S	2,174,184	\$ 739.222	

				2012		
		Α	ccumulated			Remaining
Company	 Goodwill	A	mortization	 Balance	 Net Effect	time-years
Propilco	\$ 327,986	\$	(86,572)	\$ 241,414	\$ 79,667	14.8
Andean Chemicals Ltd	357,629		(94,400)	263,229	86,866	14.8
IPL Enterprises	537,093		(137,257)	399,836	131,946	12
Offshore International Group – "OIG"	748,986		(186,175)	562,811	185,728	11
Hocol	748,947		(157,333)	591,615	195,233	13
Equion	972,409		(189,695)	782,714	258,296	8.3
Total	\$ 3,693,050	\$	(851,432)	\$ 2,841,619	\$ 937,736	

Under Colombian Government Entity GAAP in 2013 and 2012, \$144,356 and \$282,463 were amortized in regard to goodwill acquired from OIG, Hocol, Andean Chemicals, IPL Enterprises, Propilco and Equion. The amortization in the table above represents the accumulated amortization of the companies that could be deductible for income tax purposes. Under U.S. GAAP, goodwill acquired from OIG, which is recognized by the equity method, is included as part of the investment.

Under U.S. GAAP, Ecopetrol tests goodwill for impairment at least annually using a two-step process that begins with an estimation of the fair value of a reporting unit. The first step is a screen for potential impairment and the second step measures the amount of impairment. Ecopetrol did not perform a qualitative analysis although allowed.

For impairment purposes fair value is determined by reference to market value, if available, or by a qualified evaluator or pricing model. Determination of a fair value by a qualified evaluator or pricing model requires management to make assumptions and use estimates. Management believes that the assumptions and estimates used are reasonable and supportable in the existing market environment and commensurate with the risk profile of the assets valued. However, different assumptions and estimates could be used which would lead to different results. The valuation models used to determine the fair value of these companies are sensitive to changes in the underlying assumptions. For example, the prices and volumes of product sales to be achieved and the prices which will be paid for the purchase of raw materials are assumptions which may vary in the future. Adverse changes in any of these assumptions could lead the Company to record a goodwill impairment charge.

During 2013 and 2011, Ecopetrol performed an impairment test of goodwill which showed that the Propilco was impaired by \$280,493 and \$46,691, respectively. During 2013, lower supply from Ecopetrol increased the variable costs, as the company switched their raw material suppliers. Furthermore, the company performance was challenged by shifts in the petrochemical markets, as a result of new shale gas discoveries in the U.S. and low costs products coming from Asia. During 2012, Ecopetrol Performed an impairment test of goodwill and there was no impairment.

# b. Business Combination

During 2012 and 2013, Ecopetrol was not in any business combinations.

In January 24, 2011, we obtained required authorizations to completed the acquisition of BP Exploration Company (Colombia) Limited, a British Petroleum subsidiary operating in Colombia, which includes assets in oil and gas exploration and production as well as oil transportation and gas marketing. As a result of this acquisition, we increased our participation in the ownership of the Ocensa pipeline from 60.00% to 72.65%, in ODC from 66% to 73% and in Oleoducto del Alto Magdalena, or OAM assets, from 83.00% to 85.12%. We also acquired a 10.20% interest in Transgas de Occidente.

The total acquisition price, paid in cash, was US\$1,596,157 thousands. Ecopetrol totals 51% ownership, the remaining 49% represents Talisman Energy Inc. share. The following table details the purchase price calculation (USD in thousands) as well as the Colombian peso equivalent (in millions) of the transaction using the effective exchange rate on the payments dates.

	Amount USD Amount COP
Purchase Price	\$ 1,750,000
Less: Purchase Price Adjustment	(153,842)
Adjusted Purchase Price	1,596,157
Participation (%)	51%
Total Purchase Price	<u>\$ 814,040</u> \$ 1,483,891

The acquisition was accounted for as a business combination (ASC 805) which, among other things, requires assets acquired and liabilities assumed to be measured at their acquisition date fair values. Fair value measurements and Purchase Price Allocation process was finalized in fourth quarter 2011.

Pro-forma financial information is not presented as it would not be materially different from the information presented in the Consolidated Statement of Income.

The following table summarizes the measurement at fair value of the assets acquired and liabilities assumed:

	An	nount USD
Current assets	\$	293,465
Investments and long-term receivables		508,242
Property, plant and equipment and reserves		1,367,948
Deferred tax asset		15,073
Other assets		24,913
Total assets acquired	\$	2,209,641
Current liabilities		331,145
Long term debt		3,601
Deferred tax liability		283,332
Other liabilities		131,835
Total liabilities acquired		749,913
Net assets acquired	\$	1,459,728
Non-controlling interest goodwill		66,850
Goodwill		69,579
Total consideration paid in cash	\$	1,596,157

Property, plant and equipment and reserves were measured primarily using an income approach. The fair values of the acquired oil and gas properties were based on significant inputs not observable in the market and thus represent Level 3 measurements. Significant inputs included estimated resource volumes, assumed future production profiles, and assumptions on the timing and amount of future operating and development costs.

The net assets acquired for US\$1,459,728, represent \$2,682,999 pesos and goodwill of \$226,592 pesos. The goodwill represents the amount of the consideration transferred in excess of the values assigned to the individual assets acquired and liabilities assumed. Goodwill represents the future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The fair value of the 49% share of Talisman Energy Inc. is US\$782,117.

In Colombia, the goodwill is deductible for tax purposes, thus, a deferred tax asset of \$315,979 was recognized for the difference between the tax goodwill and the goodwill, resulting in a bargain purchase gain of \$89,387 recorded in earnings for the year ended December 31, 2011.

In addition, Ecopetrol increased its ownership interest in Ocensa and ODC while retaining control, as a result, the difference between the fair value and the carrying amount of the non-controlling interest was recognized in a decrease in additional paid-in-capital for the amount of \$792,440.

### xxi. NON-CONTROLLING INTEREST

This table presents the carrying amount of total equity (net assets) attributable to the non-controlling interest under U.S. GAAP as of December 31<sup>st</sup> of 2013, 2012 and 2011.

	OCENSA		ODC	ODL	BI	OENERGY	OBC	]	EQUION	TOTAL
Balance 2010	143,49	,	10,921	150,458	_	9,524	 (5,042)		-	 309,351
Acquired non-controlling interest	(88,970	))	(3,536)	-		-	-		1,425,702	1,333,196
Issuance of Company shares		-	-	53,284		-	321,044		-	374,328
Net income (loss)	37,78′	7	(4,739)	22,493		(2,294)	(9,114)		196,259	240,392
Other comprehensive income		-	-	-		-	-		116	116
Translation adjustments		-	-	1,404		-	-		29,332	30,736
Balance 2011	\$ 92,30'	5	2,646	\$ 227,639	\$	7,230	\$ 306,888	\$	1,651,409	\$ 2,288,119
Acquired non-controlling interest		-	-	-		(1,797)	672		-	(1,125)
Issuance of Company shares		-	-	-		5,492	-		-	5,492
Net income (loss)	51,408	3	11,888	46,133		(1,593)	(13,700)		97,709	191,845
Other comprehensive income		-	-	-		-	-		121	121
Translation adjustments		-	-	(44)		-	-		(49,923)	(49,967)
Spin-off of Ocensa shares	73,79′	7	-	-		-	-		(73,797)	-
Dividends for Spin-Off		-	-	-		-	-		(37)	(37)
Balance 2012	\$ 217,512	5	14,534	\$ 273,728	\$	9,332	\$ 293,860	\$	1,625,482	\$ 2,434,448
Payment of dividends	(255,719	))	-	-		-	-		-	(255,719)
Capital contribution		-	-	-		9,164	-		-	9,164
Net income (loss)	344,24	7	18,566	56,583		(2,335)	(37,992)		160,620	539,689
Other comprehensive income		-	-	-		-	-		43	43
Translation adjustments		-	-	85		-	-		87,621	87,706
Balance 2013	\$ 306,040	5	33,100	\$ 330,396	\$	16,161	\$ 255,868	\$	1,873,766	\$ 2,815,331

#### xxii. CUMULATIVE TRANSLATION ADJUSTMENT

Under Colombian Government Entity GAAP, the companies domiciled outside Colombia, regardless of their functional currency, must report in USD and translate balances to Colombian pesos with the impact recorded as a cumulative translation adjustment.

For U.S. GAAP, the Company must remeasure all subsidiary financial information to its functional currency and then translate it to the reporting currency. This difference in methodology results in a difference in the translated amounts recorded in the consolidated financial statements.

#### xxiii. EARNINGS PER SHARE

Under Colombian Government Entity GAAP, earnings per share ("EPS") are calculated by dividing net income by the weighted average of both common and preferred shares outstanding for each period presented. However, although the Company has presented EPS under Colombian Government Entity GAAP for informational purposes, the presentation of EPS is not required for financial statements issued under Colombian Government Entity GAAP. The Company does not have any issued or outstanding preferred shares.

U.S. GAAP requires dual presentation of basic and diluted EPS for entities with complex capital structures, as well as a reconciliation of the basic EPS calculation with the diluted EPS calculation. Basic EPS is calculated by dividing net income available to common shareholders by the weighted average of common shares outstanding for the corresponding period.

Diluted EPS assumes the issuance of common shares for all dilutive potential common shares outstanding during the reporting period. For the years ended December 31, 2013, 2012 and 2011, the Company had a simple capital structure. There are not any other compensation plan involving shares. Therefore, the Company is not required to present diluted EPS for these years.

### xxiv. RECENTLY ADOPTED U.S. ACCOUNTING STANDARDS

In December, 2011, FASB issued ASU No. 2011-11 Balance Sheet (Topic 210) - Disclosures about Offsetting Assets and Liabilities, the amendments require an entity to disclose information about offsetting and related arrangements on derivatives, hedging, repurchase agreements, reverse repurchase agreements, and securities transactions, to enable users of the financial statements to understand the effect of those arrangements in the financial position. An entity is required to apply the amendments for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods. The adoption of this ASU has not any effect because we do not have any such compensation agreements.

In February, 2013, FASB issued ASU No. 2013-02 Other Comprehensive Income (ASC 220). The provisions of this ASU require an entity to disclose any reclassifications out of other comprehensive income if the amount is required under U.S. GAAP to be reclassified in their entirety in the same reporting period. For other amounts that are not required to be reclassified in their entirety to net income in the same reporting period an entity is required to cross-reference other disclosures that provide additional detail about those amounts. These amendments are effective prospectively for reporting periods beginning after December 15, 2012. Ecopetrol adopted this ASU from this reporting period as shown in item 18, section C, note 3 Supplemental consolidated comprehensive income. No material effects arose from the adoption.

Recently issued Accounting Standards and U.S. GAAP Pronouncements

In February, 2013, FASB issued ASU No. 2013-04 Liabilities (ASC 405) - Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date. The amendments in this Update require an entity to measure obligations resulting from joint and several liability arrangements for which the total amount is fixed at the reporting date, as the sum of: a) The amount the entity agreed to pay on the basis of its arrangement among its- co-obligors; b) Any additional amount the entity expects to pay on behalf of its co-obligors. An entity is also required to disclose the nature and amount of the obligation as well as other information about those obligations. These amendments are effective retrospectively for fiscal years beginning after December 15, 2013; early adoption is permitted. As of the reporting date Ecopetrol has no operations within the scope of this ASU.

In March, 2013, FASB issued ASU No. 2013-05 Foreign Currency Matters (Topic 830) Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity. This update sets new rules on how and when an entity is required to release the cumulative translation adjustment into net income when an entity ceases to have a controlling interest in a subsidiary or a group of assets within a foreign entity. The amendments in this update are effective prospectively for fiscal years beginning after December 15, 2013. Early adoption is permitted, however Ecopetrol does not intend to use this option. As of the reporting date we do not expect any significant effects arising from the adoption of this ASU.

In July, 2013, FASB issued ASU No. 2013-11 Income Taxes (Topic 740) - Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists. These amendments require an entity to present an unrecognized tax benefit as a liability instead of being combined with an asset, to the extent that a net operating loss carryforward or similar tax loss or a tax credit carryforward is not available at the reporting date under the tax law of the applicable jurisdiction to settle any additional income taxes that would result from the disallowance of a tax position or the tax law of the applicable jurisdiction does not require the entity to use, and the entity does not intend to use, the deferred tax asset for such purpose.

### xxv. CONCENTRATIONS

In 2013 one customer of the refining segment accounted for 11.4% of total sales. No other customers accounted for more than 10% of total sales in 2013. In 2012 there were no customers in excess of 10% of total sales. In 2011 there were no customers in excess of 10% of total sales. There was no exposure that affects the financial position of Ecopetrol if the company lost the client.

The majority of the Company's assets and activities are located in Colombia. The financial position and results of operations of those subsidiaries located outside of Colombia are not material to the Company.

### xxvi. SEGMENT INFORMATION

From the first quarter of 2013 a change was implemented in the reported segments, which consisted of removing the segment of Supply and Marketing. This change is because the marketing margin, which was the reason for that segment, has suffered different impacts (changes in the marketing scheme ANH royalties and therefore in agreement with that entity; preference of the Refinery by loading ANH crude and third parties, leaving this segment the crude oil marketing that has lower earning, among others) that make such a small margin today; and therefore cannot be considered in itself a core business of the company. This activity could migrate to a simple model of marketing services to Exploration and Production and Refining segments.

By eliminating the Supply and Marketing segment, which was approved by the Board Director, revenues and costs associated with the marketing of refined products, buying crude oil and gas, were allocated in proportion to their use to the Refining & Petrochemicals and Exploration & Production segments. The amounts for 2012 and 2011 were restated for comparative purposes.

The following segment information has been prepared according to ASC 280, Disclosure about Segments of an Enterprise and Related Information. Financial information by business segment is reported in accordance with the internal reporting system under RCP and shows internal segment information that is used by the chief operating decision maker to manage and measure the performance of Ecopetrol.

The financial information among segments is reported considering each business as a separate entity. Prices between segments are established by referencing those that would apply in an arm's length transaction. Each segment should bear the costs and expenses required to put the product in terms of use or marketing. Each segment assumes its administrative expenses and all non-operational transactions related to their activity.

The Company operates under the following segments, which are described as follows:

**Exploration and Production** - this segment includes the Company's oil & gas exploration and production activities. Revenue is derived from the sale of crude oil and natural gas to inter-company segments, at market prices, and to third parties. Revenue is derived from local sales of crude oil, regulated fuels, non-regulated fuels and natural gas. Sales are made to local and foreign distributors. Costs include those costs incurred in production. Expenses include all exploration costs that are not capitalized.

**Refining and Petrochemicals** - this segment includes the Company's refining activities. Goods sold, both internally and to third parties, include refined products such as motor fuels, fuel oils and petrochemicals at market prices. This segment also includes sales of industrial services to third parties.

Transportation and Logistics - this segment includes the Company's sales and costs associated with the Company's pipelines and other transportation activities

These functions have been defined as the operating segments of the Company since these are the segments (a) that engage in business activities from which revenues are earned and expenses are incurred; (b) whose operating results are regularly reviewed by the Company's chief operating decision maker to allocate resources to the segments and assess their performance; and (c) for which discrete financial information is available. Internal transfers represent sales to intercompany segments and are recorded and presented at market prices.

The following tables present the Company's consolidated balance sheet by segment in accordance with Colombian Government Entity GAAP:

				Α	As of I	December 31, 2013				
		ploration &		Refining		Transportation &		-		
		Production		Activities		logistics		Eliminations	_	Total
Current assets	¢.	4 2 41 1 2 5	Ô	050.050	0	2 (20.225	0		0	0.041.420
Cash and cash equivalents	\$	4,341,135	\$	870,078	\$	3,630,225	\$	(1.550.001)	\$	8,841,438
Accounts and notes receivable		4,514,267		2,482,038		960,467		(1,779,881)		6,176,891
Inventories		1,724,497		1,649,069		58,738		(172,905)		3,259,399
Investments		2,322,538		7,322		263,497		(934,049)		1,659,308
Other current assets		7,729,218		653,694		410,252		(3,038)		8,790,126
		20,631,655		5,662,201		5,323,179		(2,889,873)		28,727,162
Investments in non-consolidated companies		692,954		263,406		263,384		-		1,219,744
Property, plant and equipment, net		14,238,201		17,505,340		13,305,781		(50,642)		44,998,680
Natural and environmental resources, net		21,456,659		-		-		-		21,456,659
Other long term assets		11,306,958		4,787,406		21,332,530		(1,401,145)		36,025,749
Long term assets		47,694,772		22,556,152		34,901,695		(1,451,787)		103,700,832
Total assets	\$	68,326,427	\$	28,218,353	\$	40,224,874	\$	(4,341,660)	\$	132,427,994
Accounts payable	\$	(5,572,807)	\$	(3,139,887)	\$	(2,488,495)	\$	1,661,255	\$	(9,539,934)
Financial obligations short-term	φ	(236,376)	¢	(451,817)	ф	(2,488,495) (261,708)	¢	175,342	ф	(774,559)
Other current liabilities		(7,239,844)		(2,777,506)		(1,970,784)		175,542		(11,988,134)
Current liabilities								1.92( 507		
		(13,049,027)		(6,369,210)		(4,720,987)		1,836,597		(22,302,627)
Financial obligations long-term		(6,814,352)		(10,901,056)		(5,081,564)		1,372,980		(21,423,992)
Other long term liabilities		(9,936,820)		(1,904,224)		(2,103,773)		936,393		(13,008,424)
Long term liabilities		(16,751,172)		(12,805,280)		(7,185,337)		2,309,373		(34,432,416)
Total liabilities		(29,800,199)		(19,174,490)		(11,906,324)		4,145,970	_	(56,735,043)
Non-controlling interest		(1,376,969)		(19,402)		(3,177,377)		-		(4,573,748)
Shareholders' equity of Ecopetrol		(37,149,259)		(9,024,461)		(25,141,173)		195,690		(71,119,203)
Total equity		(38,526,228)		(9,043,863)		(28,318,550)		195,690		(75,692,951)
Total liabilities and equity	\$	(68,326,427)	\$	(28,218,353)	\$	(40,224,874)	\$	4,341,660	\$	(132,427,994)
Capital expenditures	\$	9,622,932	\$	3,835,556	\$	766,326	\$		\$	14,224,814
Goodwill	\$	1,254,738	\$	236,849	\$	683,497	\$	-	\$	2,175,084

			A	As of	December 31, 2012				
	Exploration &		Refining		Transportation &				<b>T</b> ( <b>1</b>
	Production		Activities		logistics		Eliminations	_	Total
<b></b>	6 010 (07	0	160 560	0	1 254 022	¢	(5.400)	0	<b>5</b> 0 40 (00
\$		\$		\$		\$		\$	7,940,690
									5,261,501
									2,806,282
	, ,		,		,				1,371,559
	, ,		, ,		<u> </u>				5,503,595
	, ,		, ,				(3,283,145)		22,883,627
							-		1,077,190
			13,997,481						37,134,955
	, ,		-						18,568,730
	19,065,853		7,751,299		12,834,253		(5,436,329)		34,215,076
	50,741,994		21,789,813		24,291,234		(5,827,090)	_	90,995,951
\$	67,510,604	\$	28,900,973	\$	26,578,236	\$	(9,110,235)	\$	113,879,578
\$	(8 288 357)	\$	(2 164 739)	\$	(2 718 176)	\$	2 265 897	\$	(10,905,375)
Ψ		ψ		ψ		Ψ		ψ	(2,359,488)
			. , ,						(9,989,212)
		_			<u> </u>	_			(23,254,075)
									(11,346,337)
			( ) )						
									(11,936,118)
									(23,282,455)
	(27,786,117)		(15,388,460)		(8,948,976)		5,587,023		(46,536,530)
	(1,020,677)		(12,849)		(1,569,016)		375		(2,602,167)
	(38,703,810)		(13,499,664)		(16,060,244)		3,522,837		(64,740,881)
\$	(39,724,487)	\$	(13,512,513)	\$	(17,629,260)	\$	3,523,212	\$	(67,343,048)
\$	(67,510,604)	\$	(28,900,973)	\$	(26,578,236)	\$	9,110,235	\$	(113,879,578)
\$	8,225,642	\$	4,460,104	\$	2,782,114	\$	-	\$	15,467,860
\$	1,945,463	\$	514,093	\$	382,962	\$	-	\$	2,842,518
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Production           \$         6,210,697           3,546,348         1,548,335           1,548,335         2,113,529           3,349,701         16,768,610           1,024,057         12,001,716           18,650,368         19,065,853           50,741,994         \$           \$         67,510,604           \$         (8,288,357)           (405,327)         (6,522,910)           (15,216,594)         (2,964,805)           (9,604,718)         (12,569,523)           (27,786,117)         (1,020,677)           (38,703,810)         \$           \$         (39,724,487)           \$         (67,510,604)           \$         8,225,642	Production           \$         6,210,697         \$           3,546,348         1,548,335         2,113,529           3,349,701	Exploration & Production         Refining Activities           \$         6,210,697         \$         460,560           3,546,348         3,139,496         1,548,335         1,489,671           2,113,529         32,969         3,349,701         1,988,464           16,768,610         7,111,160         1,024,057         41,033           12,001,716         13,997,481         18,650,368         -           19,065,853         7,751,299         50,741,994         21,789,813           \$         67,510,604         \$         28,900,973           \$         (8,288,357)         \$         (2,164,739)           (405,327)         (472,837)         (472,837)           (6,522,910)         (2,511,529)         (2,514,105)           (2,964,805)         (8,181,080)         (2,964,805)           (9,604,718)         (2,058,275)         (10,239,355)           (12,569,523)         (10,239,355)         (12,549,523)           (1,020,677)         (12,849)         (38,703,810)           (13,499,664)         \$         (28,900,973)           \$         (67,510,604)         \$         (28,900,973)	Exploration & Production         Refining Activities           \$         6,210,697         \$         460,560         \$           3,546,348         3,139,496         1,548,335         1,489,671         2,113,529         32,969           3,349,701         1,988,464         7,111,160         7,111,160         1,024,057         441,033           12,001,716         13,997,481         18,650,368         -         -           19,065,853         7,751,299         50,741,994         21,789,813         \$           \$         67,510,604         \$         28,900,973         \$           \$         67,510,604         \$         28,900,973         \$           \$         6,522,910         (2,511,529)         (5,149,105)         (2,964,805)         (8,181,080)         (9,604,718)         (2,058,275)         (12,2569,523)         (10,239,355)         (2,7,786,117)         (15,388,460)         (1,020,677)         (12,849)         (38,703,810)         (13,499,664)         \$         \$         (39,724,487)         \$         (13,512,513)         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$	Production         Activities         logistics           \$         6,210,697         \$         460,560         \$         1,274,922           3,546,348         3,139,496         648,403         1,548,335         1,489,671         795           2,113,529         32,969         53,786         309,096         16,768,610         7,111,160         2,287,002           1,024,057         41,033         12,100         12,001,716         13,997,481         11,418,012,           18,650,368         -         26,869         19,065,853         7,751,299         12,834,253           50,741,994         21,789,813         24,291,234         24,291,234         3         6,578,236           \$         (8,288,357)         \$         (2,164,739)         \$         (2,718,176)           (405,327)         (472,837)         (1,762,369)         (6,522,910)         (2,511,529)         (958,160)           (15,216,594)         (5,149,105)         (5,438,705)         (2,64,805)         (3,810,80)         (2,113,858)           (9,604,718)         (2,058,275)         (1,396,413)         (1,269,016)         (3,703,810)         (13,499,664)         (16,060,244)           (10,20,677)         (12,849)         (1,569,016)         (13,499,664)<	Exploration & Production         Refining Activities         Transportation & logistics           \$         6,210,697 3,546,348         \$         460,560 3,546,348         \$         1,274,922 9         \$           \$         6,210,697 3,546,348         \$         3,139,496         648,403         \$           \$         3,546,348         3,139,496         648,403         \$         \$           \$         1,548,335         1,489,671         795         \$         \$           \$         3,349,701         1,988,464         309,096         \$         \$           \$         1,024,057         41,033         \$         \$         \$           \$         1,024,057         41,033         \$         \$         \$           \$         1,024,057         41,033         \$         \$         \$           \$         0,05,853         7,751,299         \$         \$         \$           \$         67,510,604         \$         28,900,973         \$         \$         \$           \$         67,510,604         \$         28,900,973         \$         \$         \$           \$         67,510,604         \$         28,900,973         \$         \$         \$	Exploration & Production         Refining Activities         Transportation & logistics         Eliminations           \$             6.210,697             \$             6.210,697             \$             4.400,560             \$             1,548,335             1,489,671             795             (232,519)             2,113,529             32,969             53,786             (828,725)             3,349,701             1,988,464             309,096             (143,666)             16,768,610             7,111,160             2,287,002             (3,283,145)             1,024,057             41,033             12,100             -             26,669             (108,507)             19,065,853             7,751,299             12,834,253             (5,436,329)             50,741,994             21,789,813             24,291,234             (5,827,090)             \$             50,741,994             21,789,813             24,291,234             (5,827,090)             \$             25,0741,994             21,789,813             24,291,234             (5,827,090)             \$             26,578,236             \$             (9,110,235)             \$             (405,327)             (472,837)             (1,762,369)             28,009,973             \$             26,578,236             \$             (9,110,235)             (5,822,910)             (2,164,739)             \$             (2,964,805)             (8,181,080)             (2,113,858)             1,913,406             (9,604,718)             (2,058,275)             (15,216,594)             (5,149,105)             (5,438,705)             2,550,329             (2,964,805)             (8,181,080)             (2,113,858)             1,913,406             (9,604,718)             (2,058,275)             (1,396,413)             1,123,288             (15,26,523)             (10,239,355)             (3,510,271)             30,36,694             (2,786,117)             (15,388,460)	Exploration & Production         Refining Activities         Transportation & logistics         Eliminations           \$         6,210,697         \$         460,560         \$         1,274,922         \$         (5,489)         \$           3,546,348         3,139,496         648,403         (2,072,746)         \$         (2,072,746)         \$           1,548,335         1,489,671         795         (232,519)         \$         (33,49,701)         1,988,464         309,096         (143,666)           16,768,610         7,111,160         2,287,002         (3,283,145)         \$         \$           1,024,057         41,033         12,100         -         \$         \$           1,024,057         41,033         12,100         -         \$         \$           18,650,368         -         26,869         (108,507)         \$         \$         \$           19,065,853         7,751,299         12,834,253         (5,436,329)         \$         \$         \$           \$         6,522,910         (2,514,739)         \$         (2,718,176)         \$         2,265,897         \$           \$         (405,327)         (472,837)         (1,762,369)         \$         \$         \$

The Company's consolidated statement of net income by segment is as follows in accordance with Colombian Government Entity GAAP:

				Yea	r en	ded December 31, 2013				
	_	Exploration & Production		Refining Activities		Transportation & logistics	Eliminations			Total
Revenues:										
Local sales	\$	3,194,136	\$	20,494,260	\$	163,180	\$	(179,544)	\$	23,672,032
Foreign sales, net		41,153,504		7,762,069		-		(4,620,767)		44,294,806
Services		29,575		202,325		5,639,436		(3,409,460)		2,461,876
Inter-segment net operating revenues		5,601,988		777,025		412,510		(6,791,523)		-
Total Revenue		49,979,203		29,235,679		6,215,126	_	(15,001,294)		70,428,714
Cost of sales		20,962,509		28,642,962		2,970,887		(15,052,311)		37,524,047
Depreciation, depletion and amortization		3,911,239		570,900		548,096		-		5,030,235
Selling and projects		2,963,917		1,150,460		301,145		168,464		4,583,986
Administration expenses		640,800		475,518		340,175		(776)		1,455,717
Costs and expenses		28,478,465		30,839,840		4,160,303		(14,884,623)		48,593,985
Operating income		21,500,738		(1,604,161)		2,054,823		(116,671)		21,834,729
Financial income (expenses), net		58,161	_	(153,974)	_	126,069	_	15,397		45,653
Pension expenses		(192,587)		(218,827)		(67,323)		-		(478,737)
Other non-operating income (expenses)		250,126		158,437		72,340		(341)		480,562
Other expenses, net		115,700		(214,364)		131,086		15,056		47,478
Income before income taxes and non-controlling		21,616,438		(1,818,525)	_	2,185,909		(101,615)		21,882,207
Income tax benefit (expense)		(7,697,287)		573,708		(1,027,550)		62,291		(8,088,838)
Non-Controlling interest		(255,051)		2,148		(433,963)		-		(686,866)
Net income for the year	\$	13,664,100	\$	(1,242,669)	\$	724,396	\$	(39,324)	\$	13,106,503

			Yea	r end	led December 31, 2012			
	xploration & Production	Refining Activities		Transportation		Eliminations		 Total
Revenues:								
Local sales	\$ 2,517,035	\$	19,877,439	\$	1,990	\$	(112,409)	\$ 22,284,055
Services	184,441		52,584		2,890,500		(1,049,667)	2,077,858
Foreign sales, net	41,758,403		8,016,685		477		(5,285,476)	44,490,089
Inter-segment net operating revenues	8,191,244		1,565,393		1,159,198		(10,915,835)	-
Total Revenue	 52,651,123		29,512,101		4,052,165		(17,363,387)	68,852,002
Cost of sales	 21,910,603		28,871,613		2,179,951		(17,419,842)	35,542,325
Depreciation, depletion and amortization	3,669,404		551,625		772,154		-	4,993,183
Selling and projects	2,769,044		724,073		605,493		-	4,098,610
Administration expenses	471,779		204,423		198,778		-	874,980
Costs and expenses	 28,820,830		30,351,734		3,756,376		(17,419,842)	45,509,098
Operating income	23,830,293		(839,633)		295,789		56,455	 23,342,904
Financial income (expenses), net	 (153,936)		76,245		63,997		(154,195)	 (167,889)
Pension expenses	(379,565)		(431,320)		(137,570)		-	(948,455)
Other non-operating income (expenses)	140,002		(22,969)		16,738		(28,630)	105,141
Other expenses, net	(393,499)		(378,044)		(56,835)		(182,825)	(1,011,203)
Income before income taxes and non-controlling	23,436,794		(1,217,677)		238,954		(126,370)	22,331,701
Income tax benefit (expense)	(7,432,174)		325,545		(26,766)		-	(7,133,395)
Non-Controlling interest	(352,649)		1,139		(68,020)		171	(419,359)
Net income for the year	\$ 15,651,971	\$	(890,993)	\$	144,168	\$	(126,199)	\$ 14,778,947

			Year	r en	ded December 31, 2011			
	 Exploration & Production		Refining Activities		Transportation		Eliminations	 Total
Revenues:								
Local sales	\$ 2,104,106	\$	19,804,451	\$	2,543,697	\$	(897,625)	\$ 23,554,629
Foreign sales, net	39,407,562		8,582,545		821		(5,578,043)	42,412,885
Inter-segment net operating revenues	5,787,233		1,566,610		1,047,760		(8,401,603)	-
Total Revenue	47,298,901		29,953,606	_	3,592,278		(14,877,271)	65,967,514
Cost of sales	 17,077,573		27,805,828		1,584,711	_	(14,340,689)	 32,127,423
Depreciation, depletion and amortization	3,253,845		557,498		765,818		-	4,577,161
Selling and projects	1,978,344		742,921		478,732		-	3,199,997
Administration expenses	586,780		257,916		174,221		-	1,018,917
Costs and expenses	 22,896,542		29,364,163	_	3,003,482		(14,340,689)	40,923,498
Operating income	24,402,359		589,443		588,796		(536,582)	 25,044,016
Financial income (expenses), net	 (510,870)	_	(303,696)	_	(117,983)		28,247	 (904,302)
Pension expenses	(292,648)		(318,990)		(94,660)		-	(706,298)
Other non-operating income (expenses)	135,188		(13,807)		87,481		(845)	208,017
Other expenses, net	 (668,330)		(636,493)	_	(125,162)		27,402	 (1,402,583)
Income before income taxes and non-controlling	 23,734,029		(47,050)	_	463,634		(509,180)	23,641,433
Income tax benefit (expense)	(7,993,182)		36,912		548		-	(7,955,722)
Non-Controlling interest	(208,962)		1,151		(25,566)		-	(233,377)
Net income for the year	\$ 15,531,885	\$	(8,987)	\$	438,616	\$	(509,180)	\$ 15,452,334

The following tables illustrate sales by geographic zones:

Sales by geographic zones December 31, 2013

Zone	Products	Value	Participation
Colombia*	Crude oil, Refined, Petrochemicals and natural gas	\$ 26,352,461	37.4%
United States of America	Crude oil, Refined and Petrochemicals	20,609,349	29.2%
Asia	Crude oil, Refined and Petrochemicals	11,326,247	16.1%
Europe	Crude oil, Refined, and Petrochemicals	4,895,570	7.0%
South America	Crude oil, Refined Petrochemicals and natural gas	1,666,422	2.4%
Central America and Caribbean	Crude oil, Refined and Petrochemicals	3,640,865	5.2%
Other	Petrochemicals	1,937,800	2.7%
		\$ 70,428,714	100%

\*Includes sales to free trade zone by \$144,562

Sales by geographic zones December 31, 2012

Zone	Products	Value	Participation
Colombia*	Crude oil, Refined, Petrochemicals and natural gas	\$ 24,447,603	35.5%
United States of America	Crude oil, Refined and Petrochemicals	24,721,340	35.9%
Asia	Crude oil, Refined and Petrochemicals	7,201,295	10.5%
Africa	Refined and Petrochemicals	330,775	0.5%
Europe	Crude oil, Refined, and Petrochemicals	3,977,682	5.8%
South America	Crude oil, Refined Petrochemicals and natural gas	1,791,111	2.6%
Central America and Caribbean	Crude oil, Refined and Petrochemicals	6,213,770	9.0%
Other	Petrochemicals	168,426	0.2%
		\$ 68,852,002	100.0%

\*Includes sales to free trade zone by \$85,690

Sales by geographic zones December 31, 2011

Zone	Products	Value	Participation
Colombia*	Crude oil, Refined, Petrochemicals and natural gas	\$ 23,659,990	35.9%
United States of America	Crude oil, Refined and Petrochemicals	27,450,466	41.6%
Asia	Crude oil, Refined and Petrochemicals	4,351,492	6.6%
Africa	Refined and Petrochemicals	140,512	0.2%
South America	Crude oil, Refined, Petrochemicals and natural gas	2,458,953	3.7%
Central America and Caribbean	Crude oil, Refined and Petrochemicals	5,054,208	7.7%
Europe	Crude oil, Refined and Petrochemicals	2,768,359	4.2%
Other	Petrochemicals	83,534	0.1%
		\$ 65.967.514	100.0%

\*Includes sales to free trade zone of \$105,361

The following tables illustrate sales of products by segment:

Sales of products by segment December 31, 2013

Local Sales	Exploration & Production	Refining Activities	Transportation	Eliminations	Total
Medium distillates	\$ 4,429	\$ 11,578,473	\$ -	\$ - 5	\$ 11,582,902
Gasolines	613	5,967,471	-	-	5,968,084
Crude oil	1,459,410	-	-	(37,790)	1,421,620
Other products	56,304	1,154,899	163,180	(132,109)	1,242,274
Services	29,577	202,323	5,639,436	(3,409,460)	2,461,876
Natural gas	1,537,336	-	-	(9,645)	1,527,691
L.P.G.	136,042	239,316	-	-	375,358
Diesel and gasoline subsidies	-	938,679	-	-	938,679
Plastic and rubber		615,424			615,424
Total local sales	\$ 3,223,711	\$ 20,696,585	\$ 5,802,616	<u>\$ (3,589,004)</u>	§ 26,133,908

	Exploration &	Refining			
Foreign Sales	Production	Activities	Transportation	Eliminations	Total
Crude oil	\$ 40,505,921	\$ -	\$ -	\$ (4,685,739)	5 35,820,182
Fuel oil	-	4,463,237	-	-	4,463,237
Gasolines	-	789,071	-	-	789,071
Diesel	-	1,195,704	-	-	1,195,704
L.P.G	2,360	91,785	-	-	94,145
Natural gas	620,077	-	-	(33,390)	586,687
Plastic and rubber	-	857,397	-	-	857,397
Other products and services	25,146	364,875	-	98,362	488,383
Total foreign sales	\$ 41,153,504	\$ 7,762,069	<u>\$</u>	\$ <u>(4,620,767</u> )	5 44,294,806

Sales of products by segment December 31, 2012

Local Sales	oration & duction	Refining Activities	Tra	nsportation	Eli	minations	Total	
Medium distillates	\$ 1,839	\$ 11,131,140	\$	-	\$	- \$	11,132	,979
Gasolines	-	5,697,178		-		-	5,697	,178
Crude oil	842,975	-		-		(19,784)	823	,191
Other products	116,265	1,175,236		1,989		(62,725)	1,230	,765
Services	186,449	52,584		2,890,501		(1,049,666)	2,079	,868
Natural gas	1,392,889	-		-		(10,493)	1,382	,396
L.P.G.	160,968	350,881		-		(19,409)	492	,440
Diesel and gasoline subsidies	-	809,773		-		-	809	,773
Plastic and rubber	91	713,232		-		-	713	,323
Total local sales	\$ 2,701,476	\$ 19,930,024	\$	2,892,490	\$	(1,162,077) \$	24,361	,913

	Ex	ploration &	Refining					
Foreign Sales	P	roduction	 Activities	Tı	ransportation	E	liminations	Total
Crude oil	\$	41,129,261	\$ -	\$	-	\$	(5,242,401) \$	35,886,860
Fuel oil		-	4,283,814		-		-	4,283,814
Gasolines		-	1,182,367		-		-	1,182,367
Diesel		-	1,216,213		-		-	1,216,213
L.P.G		2,967	48,540		-		-	51,507
Natural gas		606,011	-		-		(42,599)	563,412
Plastic and rubber		-	754,648		-		-	754,648
Other products and services		20,164	531,103		477		(476)	551,268
Total foreign sales	\$	41,758,403	\$ 8,016,685	\$	477	\$	(5,285,476) \$	44,490,089

Sales of products by Segment December 31, 2011

Local Sales	ploration & Production	Refining Activities	Tra	ansportation	Eliı	ninations	Total
Medium distillates	\$ 6,141	\$ 9,736,205	\$	-	\$	-	\$ 9,742,346
Gasolines	-	5,206,873		-		-	5,206,873
Crude oil	460,591	-		-		(14,886)	445,705
Other products	63,979	1,095,501		-			1,159,480
Services	89,805	27,468		2,543,697		(874,326)	1,786,644
Natural gas	1,427,520	-		-		(8,413)	1,419,107
L.P.G.	56,070	671,041		-		-	727,111
Diesel and gasoline subsidies	-	2,251,322		-		-	2,251,322
Plastic and rubber	-	816,041		-		-	816,041
Total local sales	\$ 2,104,106	\$ 19,804,451	\$	2,543,697	\$	(897,625)	\$ 23,554,629

Foreign Sales	Exploration & Production		Refining Activities		Transportation		liminations	Total
Crude oil	\$ 38,830,368	\$	_	\$	-	\$	(5,412,176)	\$ 33,418,192
Fuel oil	-		4,447,657		-		-	4,447,657
Gasolines	-		1,663,221		-		-	1,663,221
Diesel	-		1,482,625		-		-	1,482,625
Natural gas	554,540		-		-		(46,474)	508,066
Plastic and rubber	-		804,835		-		-	804,835
Other products	22,654		184,207		821		(119,393)	88,289
Total foreign sales	\$ 39,407,562	\$	8,582,545	\$	821	\$	(5,578,043)	\$ 42,412,885

NOTE: Certain amounts of the consolidated financial statements of December 2012 and December 2011 were reclassified for presentation purposes consistent with those of December 31, 2013.

## xxvii. RELATED PARTIES

The Company is majority owned by Colombian Government, so other state-owned companies and governmental entities are considered to be related parties. In addition to those transactions disclosed in Note 16 of statutory financial statements and those included in Item 7, numerous transactions with these entities exist. The most significant of them are disclosed below.

Fuel subsidy: Selling prices of regular motor gasoline and diesel are regulated by government. However a subsidy is granted to producers to compensate the difference between selling price and U.S. Gulf reference market price. The amount received by the Company in 2013, 2012 and 2011 was \$938,679, \$809,773 and \$2,251,322, respectively.

Purchases of hydrocarbons from ANH: The Company purchases the physical product that the ANH receives from all producers in Colombia at prices set forth by Law 756 of 2002 and Resolution 18-1709 of 2003, which references international prices. For more information on this transaction, please see Notes 16 and 25.

The Company also paid in kind royalties over certain fields as set forth in Law 141 of 1994, the Administrative Agreement of Collaborative Collection of Liquid Hydrocarbon Royalties signed on September 16, 2010, with the ANH, and Decree 4923 of 2011. The quantities of oil and gas paid as in-kind royalties to the ANH for the years ended December 31, 2013, 2012, 2011 were 51,973,436 boe, 54,095,846 boe and 59,059,539 boe, respectively.

The following tables present consolidated accounts receivable, accounts payable as well as revenues and expenses with related parties of the Company as of December 31, 2013 and 2012:

	2013				2012			
		Assets	Liabilities		Assets			Liabilities
Banco Agrario de Colombia	\$	5,482	\$	276,128	\$	17	\$	184,785
Direccion de Impuestos y Aduanas Nacionales		4,893,051		866,996		3,117,918		1,059,565
E.S.E. Hospital Universitario San Jorge-Pereira		-		1,500		-		-
Isagen S.A.		12,689		5		10,495		5,979
Corporacion Autonoma Regional del Rio Grande de la Magdalena		-		2,750		-		6,330
U.A.E. Agencia Nacional de Hidrocarburos		61		2,345		-		69
Interconexion Electrica S.A.		536,222		-		565,759		79
Empresas Publicas de Medellín		9,168		101		6,714		5,630
Ministerio de Minas y Energia		50,401		278		92		2,439
Contraloria General de la Republica		-		87,923		-		-
E.S.P. Empresa de Energia de Bogotá S.A.		968,735		-		801,496		-
Ministerio de Hacienda y Credito Público		586,870		1,457,389		3,183,910		4,201,048
Instituto Colombiano de Bienestar Familiar		-		2,315		-		1,860
E.S.P. Generadora y Comercializadora de Energia del Caribe S.A.		11,184		2,231		17,049		330
Entidades Territoriales		63,217		39,307		57,170		46,198
Others		10,178		8,086		5,689		33,345
	\$	7,147,258	\$	2,747,354	\$	7,766,309	\$	5,547,657

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Other transactions with related parties during 2013, 2012 and 2011 are:

	20	13	20	12	20	11	
	Income	Expenses	Income	Expenses	Income	Expenses	
Banco Agrario de Colombia	-	11,641	-	20,696		15,392	
Direccion de Impuestos y Aduanas Nacionales	19	17,828	-	16,563	-	706,206	
Isagen S.A.	238	-	3,194	-	113,447	230	
Unidad de Planeacion Minero Energetica	-	7,282	-	1,287	-	2,208	
Fondo Nacional Ambiental	11	865	-	281	-	340	
U.A.E. Agencia Nacional de Hidrocarburos	1,950	317,060	1,158	213,974	141	15	
Corporacion Autonoma Regional de la Orinoquia	4	631	2	2,433	-	1,831	
E.S.P. Empresa de Energia del Casanare - Enerca S.A.	686	137	78	70	464	170	
Fondo Rotario de la Policia Nacional	-	13,093	-	5,610	-	10,209	
Fiduciaria la Previsora S.A.	36	854	-	501	172	861	
Empresas Publicas de Medellín	26,511	641	19,220	-	96,373	2,281	
Ministerio de Minas y Energia	331	-	-	173	705	18	
Contraloria General de la Republica	-	88,786	-	64,519	-	55,082	
Ministerios de Hacienda y Crédito Público	-	126,836	616	196,404	2	883	
E.S.P. Empresa de Acueducto y Alcantarillado de Bogotá	45	9	44	1	40	4	
Instituto Colombiano de Bienestar Familiar	-	6,621	-	6,892	-	6,761	
E.S.P. Aguas de Barrancabermeja S.A.	-	13,000	-	-	-	895	
E.S.P. Transportadora de Gas Internacional S.A.	736	330	-	600	3,189	749	
Fuerzas Militares	-	280,665	-	225,019	-	-	
Entidades Territoriales	-	79,309	1	59,313	233	60,005	
Others	(1)	41,096	43	32,019	196,934	17,723	
	\$ 30,566	\$ 1,006,684	\$ 24,356	\$ 846,355	\$ 411,700	\$ 881,863	

# xxviii. FAIR VALUE

Accounting standards for fair value measurement (ASC 820) establish a framework for measuring fair value and stipulate disclosures about fair value measurements. The standards apply to recurring and non-recurring financial and non-financial assets and liabilities that require or permit fair-value measurements. Among the required disclosures is the fair-value hierarchy of inputs the Company uses to value an asset or a liability. The three levels of the fair-value hierarchy are described as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets and liabilities. For the Company, Level 1 inputs include marketable securities that are actively traded.

Level 2: Inputs other than Level 1 that is observable, either directly or indirectly. For the Company, Level 2 inputs include quoted prices for similar assets, prices obtained through third-party broker quotes, and prices that can be corroborated with other observable inputs for substantially the complete term of a contract.

Level 3: Unobservable inputs - The Company does not use Level 3 inputs for any of its recurring fair-value measurements. Level 3 inputs may be required for the determination of fair value associated with certain non-recurring measurements of non-financial assets and liabilities. The Company uses Level 3 inputs to determine the fair value of certain non-recurring non-financial assets.

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The fair value hierarchy for recurring assets measured at fair value at December 31, 2013, and December 31, 2012, is as follows:

	Fair Value at Reporting Date Using Ouoted Price					Fair Val Ouoted Price	ue at Reporting D	porting Date Using		
Description	2013	in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	2012	in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
ASSETS										
Available for sale debt securities										
Securities issued by mixed – economy governmental entities	\$ 1,504,957	\$ 1,504,957	\$-	s -	\$ 1,367,179	\$ 1,367,179	\$-	\$ -		
Securities issued or secured by Colombian government	210,493	210,493	-	-	3,001,374	3,000,260	1,114	-		
Securities issued or secured by government sponsored enterprise (GSEs)	42,129	42,129	-	-	1,637,914	1,637,914	-	-		
Securities issued or secured by financial entities	10,167	10,167	-	-	-	-	-	-		
Securities issued or secured by financial entities	641,658	-	641,658	-	216,046	59,759	156,287	-		
Other debt securities	9,286	9,286	-	-	660,634	660,634	-	-		
Securities issued or secured by USA government	73,794	73,794		-	44,265	44,265	-	-		
Total available for sale debt securities	\$ 2,492,484	\$ 2,492,484	\$ 641,658	\$ -	\$ 6,927,412	\$ 6,770,011	\$ 157,401	s -		
Short-term Investments – held to maturity securities:										
Securities issued or secured by Colombian government	98,039	-	98,039	-	96,791	-	96,791	-		
Other debt securities	1,692	-	1,692	-	2,411	-	2,411	-		
Total Short-term Investments classified as held to maturity	\$ 99,731	<del>s</del> -	\$ 99,731	<del>s</del> -	\$ 99,202	<del>s</del> -	\$ 99,202	<del>s</del> -		
Derivatives										
Option	(45)	-	(45)	-	4,543	-	4,543	-		
Swap	-	-	-	-	-	-	-	-		
FX Forward	-	-	-	-	-	-	-	-		
Total derivatives	(45)	-	(45)	-	4,543	-	4,543	-		
Total Recurring Assets at fair value	\$ 2,592,170	\$ 1,850,826	\$ 741,344	\$	\$ 7,031,157	\$ 6,770,011	\$ 261,146	<u>s</u> -		

#### The fair value plan assets

Medical, Education and Severance plans are unfunded. Pension and pension bonds plans are covered by assets in five trust funds with the following investment allocation:

Investment	 2013	Level
Colombian government treasury bonds in COP	\$ 3,099,060	1
Other securities, liquidity, non-governmental entity bonds in COP	978,427	1
Colombian government treasury bonds in COP	472,085	2
Other securities, liquidity, non-governmental entity bonds in COP	6,143,307	2
Colombian government treasury bonds in USD	175,791	1
Other securities, liquidity, non-governmental entity bonds in USD	562,401	1
Other securities, liquidity, non-governmental entity bonds in USD	19,271	2
Total	\$ 11,450,342	

The fair value of the plan assets is calculated using the information published by INFOVALMER, a renowned trustworthy financial price provider authorized by the Colombian Financial Regulator (Superintendencia Financiera de Colombia). Accordingly, there are two methodologies to calculate the prices of the securities: Average Price and Estimated price.

The Average Price is calculated mainly from representative market transactions carried through electronic platforms approved and supervised by the named regulator. The Investments that reflect this condition are located under level 1, bearing in mind that they include marketable securities that are actively traded. Likewise, the Estimated Price is calculated for investments that do not reflect enough information to estimate an average market price, replicating quoted prices for similar assets or prices obtained through third-party broker quotes. This estimated price is also given by INFOVALMER as a result of the application of robust methodologies approved by the Financial Regulator and broadly used by the financial industry. The investments reflecting this condition are located under level 2.

The company apply this methodology since March 2013, for that reason, we do not provide a fair value disclose classified by levels for 2012.

Under U.S. GAAP the Company classifies as restricted assets, those assets where their availability depends on a court decision, contractual or legal restriction, such as cash, trust funds or investments. The detail of restricted assets is as follows:

Concept	2013	Level	
Investment securities	\$ 336,714		1
Investment securities	34,673		2
Specific destination funds	299,702		2
Cash	57,857		1
Total	\$ 728,946		

The most significant restricted assets are related to Santiago de Las Atalayas Fund which are detailed as follows:

Concept	2013	Level
Investments available for sale	\$ 336,714	1
Investments available for sale	34,673	2
Specific destination funds	73,467	2
Cash	510	1
Total	\$ 445,364	

Other restricted assets like specific destination, correspond to Oleoducto Bicentenario for \$111,482 and Cenit Transporte y Logística for \$20,210 classify both in level 2.

Marketable Securities: The Company calculates fair value for its marketable securities based on quoted market prices.

**Derivatives:** The Company's derivative instruments principally include foreign exchange and refined-product (asphalt) swaps, options and forward contracts, principally with financial institutions and other oil and gas companies, the fair values for which are obtained from third-party broker quotes, industry pricing services and exchanges.

The Company obtains multiple sources of pricing information for the Level 2 instruments. Since this pricing information is generated from observable market data, it has historically been very consistent. The Company does not materially adjust this information.

The fair value hierarchy for non-recurring assets measured at fair value at December 31, 2013 is as follows:

	Fair Value Measurements Using									
		<b>Quoted Price in</b>								
		<b>Active Markets</b>	Other	Significant						
		for Identical	Observable	Unobservable	Total Gains					
Description	2013	Assets Level 1	Inputs Level 2	Inputs Level 3	(Losses)	2012				
Goodwill	\$ 930,023	\$ -	\$-	\$ 930,023	\$ (280,489)	\$1,264,470				
Production fixed assets with impairment	94,193	-	-	94,193	(45,620)	189,294				
Total Non-Recurring Assets	\$1,024,216	\$ -	\$ -	\$ 1,024,216	\$ (326,109)	\$1,453,764				

Impairment of "Goodwill"- During 2011, Ecopetrol performed an impairment test of goodwill which showed that goodwill had been impaired in Propilco by \$46,691, In 2012 it was cero. In 2013, Ecopetrol performed an impairment test on the recognized goodwill, resulting in a Propilco impairment of \$280,489. During 2013, lower supply from Ecopetrol increased the variable costs, as the company switched their raw material suppliers. Furthermore, the company performance was challenged by shifts in the petrochemical markets, as a result of new shale gas discoveries in the U.S. and low costs products coming from Asia.

Impairment of "*Properties, plant and equipment*"- During 2013 and in accordance with the accounting standard for the impairment or disposal of long-lived assets (ASC 360), long-lived assets "held and used" with a carrying amount of \$139,813 were written down to a fair value of \$94,193, resulting in a before-tax loss of \$45,620. The fair values were determined from internal cash-flow models, using discount rates consistent with those used by the Company to evaluate cash flows of other assets of a similar nature. The respective long-lived assets were reviewed for impairment on a field-by-field basis.

Assets and Liabilities Not Required to Be Measured at Fair Value

The Company holds cash and cash equivalents. The instruments held are primarily time deposits and money market funds. The fair values reflect the cash that would have been received or paid if the instruments were settled at year-end. Cash equivalents had carrying/fair values of \$8,750,039 and \$7,972,335 at December 31, 2013 and 2012, respectively. Fair values of other financial instruments at the end of 2013 and 2012 were not material.

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and accounts receivables. The carrying value of cash and accounts receivable reflects management's assessment of credit risk. As of December 31, 2012 and 2013, cash and cash equivalents includes balances in savings and checking accounts, as well as term deposits and certificates of deposit, placed primarily with governments and financial institutions with strong investment grade ratings.

The carrying amounts of the Company's accounts receivable, accounts payable and current notes payable approximate fair value because they have relatively shortterm maturities and bear interest at rates tied to market indicators, as appropriate. The Company's long-term debt consists of debt instruments that bear interest at fixed or variable rates tied to market indicators.

The carrying amount and estimated fair values of the Company's financial instruments that are not recognized in the balance sheets at fair value as of December 31 are as follows:

	20	13		20	12	
	Carrying Estimated Fair val		Fair value	Carrying	Estimated	Fair value
Description	Amount	Fair Value	hierarchy	Amount	Fair Value	hierarchy
Long-term notes payable	\$ 11,284,800	\$ 10,757,433	Level 2	\$ 9,600,559	\$ 9,521,801	Level 2
Long-term debt (including current portion):	\$ 9,907,320	\$ 10,998,186	Level 1	\$ 4,154,087	\$ 4,987,654	Level 1
Total	\$ 21,192,120	\$ 21,755,619		\$ 13,754,646	\$ 14,509,455	

### xxix. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

In accordance with the requirements of the United States Securities and Exchange Commission (SEC), Accounting Standards Codification 932 and the ASU- 2010-03 "Oil and Gas reserve Estimation and Disclosures" rule, this section provides supplemental information on oil and gas exploration and producing activities of the Company. The information included in items (i) through (iii) provides historical cost information pertaining to costs incurred in exploration, property acquisitions and development, capitalized costs and results of operations. The information included in items (iv) and (v) presents information on Ecopetrol's estimated net proved reserve quantities, standardized measure of estimated discounted future net cash flows related to proved reserves, and changes in estimated discounted future net cash flows.

The following information corresponds to Ecopetrol's oil and gas producing activities at December 31 2013, 2012 and 2011 in direct and joint operations.

Under the SEC final rule, optional disclosure of possible and probable reserves is allowed. But, the Company opted not to do so. Ecopetrol estimated its reserves without considering non-traditional resources.

# Table i – Capitalized costs relating to oil and gas producing activities

	Year ended December 31					
	2013	2011				
Natural and environmental properties	\$ 30,639,705	\$ 25,836,787	\$ 21,795,716			
Wells, equipment and facilities – property, plant and equipment	11,714,769	10,045,169	8,460,137			
Construction in progress	8,064,129	5,841,384	4,912,199			
Accumulated depreciation, depletion and amortization	(22,647,249)	(18,802,677)	(15,850,932)			
Net capitalized costs	\$ 27,771,354	\$ 22,920,663	\$ 19,317,120			

In accordance with ASC 410-20, these natural and environmental costs include the asset retirement obligations amounting \$12,598, \$80,244, and \$79,930, during 2013, 2012 and 2011, respectively.

For 2012, we disclosed an amount increased in \$19,014 due to a difference between our ARO tool and the accounting system. According to ASC 250, we consider this difference is not material.

### Table ii - Costs incurred in oil and gas exploration and development activities

Costs incurred are summarized below and include both amounts expensed and capitalized in the corresponding period.

	Year ended December 31							
	 2013		2012		2011			
Acquisition of proved properties (1)	\$ 336,954	\$	-		1,483,891			
Acquisition of unproved properties (2)	-		67,016		336,824			
Exploration costs	2,486,283		1,676,821		1,562,147			
Development costs	9,724,279		9,204,629		8,875,850			
Total costs incurred	\$ 12,547,517	\$	10,948,466	\$	12,258,712			

(1) Represents the scheduled buy-in costs paid to Murphy Oil (Operator) to participate in the Dalmatian and Gunflint projects in 2013. For 2011 includes wells, equipment and facilities associated with Equion.

(2) Represents the scheduled buy-in costs paid to Murphy Oil (Operator) to participate in the Dalmatian project in 2012 and wells, equipment and facilities associated with Caño Sur in 2011.

# Table iii Results of operations for oil and gas producing activities

	2013		2012		2011
Net revenues					
Sales	\$	44,727,535	\$	29,515,227	\$ 26,222,068
Transfers		5,601,988		12,980,714	13,558,328
Total	\$	50,329,523	\$	42,495,941	\$ 39,780,396
Production cost (1)		6,752,329		5,361,603	4,879,884
Depreciation, depletion and amortization (2)		3,439,227		3,365,845	2,622,867
Other production costs (3)		15,387,409		6,502,268	5,486,537
Exploration expenses (4)		1,473,261		1,392,834	1,149,937
Other expenses (5)		2,257,494		1,369,032	1,078,564
Total	\$	29,309,720	\$	17,991,582	\$ 15,217,789
Income before income tax		21,019,803		24,504,359	24,562,607
Income tax expenses		(7,777,327)		(8,064,384)	(8,105,660)
Results of operations for producing activities	\$	13,242,476	\$	16,439,975	\$ 16,456,947

Note: Effects of naphtha addition are included into results of operations in the table above. During 2013, 2012 and 2011 the additional total barrels (million boe) were 25.1, 19.4 and 15.4, respectively.

- (1) Production costs are lifting costs incurred to operate and maintain productive wells and related equipment and facilities, including costs such as operating labor, materials, supplies, and fuel consumed in operations and the costs of operating natural gas liquids plants. In addition, it includes accretion expense related to the asset retirement obligations that were recognized during 2013, 2012, and 2011, amounting approximately \$159,988, \$150,754 and \$ 133,796, respectively. The Company's results of operations from oil and gas producing activities for the years ending December 31, 2013, 2012 and 2011 are shown above.
- (2) In accordance with ASC 410-20, the expense related to asset retirement obligations that were recognized during 2013, 2012 and 2011 in depreciation, depletion and amortization, amounted approximately to \$92,406, \$131,342 and \$28,676, respectively.
- (3) Corresponds to transportation costs and naphtha that are not part of the Company's lifting cost.
- (4) Exploration expenses include the costs of geological and geophysical activities as well as the non-productive exploratory wells.
- (5) Corresponds to administration and marketing expenses.

During 2013, 2012 and 2011, respectively, the Company transferred approximately 11%, 31% and 34% of its crude oil and gas production; (percentages based on the value sales in Colombian pesos) to intercompany business units. Based on volume, those transfers were 36%, 39%, and 42%, respectively (including Reficar). The intercompany transfers were recorded at values equal to the Company's market prices.

#### Table iv – Reserve information

The reserve information presented in this section is based on the definitions and rules used for U.S. GAAP purposes. The estimates for proved oil and gas reserves used in the preparation of the consolidated financial statements were prepared by Ecopetrol's engineers, audited in a 99% by the "external engineers".

Reserves are first estimated internally. This process is supervised and coordinated by the corporate manager of reservoirs, a geologist who holds a master's degree in geology and has more than 20 years of experience in projects associated with reservoir characterization and development, estimation, and reporting of reserves. The employees involved in the reserves process meet the Society of Petroleum Engineers, or SPE, qualifications for reserves estimators. Internally estimated reserves are submitted for an external audit process, which was conducted by the External Engineers (Ryder Scott, DeGolyer and MacNaughton and Gaffney, Cline & Associates). According to our corporate policy, we report the reserves values obtained from the External Engineers.

The reserves process ends when the Reserves Directorate who consolidates the results and presents them to the Reserves Committee, whose members are the Chief Financial Officer, the Exploration and Production Executive Vice-President and the Vice-President of Strategy. Finally, results are presented to the Audit Committee of the Board of Directors and approved by the Board of Directors.

Information concerning the technical definitions used for the estimated proved reserves is included in this annual report. The information provided in this annual report about our 2013 net proved reserves is based on the 2013 audited reserve reports for 99% of our total reserves prepared by experts under the SEC definitions and rules. The remaining 1% corresponds to calculations made by us internally using SEC definitions and rules set forth in Rule 4-10(a) of Regulation S-X and the disclosure guidelines contained in the SEC's "Modernization of Oil and Gas Reporting" final rule dated December 31, 2008 and effective as of January 1, 2010.

Our 2013 crude oil and natural gas net proved reserves include reserves from production assets located in Colombia regarding the Hocol and Equion's assets, United States and Peru.

The Company's proved reserves as of December 31, 2013, 2012 and 2011 are based on the SEC average price methodology for U.S. GAAP purposes, which mirrors the average price methodology used by the Company in Colombia during this period.

Future development, abandonment and production costs were computed by estimating the expenditures to be incurred in developing, producing, and abandoning proved oil and gas reserves at the end of the year, based on year-end costs. Future income taxes were computed by applying statutory tax rates to the estimated net pre-tax cash flows after consideration of tax basis and tax credits and carry forwards.

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 methodology prescribed under ASU 2010-03 and ASU-2010-14 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 the Company's future cash flows or the value of its oil and gas reserves.

Ecopetrol used deterministic methods that are commonly used internationally to estimate reserves. These methods have some uncertainty in degradation, and thus, the estimates should not be interpreted as being exact amounts. However, the estimates used to evaluate reserves is considered reliable.

Estimates of reserves were prepared by geological and engineering methods commonly used in the oil industry. The method or combination of methods used in the analysis of reserves was adopted from experience with similar reserves, stage of development, quality and completeness of basic data and production history.

The majority of the producing proved reserves were estimated by applying appropriate decline curves or other performance relationships. In analyzing decline curves, reserves were estimated by calculating economic limits that are based on current economic conditions. In certain cases, where the methods previously employed could not be used, reserves were estimated by analogy with similar reserves where more complete data was available.

Most of the Company's activities and reserves are located in Colombia. The Colombian Nation is the owner of all mineral interests located in Colombia. The Company and, by extension of joint association contracts, its partners, are given the right to explore, develop, produce and sell those reserves, but do not own them. The reserve quantities and their standardized measure, presented in the following tables, represent those reserves and their estimated value that the Company has the right to extract and sell.

The information provided does not represent management's estimate of the Company's expected future cash flows or value of proved oil and gas reserves. Estimates of proved reserve quantities involve uncertainty and change over time as new information becomes available.

The table below sets forth the Company's total proved oil and gas reserves together with their changes therein as of and for the years ended December 31, 2013, 2012 and 2011. The estimates (oil in million barrels, gas in billion cf, gas converted to million barrels at 5.7 billion cf per million barrels) using the SEC rules in effect for each respective year.

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The following is the reserve quantity information:

		2013			2012			2011	
	Oil	Gas	Total	Oil	Gas	Total	Oil	Gas	Total
	million		million	million	billion	Million	Million	billion	million
	barrels	billion cf	boe	barrels	cf	boe	barrels	cf	boe
Proved Reserves:									
Beginning of year	1,370.3	2,886.4	1,876.7	1,371.0	2,768.4	1,856.7	1,236.4	2,722.6	1,714.0
Revisions of previous estimates	172.7	337.5	231.9	42.7	8.8	44.2	107.6	(260.8)	61.8
Improved recovery	23.2	19.9	26.7	65.3	-	65.3	14.8	3.6	15.4
Purchases of minerals in place	7.5	11.0	9.4	-	-	-	18.3	93.3	34.6
Extensions and discoveries	66.2	49.3	74.9	90.4	298.6	142.8	184.5	386.2	252.3
Sales of minerals in place	(0.6)	(12.3)	(2.8)	-	-	-	-	-	-
Production	(205.7)	(223.5)	(244.9	(199.2)	(189.3)	(232.4)	(190.5)	(176.5)	(221.5)
End of year	1,433.6	3,068.4	1,972.0	1,370.3	2,886.4	1,876.7	1,371.0	2,768.4	1,856.7
Proved developed reserves:									
Beginning of year	933.3	2,535.9	1,378.2	855.8	2,229.5	1,246.9	800.7	2,261.7	1,197.5
End of year	933.0	2,663.3	1,400.2	933.3	2,535.9	1,378.2	855.8	2,229.5	1,246.9
Proved undeveloped reserves:									
Beginning of year	437.0	350.6	498.5	515.2	538.9	609.8	435.6	460.9	516.5
End of year	500.6	405.0	571.7	437.0	350.6	498.5	515.2	538.9	609.8

#### Revisions

In 2013, net revisions increased reserves by 231.9 million boe. The main revisions are in Colombian fields. Our most important heavy crude oil projects in Castilla, Chichimene, Rubiales and Quifa Fields drove a 91.7 million boe increase in reserves. New development projects in Castilla Field units K1 and K2 caused a 68.2 million boe increase in reserves and development activities and improved reservoir performance in Chichimene, Rubiales and Quifa Fields accounted for a 23.4 million boe increase.

Improved performance in natural sales gas in Cupiagua Field accounted for a 45.5 million boe increase in reserves and, in Pauto field, accounted for a 9.7 million boe increase in reserves. Revisions in Yarigui, Tisquirama, Provincia, Galan, San Roque and Cusiana Fields as a result of better production performance and drilling activities accounted for a 32.4 million boe increase in reserves.

The revisions described above accounted for 77% of the increase in reserves due to revisions in 2013. Revisions of the remaining 23% (52.7 million boe) were caused from varying increases and decreases from other fields.

#### Improved Recovery

In 2013, improved recovery increased reserves by 26.7 million boe. The improved recovery additions in 2013 were associated with the continued development of water flood projects through existing wells, though additional drilling may be required to fully optimize the development configuration. The main additions were in Yarigui field representing a 6.7 million boe increase, Tibu field representing 5.4 million boe increase and Peñas Blancas Field representing 4.9 million boe increase.

#### **Extensions and Discoveries**

The Company's extensions and discoveries during 2013 amounted to 74.9 million boe, which corresponded to 39.8 million boe of newly discovered fields and 35.1 million boe of extensions of proved acreage. The newly discovered fields corresponded to our Acacias, Caño Sur and Vigia Sur fields.

In terms of the extensions of proved acreage, which amounted to 35.1 million boe, 68% was associated with activities in the followings fields: 7.7 million boe related to new proved areas in the Hocol's Mamey field; 8.8 million boe related to new proved areas in the Rubiales and Quifa fields; and 7.4 million boe related to new proved areas in La Cira – Infantas fields. The remaining 32% corresponds to smaller changes in several other Company fields.

#### Purchases

In 2013, purchases of participation interests increased liquid volumes 9.4 million boe representing the acquisition of a 31.5% participation in Gunflint Field by Ecopetrol America.

# Sales

In 2013, sales of participation interests decreased reserves 2.8 million boe, resulting from the sale of a portion of the Company's equity interest in the Dificil and Entrerrios Fields in Colombia.

Of the total amount of proved undeveloped reserves that we had at the end of 2012 (498 million boe), we converted approximately 147 million boe, or 29%, to proved developed reserves during 2013, primarily associated with the development of crude oil projects through drilling and workovers in Castilla, Rubiales, Pidemonte, La Cira Infantas, Quifa Suroeste, Apiay, Casabe, Suria and Palagua fields. These projects accounted for approximately 81% of the total conversion. The conversion of the remaining 19% is associated with development execution in other fields such as the Ocelote, Suria Sur, Yarigui – Cantagallo and Gala fields, among others. The amount of investments made during 2013 to convert proved undeveloped reserves to proved developed reserves was US\$2,352 million.

# Table 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 crude oil and natural gas reserves, is calculated in accordance with the requirements of ASU 2010-03. Estimated future cash inflows from production under U.S. GAAP are computed by applying unweighted arithmetic average of the first-day-of-the-month oil and gas price to year-end quantities of estimated net proved reserves.

	2013	2012	2011
Future cash inflows	\$ 264,155,176 \$	251,891,162 \$	251,939,319
Future production cost	(72,941,680)	(68,593,660)	(70,967,449)
Future development costs	(17,793,007)	(12,811,379)	(16,295,234)
Future income tax expenses	(58,115,581)	(55,445,509)	(56,743,761)
Future net cash flow	115,304,908	115,040,614	107,932,875
10% annual discount for estimated timing of cash flows	(42,044,683)	(42,457,937)	(38,932,148)
Standardized measure of discounted future net cash flows	\$ 73,260,225 \$	72,582,677 \$	69,000,727

The following are the principal sources of change in the standardized measure of discounted net cash flows:

	2013		2012	2011
Net change in sales and transfer prices and in production (lifting) cost related to				
future production	\$ 11,751,390	\$	8,921,835	\$ 21,725,178
Changes in estimated future development costs	(5,387,485)		2,092,588	(3,602,471)
Sales and transfer of oil and gas produced during the period	(43,577,194)		(37,134,338)	(34, 900, 512)
Net change due to extension discoveries	(142,673)		2,370,545	9,500,676
Net change due to purchase and sales of minerals in place	55,199		-	1,239,446
Net change due to revisions in quantity estimates	15,600,101		3,017,004	3,912,856
Previously estimated development costs incurred during the period	6,176,479		5,928,223	8,265,106
Accretion of discount	10,756,496		10,527,661	7,770,745
Timing and other	7,387,316		6,564,830	13,658,144
Net change in income taxes	(1,942,081)		1,293,602	(14,123,076)
Aggregate change in the Standardized measure of discounted future net cash flows				
for the year	\$ 677,548	<u>\$</u>	3,581,950	\$ 13,446,092

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# BICENTENARIO TRANSPORT CONTRACT

Entered into between

Oleoducto Bicentenario de Colombia S.A.S.

and

ECOPETROL S.A.

BOGOTÁ D.C., JUNE 20TH, 2012

# bicentenario

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#### BICENTENARIO TRANPORT CONTRACT Oleoducto Bicentenario de Colombia S.A.S.

This Crude Transport Contract (henceforth to be known as the "Contract"), is entered into today, June 20th, 2012 (the "Signature Date"):

- OLEODUCTO BICENTENARIO DE COLOMBIA S.A.S., a Colombian Company of a corporate nature, of the type of companies known as the Simplified Joint Stock Companies, with its domicile in Bogotá D.C., incorporated by means of a private document dated August 18th, 2010, registered in the Mercantile Registration on August 18th, 2010, with mercantile registration number 2017702, represented in this Contract by Fernando Gutiérrez Montes, identified as indicated next his signature, duly authorized for this purpose by the Board of Directors, as evidenced in Minutes No. 22 dated May 23rd, 2012 ("Bicentenario"); and
- 2. ECOPETROL S.A., a mixed economy company, of a commercial nature, incorporated as a publicly held company of the natural order, related to the Ministry of Mines and Energy, in accordance with Law 1118 issued 2006, governed by its corporate by-laws, which are contained comprehensively in Public Deed number 5314 dated December 14<sup>th</sup>, 2007, granted before the Second Notary Public in the Notarial Circuit of Bogotá D.C. and in Public Deed number 560 dated May 23<sup>rd</sup>, 2011, granted at the 46<sup>th</sup> Notary Public in the Notarial Circuit of Bogotá, D.C., (henceforth to be known as "Ecopetrol"), represented by Alvaro Castañeda, identified as indicated next to his signature (henceforth the "Shipper," and jointly with Bicentenario, the "Parties" and, each one of them individually, a "Party").

The Parties have agreed to enter into this Contract, which shall be governed by the terms and conditions provided for in the clauses that are indicated, based on the following

#### **CONSIDERATIONS:**

- 1. That Bicentenario shall build a private Crude transport system known as "Oleoducto Bicentenario de Colombia" henceforth to be known as the "Pipeline"), in several stages (known as the "Phases" in the AMI).
- 2. That, in order to establish the terms and conditions under which the Pipeline shall be designed, financed, built, operated and maintained, Ecopetrol S.A., Pacific OBC, Corp., Pacific OBC 1 Corp., Pacific OBC 2 Corp., Pacific OBC 3 Corp., Meta Petroleum Corp., Petrominerales Colombia Ltd., Hocol S.A., Canacol Energy S.A. (formerly, Rancho Hermoso S.A.), Vetra Exploración y Producción Colombia S.A.S. and Grupo C&C Energía (Barbados) Ltd., entered into the Framework Investment Agreement (henceforth known as he "AMI," its acronym in Spanish, whose CLAUSE 6(a) was modified by the Shareholders of Bicentenario at the Bicentenario General Shareholders Assembly in its meeting on December 16<sup>th</sup>, 2011, and said CLAUSE was approved, and Schedule P was modified by means of Addendum number 1, signed on June 20<sup>th</sup>, 2012.

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- 3. That Bicentenario may, among other alternatives, obtain financing with finance institutions (henceforth to be known as the "Lenders") for the construction of the Pipeline and shall use the funding from the Contract, among others, to pay for the debt that it may enter into with the Lenders.
- 4. That for purposes of ensuring the financial viability of the construction, operation and maintenance of the Araguaney-Banadía Segment, the Shipper, in its condition as a Bicentenario Shareholder, shall enter into a crude transport contract by virtue of which during the Ship or Pay Term, the Shipper shall pay the Tariff with respect to the Contracted Capacity, regardless of the number of Barrels actually transported, in accordance with the terms and conditions that are established in this Contract.
- 5. That in addition to the financial viability of the Project, the Shipper is interested in transporting the Crude Owned by the Shipper through the Pipeline, and once the Araguaney-Banadía Segment is built and placed into operation, Bicentenario shall have the capacity in the Pipeline to be able to transport the Crude that is owned by the Shipper.
- 6. That, simultaneously with this Contract going into effect, Bicentenario shall enter into transport contracts with each of its Shareholders (or with Affiliates of these) under terms similar to this Contract, equivalent to the proportion of their percent shareholding in the Effective Capacity in the Pipeline.

On the basis of the aforementioned considerations, Bicentenario and the Shipper have agreed to enter into this Contract, which shall be governed by the following,

#### CLAUSES

**<u>Clause 1.</u> <u>Definitions</u>**. The terms that are used in uppercase in this Contract shall have the meaning assigned to them in <u>Schedule A</u> of the Contract.

# Clause 2. Purpose and Scope of the Contract.

Section 2.01 Purpose: Subject to the terms and conditions provided for in this Contract and in the Transporter's Manual, Bicentenario undertakes to provide the Shipper with the Service for the Shipper's Contracted Capacity. In consideration, the Shipper, undertakes to pay Bicentenario the Tariff in the "Ship or Pay" modality in accordance with Section 2.02 of this Contract and/or in the "Ship or Pay" modality, in accordance with Section 2.03.

Section 2.02 – Modality of transport or pay for the Service: The modality under which Bicentenario will render the Service to the Shipper, with respect to the Shipper's Contracted Capacity during the Ship or Pay Term, shall be that of transport or pay, by virtue of which the obligation to pay the Tariff for the account of the Shipper with respect to said Shipper's Contracted Capacity is to be paid in full under the terms of this Contract, regardless of the number of Barrels nominated or actually transported.

Section 2.03 – Modality of transport and pay for the service: The modality under which Bicentenario will render the Service to the Shipper for the Shipper's Contracted Capacity during the Ship and Pay Term shall be that of transport and pay, by virtue of which the obligation to pay the Tariff for the account of the Shipper is to be paid under the terms of this Contract, solely for the number of Barrels nominated and actually transported.

#### Clause 3. Service.

#### Section 3.01 Description of the Service:

(a) The Service that Bicentenario undertakes to render, solely and exclusively comprises: (i) to receive the Crude that is owned by the Shipper at the Point of Entry, which complies with the Quality Specifications in <u>Schedule J</u> of the Contract, (ii) to transport, safe keep and transport the Crude owned by the Shipper through the Point of Exit, up to the Shipper's Contracted Capacity, (iii) to place at the disposal of the Shipper, at the Point of Exit, the equivalent amount of Crude owned by the Shipper, adjusted for Volumetric Compensation on account of Quality, and (iv) to transport the Shipper's Segregated Crude, once the Subsequent Stages enter into operation and provided that it is technically and operationally viable and in compliance with the Transporter's Manual.

(b) The Service shall be rendered under the terms established in this Contract and its Schedules, which are an integral part of this Contract.

Section 3.02 - Term for the Provision of the Service: The Service shall be rendered from the Date of Initiation of the Service and through the Date of Termination of the Contract. The initiation of the provision of the Service is conditioned to the occurrence of the Conditions Precedent.

Section 3.03 - Nominations by the Shipper: The Shipper undertakes to make the Nominations in compliance with the procedure established in the Transporter's Manual. In the event that the Shipper submits nominations for an amount of Crude that is less than the Shipper's Contracted Capacity, or does not submit a Nomination at all, the Shipper shall be committed to paying the Tariff, multiplied by the Shipper's Contracted Capacity for the corresponding days of the Calendar Month. The Unused Capacity, what is the result of the total or partial lack of a Nomination of the Shipper's Contracted Capacity may be offered by Bicentenario in accordance with what is established in Clauses 8 and 11 of the Transporter's Manual.

Section 3.04 – Credit Notes: In the event that (i) the Shipper has not nominated and/or used the entirety of the Shipper's Contracted Capacity with respect to a Month of Nomination, thus generating an Unused Capacity, and (ii) Bicentenario has actually traded the Unused Capacity and received the respective payment, then credit notes shall be issued in favor of the Shipper, which shall be credited to the payment of the Service for the immediately subsequent month. The amount of the credit note shall be equal to the amount that Bicentenario has actually traded said Unused Capacity. It is understood that the costs and expenses in which Bicentenario has incurred in the trade shall be assumed by the Shipper that generated said traded Unused Capacity and, in the event that said traded Unused Capacity is used by a Shareholder, said collection shall not be made. In any event no interest shall be applied in favor of the Shipper on account of the grading of its Unused Capacity.

#### Section 3.05 – Delivery and Withdrawal of the Crude:

(a) The Shipper shall be under the obligation to deliver to Bicentenario at the Point of Delivery, the Nominated amounts and approved for the corresponding Month of Operation. Bicentenario may abstain from receiving the Shipper's Crude that is not included within the respective Nomination in the corresponding Transport Program or that does not comply with the Quality Specifications of <u>Schedule J</u> of the Contract, said abstention not giving rise to any liability whatsoever for Bicentenario.

(b) Bicentenario commits itself to placing at the disposal of the Shipper at the Point of Exit, in accordance with the Transport Program, the equivalent amount of Crude that Bicentenario may have received from the Shipper, except for: (i) the Adjustments for Volumetric Compensation on account of quality, if any, (ii) any reduction in weight or volume on account of Unidentifiable Losses, in accordance with the provisions of numeral 21.1.3 of the Transporter's Manual , which the Shipper is aware of and understands, or (iii) reductions or losses of Crude that may be derived from any Justified Event that prevents Bicentenario from placing the entirety of the Crude received at the disposal of the Shipper.

(c) The Shipper undertakes to receive and withdraw at the Point of Exit, the Crude that Bicentenario places at its disposal, as indicated in the Transport Program for the corresponding Month of Operations.

Section 3.06 - Custody of the Crude: Bicentenario undertakes to take custody of the Crude from the moment that the Shipper delivers it at the Point of Entry through the moment that Bicentenario places the equivalent amount of Crude at the disposal of the Shipper or whoever the latter may indicate at the Point of Exit.

#### Section 3.07 - Retention of the Crude:

(a) Without prejudice of any other right or prerogative, and subject to the terms established in Section 3.07(b) of the Contract, Bicentenario shall have the right, at its sole discretion, to retain the Crude that the Shipper has delivered to Bicentenario, in accordance with article 1033 of the Commercial Code, in the event that the Shipper is not fulfilling its payment obligations derived from this Contract or in the event that it is not complying with its obligation to establish and maintain its Guarantee, and in any event, until the Shipper fulfills its obligations. In any even, if said retention is made, the costs and other expenses in which Bicentenario may incur, shall be for the exclusive account of the Shipper.

(b) For purposes of the retention and sale of the Shipper's Crude, after 90 Days have gone by from the date on which the Shipper infringed its payment obligation or the obligation to establish or maintain the Guarantee, without the Shipper having rectified the non-fulfillment, Bicentenario shall have the right to send a Provisional Notification to the Shipper and to retain and request the deposit of the Crude under its custody.

(c) When 150 Days have gone by as of the date on which the Shipper infringed its payment obligation or to establish or maintain the Guarantee, without the Shipper having rectified the non-fulfillment, Bicentenario may request the sale of the retained Crude, in accordance with the applicable norms and the rules that are described in <u>Schedule I</u> of the Contract.

#### <u>Clause 4.</u> <u>Value and Payment Terms for the Service.</u>

#### Section 4.01. - Value of the Service:

- (a) The Shipper undertakes to pay Bicentenario the Tariff, multiplied by the Shipper's Contracted Capacity and by the number of days of the corresponding Calendar Month, regardless of whether the Nomination submitted by the Shipper for the corresponding month is lower than the Shipper's Contracted Capacity, and even when the Shipper has not nominated or transported any Barrels at all.
- (b) In the event that (i) the Date of Commencement for the Payment of the Tariff occurs before the Date of Initiation of the Service, and only for the period between these dates, the Shipper undertakes to pay an amount equivalent to the Tariff, multiplied by the Shipper's Contracted Capacity, for the corresponding number of Days in the Calendar Month, even despite the fact that the rendering of the Service has not commenced, or (ii) if, during the Ship or Pay term, a suspension in the Service occurs, regardless of whether the causes are attributable to Bicentenario or are derived by a Justified event in accordance with Section 8.03 of the Contract, the Shipper undertakes to pay an amount equivalent to the Tariff, multiplied by the Shipper's Contracted Capacity for the number of Days during which the suspension persists and even despite the fact that during said period of suspension the Service is not being rendered; these payments shall be subject to the treatment that is indicated below.
- (c) The amounts that the Shipper has paid on account of the Tariff in keeping with what is established in Section 4.01(b) above, if any, shall be considered as advance payments for the Tariff and shall be applied to the payment for the Service as of the twelfth month after the Term for the Provision of the Service has commenced, until all of the balances in favor of the Shipper have been exhausted. The balances in favor of the Shipper that correspond to advance payments of the Tariff shall be credited on a month by month basis until they are exhausted.
- (d) The amount that the Shipper shall have the right to deduct from the amount to be paid for the Service under the terms established in Section 4.01(c) of this Contract shall be the balance obtained from multiplying the Shipper's Contracted Capacity by the Tariff per Barrel that is applicable at the time that the Service was not rendered, by the number of Days that the Shipper made the payments for, without having received the Service in return.

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- (e) The application and recognition of balances in favor of the Shippers that Section 4.01(c) of this Contract refer to, shall only be in order if, subsequent to the application and recognition the aforementioned balances, Bicentenario is in a position to attend to the payments of principal and interest on the debts entered into with the Lenders, fulfill the coverage indices established in the Contract for the Local Syndicated Loan or in any other agreement with the Lenders, fulfill any other financial obligation or covenant established in the aforementioned instrument, attend to all of the obligations assumed by Bicentenario with third parties, and cover all of the Pipeline operations and maintenance expenses. In order to determine the above, Bicentenario shall prepare, during the first 10 Days of the Calendar Month prior to the Month of Operation with respect to which the balances are to be recognized, a cash flow forecast in accordance with generally accepted accounting principles in Colombia and if it determines in good faith and reasonably, that the balances in the payment of the Tariff would generate a non-fulfillment in the aforementioned items, then Bicentenario shall have the right to abstain from allocating, in whole or in part, as may be indicated by the analysis made in terms of cash flow, the balances that the Shipper may have paid in advance, and the Shipper accepts and acknowledges that it shall then continue to be committed to make the payments of the Tariff in the terms provided for in Section 4.01(a) of this Contract.

#### Section 4.02. - Payment and Invoicing:

(a) The value of the Service shall be charged on a monthly basis, in advance, with the issuance of a bill or invoice, as appropriate, during the first 10 Days of the Month for the corresponding Nomination, as of the Date of Commencement for the Payment of the Tariff or of the Date of Initiation of the Payment for the Service, whichever occurs firs. The bill or the invoice, as appropriate, shall include:

- (i) <u>During the Ship or Pay Term</u>: The multiplication of the Tariff by the Shipper's Contracted Capacity, by number of Days in the Calendar Month that is being invoiced, without prejudice of (A) the credit or debit notes that may be in order, as the effect overutilization or underutilization of the Shipper's Contracted Capacity by the Shipper in accordance with the approved Nomination process and the Transporter's Manual, under the terms of Section 3.04 of this Contract and the credit notes provided for in Section 4.02(e)(i)(A), if any, and (B) the application or recognition of balances in favor of the Shipper under the terms of Section 4.01(c) and subsequent sections in this Contract;
- (ii) <u>During the Ship and Pay Term</u>: The multiplication of the Tariff by the number of nominated and approved Barrels in the Transport Program, by the number of Days in the Calendar Month that is being invoiced, without prejudice of (A) the credit or debit notes that may be in order, as the effect overutilization or underutilization of the Shipper's Contracted Capacity by the Shipper in accordance with the approved Nomination process and the Transporter's Manual, under the terms of Section 3.04 of this Contract and the credit notes provided for in Section 4.02(e)(i)(A), if any, and (B) the application or recognition of balances in favor of the Shipper under the terms of Section 4.01(c) and subsequent sections in this Contract.

(b) Bicentenario shall legalized the bills as of the Date of Commencement of the Service or when the Service is reinstated in the event that there is a suspension in the Service, with the issuance and delivery of invoices within 10 Days following the expiration of the Month of Operation during which the Service that been rendered, which are to indicate (i) the amount of the advance payment actually paid by the Shipper, plus (ii) the amounts that Bicentenario is required to collect on account of the transportation tax.

(c) The Shipper undertakes to irrevocably pay the bills and the invoices (with respect to amounts other than the advance payments made), within 20 Days following their receipt, in Colombian pesos.

(d) The Shipper cannot invoke any grounds whatsoever in order to suspend or delay the payment of the bills or of the invoices, not even in the case that these or that the calculation of the Tariff contain errors, unless these are related with the fulfillment of legal requirements for the issuance of bills or invoices. Without prejudice of the above, the Shipper shall have the right to raise objections within 20 business days following receipt of the bills or invoices, with details on the items and amounts it is objecting to, as well as the grounds that give rise to the objection. Once the aforementioned term has expired, without the Shipper having made any objection whatsoever, it shall be understood that the bill or invoices, as appropriate, have been accepted in their entirety by the Shipper.

(e) In the event that the Shipper were to raise an objection under the terms provided for in the previous literal, Bicentenario shall have a 10 Day term as of the date on which the Shipper has presented the corresponding objection in order to respond to it.

- (i) In case that Bicentenario accepts the objection, or once the term expires without a response being given, in which case it shall be understood that Bicentenario accepted said objection, the following process shall be followed: (A) if the Shipper paid a greater amount that should have been indicated in the bill or invoice, Bicentenario shall recognize it in favor of the Shipper through a credit note equivalent to the entirety of the amounts excess amounts paid to Bicentenario, plus interest calculated at the weighted rate applicable to the active savings deposits for legal entities, on the immediately preceding day to the issue of the credit note, as published by the Finance Superintendence of Colombia, or (B) if the Shipper paid a lesser amount than the one indicated in the bill or invoice, the Shipper shall pay Bicentenario (within 10 Days following the expiration of the term that this numeral refers to), the entire amount owed to Bicentenario, without any interest being generated in favor of Bicentenario in this case; or
- (ii) In the event that Bicentenario does not accept the objection filed, it shall notify the Shipper, attaching the corresponding support documents. The above, without prejudice of what is provided for in Clause 20 of the Contract (*Resolution of Controversies*).

(f) The payment of the bills or invoices, as appropriate, shall be made in immediately available funds in the bank account that Bicentenario may indicate in the corresponding bill or invoice (whether these are in the name of Bicentenario or of the Autonomous Equity Trust Fund where Bicentenario has assigned economic rights derived from this Contract) and in accordance with the Loyalty and Transparency Policy.

(g) Without prejudice of any other right or prerogative that Bicentenario may have, the non-fulfillment by the Shipper of any monetary obligation in favor of Bicentenario under this Contract, with the exception that it may be an objection to a bill or invoice in accordance with Section 4.02(i) of the Contract shall give rise to the obligation to pay interest at the maximum late payment interest rate permitted by law, accrued as of the date on which the monetary obligation became due and through the date of payment of the total amounts due. Bicentenario may apply any credit note that is generated in favor of the non-performing Shipper, to the payment of the overdue balances.

#### <u>Clause 5.</u> <u>The Warranty</u>.

Section 5.01 - Amount of the Warranty: In order to guarantee the fulfillment of each and every one of the Shipper's obligations under this Contract, whether monetary or not, and without prejudice of the other rights and prerogatives of Bicentenario under this Contract, the Shipper undertakes to establish a Warranty in favor of Bicentenario and to deliver it at least 15 Days in advance of the date on which the Tariff is to be paid in accordance with Section 4.01 of the Contract, in an amount equivalent to 6 months of the Service, which is calculated in accordance with Schedule E. In the event that the Warranty is used partially by Bicentenario, the Shipper undertakes to deliver to Bicentenario, within the following 30 Days, a new Warranty in an amount equivalent to the amount used of the Warranty that is in force.

Section 5.02 - Enforceability of the Warranty: Bicentenario can enforce the Warranty, in its entirety or partially, and at the first requirement upon a noncompliance of the Shipper's obligations under this Contract. Despite the above, whenever it is a non-compliance in the payment for the Service in the term indicated in Section 4.02(c) of the Contract, Bicentenario may only enforce the Warranty as follows:

- (a) If The Shipper does not fulfill its payment obligation as established in Section 4.02(c) of the Contract, Bicentenario may call on the Warranty as of Day 27 in which the delay persists in the payment, without it having been rectified in its entirety, but in this case, Bicentenario may only enforce the Warranty partially and up to the amount that is overdue, and thus, successively, to the extent that additional overdue payments are generated, all of the above without prejudice of what is provided for in the following paragraph.
- (b) If the Shipper does not fulfill its obligation to renew or deliver a Renewed Warranty to Bicentenario under the terms of Section 5.03 of the Contract, Bicentenario may enforce the Warranty in its entirety, regardless of the fact that the balances in arrears are less than the amount collected by the execution of the Warranty and without prejudice of the other Bicentenario rights and prerogatives under this Contract.

Section 5.03 - Term for the Warranty and Renewals: Without prejudice of that the Warranty is issued under the terms of Section 5.01, the Shipper is to at all times have and maintain in force, from the date on which the Tariff begins to be paid, in accordance with Section 4.01 of the Contract and through the end of the Ship or Pay Term and for 60 Days more, a Warranty with a minimum term of validity of 6 months, in the amount established in Section 5.01, renewing it for equal periods. The Shipper shall deliver renewal of the Warranty at least 30 Days in advance of the date on which the Warranty in force expires.

Section 5.04 - Guarantee Issued by Financial Institutions: In the case of local financial institutions, the Guarantee is to specifically state that the issuer waives the benefit of *excussio* that is provided for in article 2383 of the Civil Code. In the case of Guarantees issued by foreign financial institutions, the Guarantee is to state that it is enforceable at first request and irrevocable, and they are to waive the benefit of *excussio* or similar ones.

#### <u>Clause 6.</u> <u>Conditions Precedent for the Rendering of the Service.</u>

- (a) The commencement of the provision of the Service shall be subject to all of the following conditions precedent:
  - (i) That the operational tests of the Pipeline have concluded satisfactorily for the Araguaney Banadía Segment, duly certified by Bicentenario;
  - (ii) That the Storage Contract at Coveñas has been entered into;
  - (iii) That in compliance with what is established in Article 56 of the Petroleum Code and other applicable norms, the Ministry of Mines and Energy has approved the Crude Pipeline transport tariff for the Araguaney Banadía Segment;
  - (iv) That the Shipper has established and delivered the Guarantee in favor of the Autonomous Equity Trust Fund established by Bicentenario to manage the funds stemming from this Contract;
  - (v) That the contract for the operation and maintenance of the Araguaney Banadía Segment has been entered into; and
  - (vi) That Bicentenario has obtained the necessary permits and licenses for the operation of the Araguaney Banadía Segment.

(b) Once the Conditions Precedent in numerals (i), (ii), (v) and (vi) above have been verified, Bicentenario shall send a communication to the Shipper, indicating the Date of Initiation of the Service, with at least 30 Days advance notice before said date, in order for the Shipper to establish and deliver the Guarantee.

(c) The Conditions Precedent shall be considered failed if, 12 months as of the date of Initiation of the Payment of the Tariff, these have not occurred and the provision of the Service has not commenced. In the event that the Conditions Precedent are considered failed, the Contract shall be terminated, this not causing any right to any indemnity whatsoever in favor of the Shipper. The above is without prejudice of the right that Bicentenario has to request the declaration of non-compliance with the Contract and the respective indemnity as a result of the non-compliance by the Shipper in the payment of the Tariff and/or in the establishment and delivery of the Guarantee.

(d) The amounts paid on account of the Tariff and taxes through the date of termination of the Contract, if any, shall not be reimbursed to the Shipper, with the exception of those amounts that, once the objection process for invoices provided for in Section 4.02(e) of the Contract, are to be reimbursed to the Shipper.

#### Clause 7. Statements by the Parties.

Section 7.01 - Statements by the Shipper: The Shipper declares, in favor and for the benefit of Bicentenario, that:

- (a) It is a company dedicated to the exploration, exploitation and production of Crude in Colombia, established in the Republic of Colombia, in accordance with Colombian legislation.
- (b) It is fully enabled, in accordance with the laws of the Republic of Colombia, its corporate By-laws and other provisions of a company or corporate nature, to enter into this Contract and to comply with the obligations entered by virtue of it, and that signing and entering into the Contract has been authorized by means of all of the corporate requirements and other applicable actions.
- (c) The signing and execution of the Contract does not represent any violation or infringement of the terms or provisions of any contract or agreement in which it or its Affiliates are a party to, its By-laws, or any law, regulation or judicial order.
- (d) This Contract represents a valid and binding obligation for the Shipper and that it is enforceable in accordance with its terms and conditions, except for the overall rights of creditors under a corporate reorganization or liquidation process.

Section 7.02 - Statements by Bicentenario: Bicentenario states, in favor of, and for the benefit of the Shipper, that:

- (a) It is a Simplified Joint Stock Company, incorporated in the Republic of Colombia in accordance with Colombian legislation, dedicated, among others, to the construction, operation and maintenance of the Pipeline.
- (b) It is fully enabled in accordance with the laws of the Republic of Colombia, its corporate By-laws and other provisions of a company or corporate nature, to enter into this Contract and to fulfill the obligations acquired by virtue of it, and that entering into it and fulfilling it have been authorized by means of all of the corporate requirements and all of the other corresponding actions.
- (c) The authorizations exclusively related with the construction of the Araguaney-Banadía Segment are in force.

- (d) This Contract represents a valid and binding obligation for Bicentenario and is enforceable in accordance with its terms and conditions, except for the overall rights of creditors under a corporate reorganization or corporate liquidation process.
- (e) That for the purpose of the operation of the Pipeline, it has engaged Ecopetrol S.A., or, in the case that it has not engaged it, it shall contract with a diligent Operator that has ample experience.

# Clause 8. Liabilities.

Section 8.01 Bicentenario Liability: Without prejudice of what is established in the Transporter's Manual:

- (a) Bicentenario shall be responsible for any damages that if may cause to the Shipper as a consequence of the defective or late rendering of the Service and shall be responsible for the Identifiable Losses that may be generated in the provision of the Service, and can only be exonerated of its liability, in whole or in part, to the extent that it demonstrates that the losses arose as a consequent of a Justified Event and that, in addition, Bicentenario adopted a Reasonable Effort. In all other events, other than those related with the rendering of the Service, Bicentenario shall only be liable to the extent that it incurs in gross negligence or intentional misconduct.
- (b) Without prejudice of the above, it shall not be considered that there has been a defective or tardy execution in the Service, and thus, shall not be considered non-compliance by Bicentenario, when there are suspensions in the Service that need to be executed in order to perform prevention and maintenance tasks on the Pipeline for the construction of a certain subsequent segment to the Araguaney Banadía Segment, which shall be informed in writing to the Shipper.
- (c) In the event of damages derived from the defective or tardy provision of the Service on account of causes attributable to Bicentenario, or in the event of either total or partial Identifiable Losses attributable to Bicentenario, Bicentenario shall repair the damage suffered by the Shipper under the terms and conditions and with the limitations that are indicated below. For such purposes, the Parties declare, accept and understand that, unless the damage or the Identifiable Loss is produced by gross negligence or willful misconduct by Bicentenario Bicentenario shall only be liable: (i) on account of consequential damages, for up to 75% of the Declared Value of the Barrels of Crude lost, and (ii) on account of loss of profits, up to 25% of the amount that Bicentenario is to indemnify in accordance with (i) above. All of the above, provided that the damage is duly proven.
- (d) Bicentenario shall be liable for the Unidentifiable Losses that exceed 0.5% of the deliveries, as provided for by 20.2 of the Transporter's Manual.

#### Section 8.02 Shipper's Liability:

- (a) The Shipper shall be liable for the damages that it may cause to Bicentenario for the non-fulfillment of its obligations under the Transporter's Manual and of the Contract and shall be liable for any damage that may be derived from, or that is a consequence of the actions or omissions by the Shipper, its workers, dependents, contractors, sub-contractors and of the actions or omissions of these.
- (b) The Shipper shall only be exonerated of fulfilling its obligations when the Service is interrupted for causes attributable to Bicentenario, its workers, dependents and contractors and sub-contractors or those of these, or when force majeure or a fortuitous circumstance occurs. Despite the above, when the Service is interrupted during the Ship or Pay Term, the Shipper undertakes to pay the Tariff during the period of suspension of the Service, but in this case, it shall be done in accordance with Section 8.03(c).

Section 8.03 Effects of a Justified Event: In the event that a Justified Event were to occur, which totally or partially suspends the rendering of the Service:

- (a) Bicentenario shall notify its occurrence in writing to the Shipper, within 24 hours following the moment that it is apprised of the occurrence of the Justified Event, committing itself to forward all of the details within the following 5 business Days.
- (b) Bicentenario is to perform all of the reasonable proceedings that may be required as soon as possible in order to reestablish the Service and the Contract obligations as soon as possible. Moreover, it is to perform all Reasonable Efforts in order to minimize or mitigate any delay or additional costs that could be caused, and to keep the Shipper advised on progress.
- (c) The Shipper is to continue paying the Tariff and these payments are to be treated as established in Section 4.01(c) and subsequent sections of this Contract. Despite the above, if the Justified Event suspends the rendering of the Service of a period equal to or greater than 6 continuous and uninterrupted months, as of the date on which the event occurred, the Shipper shall have the right to terminate this contract without giving rise to any indemnity whatsoever in favor of Bicentenario. If the suspension of the Service is due to an inherent defect of the Crude or to fault attributable to the Shipper, the Shipper shall be liable in accordance with what is provided for in Section 8.02 of this Contract and Clause 18 of the Transporter's Manual.

<u>Clause 9.</u> <u>Licenses, Permits and Authorizations</u>. The Parties undertake to obtain and maintain all of the licenses, permits and authorizations required for the execution of the Contract purpose in force. Each Party shall be individually responsible for all of the risks, fines, sanctions or damages that may be caused on account of the absence of any license, permit or authorization that it is obligated to obtain, and in this sense, shall indemnify and shall hold the other Party harmless and shall defend it for this event before authorities, judges and third parties.

#### Clause 10. Exclusion of a Labor Relationship.

(a) This Contract establishes an exclusively commercial relationship between the Parties, associated with the provision of the Service. Consequently, this Contract does not establish a labor or subordination relationship, or of intermediation whatsoever between the Parties, or between either of them, or of the personnel that, by virtue of the Contract, each Party may designate for its fulfillment.

(b) Each Party and its subcontractors, and their respective workers shall not be have any labor subordination to the other Party, nor shall they be intermediaries of the other Party, and shall have full technical, administrative and management autonomy with respect to their obligations under this Contract. Consequently, each Party shall assume all the risks, using its own means, and hiring the personnel that it requires for the execution of this Contract, and in entering into and in the timely execution of the Contract, shall strictly comply with its labor obligations as the true and sole employer of its workers, as the case may be. Each Party undertakes to hold the other Party harmless from any claim that it may receive with respect to or on account of non-compliance with the aforementioned norms. Consequently, entering into this Contract does not give rise to the establishment of a franchise, *joint venture*, or company, nor does it create an employee or commercial agent relationship between the Parties.

(c) Neither of the Parties is authorized to act on behalf of or in representation or for the account of the other, except for what may be specifically authorized in writing.

#### <u>Clause 11.</u> <u>Indemnities</u>.

(a) Without prejudice of what is provided for in Clause 8 of the Contract, both the Shipper and Bicentenario, independently, shall be liable to each other for all and any direct and foreseeable damages that are attributable to their sole responsibility or that of its employees or dependents during the Term of the Contract or as a consequence of it, and commit themselves to protect and fully exonerate the other Party and its managers, employees and agents from all and/or any claims, suits or actions, liabilities, costs, expenses or damages that are derived from acts that are attributable to its sole responsibility or that of its employees or dependents. The Shipper specifically accepts that any payment on account of indemnity in favor of the Shipper shall be subordinated to all amounts due and the obligations entered into by Bicentenario by virtue of the indebtedness with the Lenders have been fulfilled and have been paid for in their entirety.

(b) In order for each Party to fulfill its obligation of indemnity, as the case may be, the other Party shall request it within 45 Days following the date in which it has been apprised of the damage or claim. In the event that the respective Party is not in agreement that an even or an act covered by the indemnity obligation that has herein been agreed to has occurred, it is to: (i) inform this to the other Party within the following 15 business days, (ii) proceed in accordance with the provisions of Clause 20 of this Contract, and (iii) in any event, the Parties are to act diligently and in good faith while the controversy is resolved.

(c) On the basis of this Clause, if it were to be considered necessary, either of the Parties may call the other Party in guarantee in any type of process that may be undertaken against it.

<u>Clause 12.</u> <u>Good Governance Code and Anti-Money Laundering Policies</u>. The Parties undertake to respect and abide by the Good Governance Code and the Policies of Loyalty and Transparency of Bicentenario, which are attached to this Contract in <u>Schedule C</u> and <u>Schedule D</u>. Moreover, the Parties undertake to respect and abide by the Shipper's Good Governance Code and the Anti-Money Laundering Policies, whenever these are to be applied. In the event that there are provisions that are contradictory between the Bicentenario policies and those of the Shipper, the Parties shall in good faith agree to a solution and a course of action to be followed.

#### Clause 13. Transparency Commitment. The Parties undertake to:

- (a) Maintain appropriate behaviors and controls to ensure ethical actions that are in keeping with the norms in force.
- (b) Abstain from performing (directly or indirectly, or through employees, representatives, affiliates or contractors), payments, loans, gifts, gratuities commissions, to employees, managers, administrators, contractors or vendors of Bicentenario, public officials, members of popular election corporations or political parties, with the purpose of inducing these persons to perform any action or to make a decision, or to use their influence, with the purpose of contributing to obtain or retain businesses with respect to the Contract.
- (c) Abstain from originating inaccurate records or information, or from disseminating information that affects the image of the other Party when it is based on assumptions that are not demonstrated.
- (d) Avoid any situation that may generate a conflict of interest. By virtue of this commitment, the Shipper shall comply with the rules that are established in the Bicentenario Code of Good Governance regarding conflict of interest.
- (e) Mutually and reciprocally communicate any deviation in the course of action indicated in this Clause.
- (f) In the case of Bicentenario, give equal and fair treatment to all shippers with a Contracted Capacity in the Pipeline.

### Clause 14. Duration.

Section 14.01 - Term of Duration: This Contract shall enter into force on the Date of Signature and shall continue to be valid, first, (i) during the Ship or Pay Term, under the modality of "transport or pay," with respect to the Shipper's Contracted Capacity, and then, (ii) during the Ship and Pay Term, under the modality of "transport and pay," for up to the Shipper's Contracted Capacity, for which the Parties shall agree to the applicable terms and conditions, including, but not limited to the revision of the Tariff and the demand of the Guarantee, or not; unless it is terminated in accordance with Section 14.02.



In the event that the Parties do not agree to the terms and conditions for the Ship and Pay Term, in accordance with the previous paragraph, the terms and conditions established for the Shipper's Contracted Capacity and the Transporter's Manual shall govern, insofar as applicable, and the tariff that is equivalent to an amount that permits Bicentenario to cover the Pipeline maintenance, operation and management expenses, and the expenses for depreciation, amortization and taxes shall be applied, as well as a fair profit.

#### Section 14.01 - Early Termination:

- (a) The Shipper can only declare the early termination of this Contract, at any time, in any of the following events:
  - (i) The winding up and liquidation of Bicentenario.
  - (ii) If the Precedent Conditions are considered failed after 12 months as of the Date of Initiation of the Payment of the Tariff and the rendering of the Service has not commenced, in accordance with Clause 6(c) of this Contract.
  - (iii) If at any time, after the Date of Initiation of the Service, Bicentenario does not render the Service for a period that exceeds 6 uninterrupted months, on account of a Justified Event.
  - (iv) Whenever Bicentenario has notified the Shipper that it has paid the Lenders or third parties the entire debt under the loan contracts entered into with the Lenders, for which purpose, the Shipper is to provide notification in writing of said decision with at least 60 Days advance notice to the proposed date for the termination of the Contract.
- (b) Bicentenario may only declare the early termination of this Contract, in any of the following events:
  - (i) The non-fulfillment by the Shipper of the obligation to pay the Tariff, without having remedied said non-fulfillment during a period of 150 Days as of the date on which the Shipper should have paid the corresponding invoice. Without prejudice of the aforementioned period, Bicentenario may:
    - (A) Collect on the Guarantee in accordance with Section 5.02 of the Contract;
    - (B) Retain the Shipper's Crude in accordance with Section 3.07 of the Contract;
    - (C) 90 Days as of the date on which the corresponding invoice should have been paid, dispose of the Shipper's Contracted Capacity and offer it temporarily to other Shareholders or to third parties, in accordance with the priority rules established in the Transporter's Manual, without the Shipper having any right to nominate any Crude whatsoever while the non-compliance subsists; and/or

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- (D) initiate the necessary steps so that, once the advance termination of the Contract has concluded, Bicentenario may offer the Shipper's Contracted Capacity to the other Shareholders or to any third party under a firm capacity commitment.
- (ii) The non-fulfillment of any of the Shipper's obligations under this Contract and the Transporter's Manual, other than the obligation to pay the Tariff and to establish and to renew the Warranty, said non-fulfillment not having been remedied in a period of 90 Days as of the date on which Bicentenario notified the Shipper of the non-compliance.
- (iii) The non-delivery of the Guarantee or of its respective renewals within the terms set out in this Contract, or that for any circumstance attributable to the Shipper, the Guarantee cannot be enforced, without said non-fulfillment having been remedied in a period of 60 Days as of the date on which Bicentenario notified the Shipper of the non-fulfillment. However, if at the time of the non-fulfillment, the Shipper is also is also in non- compliance in the payment for the Service, the term to rectify it shall be 30 Days.
- (iv) The early termination of the Contract entered into with the Shipper by Bicentenario, as a result of the occurrence of any of the events described in Section 13.02(b) of the Storage Contract.
- (v) The winding up and liquidation of the Shipper.
- (vi) The entering into a legal transaction by virtue of which it seeks to be substituted in the contractual position derived from this Contract, or assigning a right or an obligation derived from it, without prior authorization in writing by Bicentenario and the Lenders, unless it is a matter of the assignments permitted under Clause 15(b) of the Contract, when such non-fulfillment has not been rectified in a period of 30 Days as of the date on which Bicentenario notified the Shipper of the non-fulfillment.

(c) The exercise by either of the Parties of the authority to declare the termination of this Contract (i) shall be evidenced in a written communication that one of the Parties shall deliver to the other, (ii) shall have the prior authorization of the Lenders, in the event that the latter require it, when it is a matter of the circumstances provided for in Section 14.02(b) of the Contract, and (iii) in any event, shall not restrict the attribution of the performing Party to adopt or to enforce any right or prerogative that it conferred to it by this Contract or by the laws in force, including the enforcement of the Guarantee in the case of Bicentenario.

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(d) If, as a consequence of the early termination of the Contract by Bicentenario, in accordance with the provisions of Section 14.02(b) of this Contract, (A) the Lenders require the advance payment of the loan entered into by Bicentenario under the Local Syndicated Loan; and/or (B) Bicentenario, after exercising commercially reasonable endeavors and efforts for a period of 6 months as of the early termination of this Contract, has not entered into a transport contract with a third party under conditions similar lo those of this Contract, that permit it to pay the costs and expenses for the Bicentenario debt with the Lenders under the Local Syndicated Loan; and/or (C) the "Purchase Option" (as this term is defined in the AMI) has not been exercised within 6 months following the date on which the early termination of the Contract has taken place; the Shipper is to pay into the autonomous equity trust fund to which Bicentenario has assigned the economic rights derived from this Contract, whenever the latter requires it, an amount equivalent to:

- (i) The outstanding balance of the debt that Bicentenario has with the Lenders under the Local Syndicated Loan as of the date on which the early termination of the Contract takes place, multiplied by the Shipper's percent share in Bicentenario; <u>plus</u>
- (ii) Any other reasonable costs or expenses in which Bicentenario incurs as a consequence of the early termination of the Contract.

(e) Whenever Bicentenario declares the termination of this Contract under the provisions of Section 14.02 and has Crude delivered by the Shipper under its custody, Bicentenario shall place said Crude at the disposal of the Shipper within a reasonable term that is not to exceed 15 Days as of the date of delivery of the communication that Section 14.02(c) refers to, unless (i) there is any obligation for the account of the Shipper pending fulfillment, with respect to which Bicentenario may exercise the right of retention provided for in Section 3.07 of this Contract; or (ii) it is operationally not possible to comply with this term, in which case, an additional term shall be agreed to, which, together with the original term, shall not exceed 30 Days.

(f) The early termination of this Contract does not exonerate the Shipper or Bicentenario of fulfilling their corresponding obligations and responsibilities during a period prior to the date on which this Contract is terminated. In the event that the Shipper, particularly with respect to the payment of the Tariff pending payment and the amounts indicated in Section 14.02(d), if applicable. Moreover, Bicentenario may make the Guarantee effective in whole or in part at any time in an Event of Non-fulfillment by the Shipper, without prejudice of what is established in Section 14.02(b)(i) of the Contract.

(g) In any event of termination of this Contract, the Parties undertake to sign finalization minutes and for the determination of pending accounts, within a reasonable term that they may mutually agree to, which in no case may be greater than 90 Days, which shall contain the minimum information that Bicentenario shall require from the Shipper, before the preparation of these Minutes. Whenever, as a consequence of the aforementioned Minutes provided for in this Section 14.02(g), either of the Parties owes the other any amount, the creditor is to issue and deliver to the other Party, an invoice or a bill that is to be payable within the term that is provided for in Section 4.02(c) of the Contract.

#### Clause 15. Assignment.

(a) Without prejudice of what is provided for in Clause 15(b) of this Contract, neither of the Parties can replace itself validly in its contractual position, nor can it validly assign any right or obligation derived from this Contract, without the prior, specific and written authorization of the other Party. In the event that the intent of the assignment affects the fulfillment by Bicentenario of the obligations contained in the Local Syndicated Loan Contract, or if it were to have an Adverse Material Effect (as this term is defined in the Local Syndicated Loan Contract), said assignment is also to be previously approved by the Lenders. However, Bicentenario may assign the economic rights of this Contract in favor of autonomous equity trust funds that serve the purpose of paying for the obligations of the loan contracts entered into with the Lenders, this not requiring the prior authorization by the Shipper or by the Lenders.

(b) The Shipper only needs to notify Bicentenario with at least 10 Days advance notice, of the event, and is to deliver the documents that may be required Bicentenario in order to bear evidence of said circumstance, whenever:

- (i) It is a "Permitted Transfer" in accordance with what is provided for in Clause 15(b) of the AMI;
- (ii) The assignee Shipper is an affiliate of the assignor Shipper; or
- (iii) The assignment or transfer of this Contract is produced as a consequence of the merger, spin-off or any other form in which all or part of the rights and obligations of the Shipper are transferred to another company that is an Affiliate of the Shipper, as a consequence of a reorganization of the corporate and entrepreneurial structure of the Shipper.

(c) Bicentenario may condition the granting of the authorization that Clause **15(a)** of this Contract refers to, to the fulfillment of the obligations or the conditions that Bicentenario and the Lenders decide to establish, and that in any event, have the purpose of: (i) ensuring the credit quality of the assigned Shipper with respect to any financing obtained by Bicentenario, (ii) verifying the condition as a crude producer of the assigned Shipper, and (iii) obtaining the authorization of the Lenders.

# <u>Clause 16.</u> <u>Confidentiality</u>.

(a) The Parties mutually agree to provide each other with all the technical, commercial legal and other information that they may require for the execution for the execution of this Contract.

(b) The Parties shall maintain, and undertake that their shareholders, employees, members of the board of directors, representatives, managers, Affiliates, and the shareholders, employees, members of the board of directors, representatives, managers of these, maintain under strict confidentiality all the information that they may have or obtain under this Contract, with the understanding that the above shall not apply to: (i) information that is available or that may be disclosed to the general public, provided that it has not been disclosed by either of the Parties or by any of their shareholders, employees, members of the board of directors, representatives, managers of these, with the consent of the other Party; or (ii) information whose disclosure may be required by an applicable law or regulation, judgment or arbitration award.

(c) The confidentiality obligation that is agreed to under this Clause 16 shall be in force (i) throughout the entire Term of Validity plus 2 more years, or (ii) in the case of early termination of the Contract, up to 2 more years as of the date on which the Contract is terminated, under the provisions of Section 14.01.

<u>Clause 17.</u> <u>Arrears.</u> The Parties specifically waive the formalities of requirement to be declared in arrears in the event of delays or omission in the fulfillment of obligations that they enter into through this Contract and thus, to be called judicially for being in arrears. For these purposes, the Parties specifically accept that the written communication that the performing Party addresses to the non-performing Party shall be sufficient.

#### Clause 18. Notifications.

(a) Unless the contrary is specifically provided for, all authorized or required notifications between the Parties under any of the provisions of this Contracts, as well as any communication that one Party may wish to give to the other Party, shall be delivered for the attention of and to the following addresses:

#### To the Shipper:

For the attention of:	Alvaro Castañeda
Address:	Carrera 13 No. 36-24, Bogotá D.C.
e-mail address:	<u>alvaro.castaneda@Ecopetrol.com.co</u>
Telephone:	234-43565
To Bicentenario:	

For the attention of:	Sofía Sepúlveda Arcila
Address:	Cra 11 No. 84 - 09 Piso 8, Bogotá D.C., Colombia
e-mail address:	sofia.sepulveda@bicentenario.com.co
Telephone:	+57 (1) 319-9200

(b) All notifications and communications are to be made in writing, in Spanish, and shall delivered personally or by private or certified mail service, or by any electronic transmission means for written communications that provides acknowledgement of receipt or written confirmation of complete transmission of the notification, both of its content, as well as with respect to the addressee.

(c) Either of the Parties may modify, at any time, its information for notifications, by means of a communication in writing to the other Party. The modifications thus made shall only have effect and shall be obligatory of the other Party as of the eleventh business day following the day on which the corresponding Party has received the notification of change in the information.

Dicentenario

(d) Unless there is explicit evidence to the contrary, the communications that one Party delivers to the other at the addresses indicated in Clause 18(a) of this Contract, shall be understood to have been received: (i) on the same day if the delivery is made in person, (ii) on the next business day after it has been sent, if it has been sent by electronic mail, or (iii) on the fifth business day after it has been sent, if it has been sent by certified mail.

**<u>Clause 19.</u>** Applicable Law. This Contract shall be governed by the laws of the Republic of Colombia.

#### Clause 20. Resolution of Controversies.

#### Section 20.01 - Controversies and Direct Settlement:

(a) All differences or controversies that may arise between the Parties on account of this Contract, or with relation to the Contract (the "<u>Controversy</u>"), shall be resolved by means of the mechanisms indicated in this Clause 20, prior notification in writing by one Party to the other regarding the existence of the Controversy (the "<u>Notification</u>").

(b) The legal representative of Bicentenario and the legal representative of the Shipper shall y attempt to reach a direct settlement that definitively resolves the Controversy and that is to be evidenced in writing within 60 Days following the date on which the Notification was sent. If the Parties reach a direct settlement that is evidenced in writing as provided for in this provision, this settlement shall have the effects of a transaction and shall be confidential under the terms of the confidentiality clause of this Contract, and shall not represent an admission of responsibility nor proof of it, unless the contrary is specifically stated. Moreover, the documents exchanged between the Parties on account of the Controversy shall also be confidential in the terms of the Confidentiality Clause of this Contract and cannot be used as proof by the Parties.

(c) If the term indicated in Section 20.01(b) above were to expire, the Parties not having reached a direct settlement that is evidenced in writing, the Controversy shall be resolved in accordance with the following sections, as the case may be.

Section 20.02 - Legal Arbitration: If the Controversy is not resolved by direct settlement in accordance with Section 20.01, the Controversy shall be resolved definitively by means of arbitration, in accordance with the following provisions:

(a) The Arbitration Court shall comprise 3 arbitrators designated by mutual agreement between the Parties.

(b) If the Parties were not to designate arbitrators by mutual agreement within a term of 20 Days as of the request to call the Court together, the arbitrators shall be designated by the Center for Arbitration and Conciliation of the Bogotá Chamber of Commerce from "List A" of arbitrators of the aforementioned center.

- (c) The Court shall be based in the city of Bogotá.
- (d) The proceedings shall be conducted in Spanish.
- (e) The arbitration shall be legal and shall be administered by the Center for Arbitration and Conciliation of the Bogotá Chamber of Commerce.
- (f) At the time that they accept their designation, the arbitrators are to state, in writing, to the Parties, their independence and impartiality to act as arbitrators in the Controversy.
- (g) The arbitration is to be conducted under the law.
- (h) The Shipper cannot invoke the commitment clause as the basis to prevent or oppose itself to being called in guarantee by Bicentenario.

#### <u>Clause 21.</u> <u>Entirety of the Contract and Modifications</u>.

#### Section 21.01 - Entirety of the Contract:

(a) This Contract includes the comprehensive and entire terms agreed upon by the Parties to govern the legal transport business agreed to between them, with respect to the Shipper's Contracted Capacity and the Service. The Parties mutually agree to fully invalidate all of the agreements, conventions, contracts, understandings or conversations that they may have held before the Date of Signature with respect to the Service and the Shipper's Contracted Capacity, with the exception of the provisions provided for in the AMI.

(b) If any provision of the Contract were to be prohibited, were null, recognized as ineffective or could not be enforced in accordance with the legislation in force, the rest of the provisions shall survive with their full binding and obligatory effects for the Parties, unless that the prohibited, null, ineffective or unenforceable provision were to be essential, in such a way that the fulfillment of the Contract, in the absence of said provision would not be possible. In those events, the Parties undertake to negotiate, in good faith, a clause that is legally valid, the purpose of which is the same as that of the provision or provisions that suffer from the defects of nullity, invalidity or unenforceability.

(c) The provisions of this Contract shall prevail over the provisions contained in the Transporter's Manual and the AMI.

Section 21.02 - Modifications: Only those modifications to this Contract that are in writing and signed by both Parties shall be valid. In the event that the modification that is sought to be made may affect the fulfillment by Bicentenario of the obligations contained in the Local Syndicated Loan Contract or leads to an Adverse Material Effect (as this term is defined in the Local Syndicated Loan Contract), said modification is also to be approved in advance by the Lenders.



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# VERSIÓN PARA FIRMA

# BICENTENARIO TRANSPORT CONTRACT SIGNATURE PAGE

# FOR THE SHIPPER,

Signature: Name: Position: C.C.:

Alvaro Castañeda Transport and Logistics Vice President 79.277.194 issued in Bogotá D.C

VERSION FOR SIGNATURE SCHEDULE A DEFINITIONS



# BICENTENARIO TRANSPORT CONTRACT SIGNATURE PAGE

# FOR BICENTENARIO,

Signature: Name: Position: C.C.:

Fernando Gutiérrez Montes Legal Representative 17.146.690

#### <u>Schedule A</u> <u>Definitions</u>

The definitions contained in this Schedule A shall apply to the Contract and to any Addendum that may be signed, as well as to any other Schedule or communication exchanged between the Parties.

Shareholder: Means each of the Bicentenario shareholders.

Affiliate: Means, with respect to any person, any other person, controlled directly or indirectly by said person, Controlling said person, or subject to Common Control by said person.

Adjustments for Volumetric Compensation on account of Quality: Means the adjustments and measurements made by Bicentenario under the terms provided for in Schedule A of the Transporter's Manual, in order to establish the ownership of the Crude between the shippers, based on the Crude differences that Bicentenario may permit to withdraw at the Point of Exit, with respect to the Crude that Bicentenario receives at the Point of Entry.

AMI: Shall have the meaning attributed it in Recital Number 2 of this Contract.

Calendar Year: Means the term that commences on January 1<sup>st</sup> of each year and ends on December 31<sup>st</sup> of the same year.

**Provisional Notification:** Means the notification that Bicentenario gives to the Shipper regarding its intent to retain the Shipper's Crude to pay the amounts in favor of Bicentenario and for the account of the Shipper, under the terms established in <u>Schedule I</u> of this Contract.

Barrel: Means the volume equivalent to 42 United States of America. Each gallon is equivalent to 3.7853 liters.

Barrels per Calendar Day (bpcd): Means the measurement unit of flow that refers to the average amount for a given period.

Bicentenario: Means the Bicentenario de Colombia S.A.S. company, as it is identified at the outset of this Contract.

Contracted Capacity: Means the capacity of the Pipeline committed by means of Transport Contracts.

Shipper's Contracted Capacity: Means the Crude transport capacity through the Pipeline that the Shipper has a right to transport by virtue of this Contract. Said Shipper's Contracted Capacity corresponds to the percent shareholding of the Shipper and/or its Affiliates in Bicentenario, applied to the Effective Capacity of the Pipeline. The Contracted Capacity of all the Bicentenario Shareholders and/or their Affiliates shall in no case be less than 110,000 bcpd.

#### VERSION FOR SIGNATURE Schedule A Definitions

Effective Capacity: Means the maximum average transport capacity that can effectively be disposed of for the transport of Crude during a given period. It is calculated as the product of the Nominal Capacity times the Service Factor.

**Nominal Capacity:** Means the maximum transport capacity, during a given period, between a pump station and a terminal at the Pipeline, or between two pump stations, calculated in consideration of the equipment installed in the system and the foreseen quality of the Crude to be transported. It is expressed in terms of bcpd.

Unused Capacity: Means that part or the total Shipper's Contracted Quantity that the respective Shipper does not nominate or decides not to use temporarily.

**Commissioner:** Means the *Bolsa Mercantil de Colombia S.A.* or any other entity that fulfills the same or better suitability standards to undertake an auction for *commodities*, particularly for Crude.

Conditions Precedent: Are the conditions that are indicated in Clause 6(a) of this Contract.

Controversy: Shall have the meaning assigned in Section 20.01(a) of the Contract.

Good Governance Code: Is the Bicentenario Good Governance Code, attached as Schedule C of the Contract.

Contract: Is this Crude transport Contract.

**Storage Contracts:** Means the Crud storage contract that shall be entered by Bicentenario with the Shipper or its Affiliates for the provision of the Crude Storage in the 2 tanks, for a capacity of up to 1,200,000 Barrels, which shall be built by Bicentenario at the Coveñas Terminal.

**Local Syndicated Loan Contract:** Means the syndicated loan contract that Bicentenario entered into with Lenders domiciled in Colombia on May 8<sup>th</sup>, 2012, the purpose of which is to grant a loan for up to COP\$ 2,100,000,000, destined to finance the construction, start-up and maintenance of the Araguaney-Banadía Segment.

Transport Contracts: Means the Crude transport contracts by means of which Bicentenario commits the Pipeline capacity.

**Control:** Means the capability of a person to subject his will to the decisions o another or other persons. Control is presumed if the presumptions of subordination that article 261 of the Colombian Commercial Code exist.

**Crude:** Means crude oil, in accordance with the definition included in article 1 of the Petroleum Code, which exists in its liquid phase in natural underground reservoirs and that remains liquid at atmospheric pressure after having passed through the surface separation facilities.

Owned Crude: Means the Crude Produced by the Shipper or its Affiliates and/or the Crude that has in any other way been acquired by the Shipper or its Affiliates.

#### VERSION FOR SIGNATURE SCHEDULE A DEFINITIONS

**Produced Crude:** Means the Crude (i) with respect to which a Shipper or its affiliates have taken part in the production, extraction, collection, treatment, storage or transfer operations or activities, individually or jointly with another person, by virtue of a concession, association, exploration and production or operations contract, or under any other title, by virtue of which the Shipper or its Affiliates have the State authorization to extract the resource, and that (ii) can include the Crude, necessary Diluent or mixes to take that Crude from the previous numeral up to the minimum technical specifications to be able to be effectively transported through the Pipeline.

Segregated Crude: Means the Crude that is decided to be transported through the Pipeline, by agreement between Bicentenario and the Shipper, without being mixed with other Crudes.

Day or Days: Shall be a calendar day or calendar days, respectively.

**Diluent:** Means the natural or refined product that is mixed with the Crude in order to bring the Crude to the minimum technical specifications to be able to be effectively transported through the Pipeline.

**Reasonable Effort:** Means the reasonable and timely measures that may have been taken by a transporter, in accordance with the requirements of the operation of a pipeline with similar characteristics to those of the Pipeline, in order to prevent any damage or its aggravation.

Quality Specifications: Means the quality specifications that the Crude is to have for its transport through the Pipeline, which are described in <u>Schedule J</u> of the Contract.

Araguaney Station: Means the set of facilities and assets for the receipt of the Crude, located at the village of 'Araguaney,' located at the Municipality of Trinidad, Department of Casanare, Republic of Colombia.

Banadía Station: Means the set of facilities and assets for the receipt of Crude and the connection to the CLC System, located at the Municipality of Saravena, Department of Arauca, Republic of Colombia.

**Monterrey Station:** Means the set of facilities and assets for the receipt of Crude and the connection to the Monterrey – Araguaney System, located at the Municipality of Monterrey, Department of Casanare, Republic of Colombia.

Subsequent Stages: Means the other Pipeline construction stages, subsequent to the Construction of the Araguaney – Banadía Segment.

Non-Fulfillment Event: Means any of the events described in Section 14.02(b) of the Contract.

Justified Event: Means any force majeure or fortuitous circumstance event, inherent defect of the Crude, or any act or event produced by a third party, including, but not limited to guerrilla or terrorist acts, or any type of public order disturbance that causes damages to the Pipeline or events that interrupt, delay or prevent the fulfillment of the obligations by Bicentenario.

#### VERSION FOR SIGNATURE Schedule A Definitions

Service Factor: Means the effectively usable percentage of the Nominal Capacity, due to temporary operational and maintenance restrictions of the Pipeline and its related and ancillary facilities, calculated for a given period, in which the effects of non- availability of the mechanical equipment, the maintenance of the line programs and the number of days of the period under consideration are to be borne in mind.

Date of Signature: Has the meaning assigned to it in the heading of this Contract.

**Date of Commencement of the Payment of the Tariff:** Shall be the date that occurs 12 months after the date of the first disbursement of the loans to be granted by the Lenders to Bicentenario under the Local Syndicated Loan Contract.

Date of Commencement of the Service: Is the date that is indicated in the notification that Bicentenario sends out to the Shipper when the Precedent Conditions are fulfilled.

Date of Termination: Is the date on which this Contract terminates, in accordance with Clause 14.

**Guarantee:** Means an irrevocable stand-by letter of credit or an irrevocable bank guarantee payable on first demand, issued by (a) a banking establishment authorized to operate in Colombia, with a AAA credit rating for its long-term debt in pesos, or (b) a foreign financial entity with a risk rating for its long-term debt in dollars that is no less than the foreign sovereign debt of Colombia, and in either event, designating as its beneficiary, the autonomous equity trust fund that is established by Bicentenario under the Local Syndicated Loan Contract, for which it can use the form that is included in <u>Schedule F</u> of this Contract.

**Transporter's Manual:** Is the document whose purpose it is to establish the overall conditions for the transport of Crude owned by the shippers through the Pipeline, which constitutes <u>Schedule B</u> of this Contract and which is an integral part of it.

Calendar Month: Means the period of time that begins at 00:00 hours on the first Day of the Gregorian month and ends at 24:00 hours on the last Day of the same Gregorian month.

Month of Nomination: Means the Calendar Month immediately precedent to a Month of Operation.

Month of Operation: Means the Calendar Month for which the Shipper has nominated the transport service and during which the Transporter executes the Transport Program.

Nomination: means the request for the transport service that each Shipper formalizes for the Month of Operation, specifying the volume of transport required, the Point of Entry, the Crude Quality and the ownership of the Crude requested to transport.

Notification: Shall have the meaning assigned in Section 20.01(a) of the Contract.

#### VERSION FOR SIGNATURE SCHEDULE A DEFINITIONS

Offer of Retained Crude: Means the communication sent by the Commissioner to the Shareholders, in which it indicates the total volume of retained Crude to be offered, the sale price, the terms and conditions for its payment and the term of validity of the offer.

**Pipeline:** Means the set of facilities and assets that comprise the private use Crude transport and lift capacity between the Araguaney Station and through the exit node at the Coveñas Terminal, for each of its construction stages, known as the 'Oleoducto Bicentenario de Colombia' pipeline, for the attention and benefit of Crude production, in accordance with the more detailed description that is indicated in the Third Clause of the Transporter's Manual.

Purchase Option: Has the meaning assigned in Clause 19(c) of the AMI.

**Operator:** Means Ecopetrol S.A. or whoever may in the future be the Operator as a result of Bicentenario having opted for entrusting a third party (whether a Shareholder or not), with the operation and maintenance of the Pipeline.

Party or Parties: Means Bicentenario or the Shipper, or both, in accordance with the context in which the term is used.

Identifiable Losses: Means the Crude losses that can be located at a specific point in the Pipeline.

Unidentifiable Losses: Shall have the meaning indicated in numeral 20.2.1 of the Transporter's Manual.

Term of Validity: Is the term that begins on the Date of Signature and ends on the Date of Termination.

Term for the Provision of the Service: Is the term that begins on the Date of Initiation of the Service and ends on the Date of Termination.

Ship and Pay Term: Means the 20-year term, as of the Day on which the Ship or Pay Term expires.

Ship or Pay Term: Means the term that commences on the date on the first date that occurs between the Date of Commencement of the Payment of the Tariff or the Date of Initiation of the Service, and ends on the last that occurs between (a) 12 years as of the date of commencement of the term, and (b) the Day on which all of the obligations that are the purpose of the Local Syndicated Loan Contract are extinguished.

Loyalty and Transparency Policy: Means the BICENTENARIO-PL-002 Policy, which is part of this Contract in Schedule D.

Lenders: Has the meaning assigned in recital 3 of this Contract.

**Transport Program** or **Program**: Means the program for operations of the Pipeline for a Month of Operation, prepared by Bicentenario on the basis of the transport nomination cycle. It specifies the use of the Effective Capacity, the volumes of Crude that enter at the Points of Entry, and the volumes of Crude that exit the Pipeline at the Points of Exit.

Point of Entry: Shall be the points of entry that are described in numeral 1 of Schedule H of the Contract.

Point of Exit: Shall be the points of exit that are described in numeral 2 of Schedule H of the Contract.

Shipper: Means Ecopetrol S.A., as it is identified at the beginning of the Contract.

Service: Means the service of receipt, transport, lifting and delivery of the Shipper's Crude and its corresponding diluent, which shall be rendered by Bicentenario through the Araguaney – Banadía Segment, once the Conditions Precedent are fulfilled and during the Term or Provision of the Service.

CLC System: Means the Crude lifting and transport system, of private use, that is owned by Ecopetrol S.A., known as 'Caño Limón-Coveñas.'

Monterrey - Araguaney System: Means the private use Crude lifting and transport system, owned by Ecopetrol S.A., known as 'Monterrey - Araguaney.'

**Tariff:** Means the Crude transport tariff calculated in accordance with the methodology established in Schedule P of the AMI, which is transcribed literally and is a part of this contract as <u>Schedule G</u>.

**Coveñas Terminal:** Means he maritime terminal located in the Municipalities of Coveñas, Department of Sucre and San Antero, Department of Córdoba, Republic of Colombia, comprising the facilities that are owned by Bicentenario, Ecopetrol S.A., Oleoducto Central S.A. - Ocensa and Oleoducto de Colombia S.A. - ODC.

Araguaney – Banadía Segment: Means the segment of the Pipeline that begins at the Araguaney Station and ends at the Banadía Station, and which is described in detail in numeral 3.2.1 of the Transporter's Manual.

**Declared Value:** Means the value of the Crude that is determined on the basis of the average for the sale price of the Vasconia Crude, or of the Crude that is used as a reference for marketing the Crude that is transported through the Pipeline, during the 10 Days prior to the date of the Offering of the Retained Crude, in accordance with the Platts quotation, for purposes of (a) the indemnity established in Section 8.01(c) of the Contract, or (b) its sale, as a consequence of its retention, in accordance with Section 3.07 of the Contract.

<u>Schedule B</u> <u>Bicentenario Transporter's Manual (Attachment H to the AMI)</u> <u>Schedule C</u> <u>Bicentenario Good Governance Code</u> <u>Schedule D</u> <u>Bicentenario Loyalty and Transparency Policy</u>

# <u>Schedule E</u> <u>Methodology for the Calculation of the Guarantee</u>

The Guarantee that the Shipper undertakes to maintain in favor of Bicentenario in accordance with the provisions of Clause 5 of the Contract shall be calculated as follows:

- 1. The total amount of the Guarantee that the Shipper is to deliver shall correspond to 6 months of revenue corresponding to the transport of the Shipper's Contracted Capacity.
- 2. It shall be calculated by multiplying (i) the Shipper's Contracted Capacity that the Shipper undertakes to pay on a monthly basis (in accordance with this Contract) by (ii) the Tariff (calculated in accordance with Schedule G of the Contract), times (iii) 6.

# <u>Schedule F</u> <u>Model for the Stand-By Letter of Credit</u>

Letter of Credit No. [ ]

PLACE AND DATE OF ISSUE: EXPIRATION DATE: NOMINAL VALUE: ISSUING BANK: BENEFICIARY: ORIGINATOR:

ſ	1
[	]
US\$[	1
[	1
P.A. Bicentenario I	
ſ	1

By means of this document, we hereby communicate to you that, for the account of [\_\_\_\_\_] (the "<u>Originator</u>"), a company incorporated in accordance with the laws of [\_\_\_\_], the Bank [\_\_\_\_] (the "<u>Bank</u>") has issued in favor of Bicentenario I, with tax identification number [\_\_\_\_] (the "<u>Beneficiary</u>"), this irrevocable stand-by letter of credit payable on first demand (the "<u>Letter of Credit</u>") to support the payment of the obligations, whether monetary or not, of the Shipper under the crude transport contract entered into with Oleoducto Bicentenario de Colombia S.A.S. on June 20<sup>th</sup>, 2012 (the "<u>Contract</u>"), for up to the nominal value indicated above (the "<u>Guaranteed Obligations</u>").

This Letter of Credit shall be in force from the [\_] of [\_\_\_\_], 20[\_] through the date on which [\_\_\_] ([\_]) calendar Days have gone by after the [\_\_] of [\_\_\_], [\_\_\_\_].

It is understood that the Bank's liability derived from this Letter of Credit, is limited solely and exclusively to the amounts and during the terms that are indicated in the heading of the Letter of Credit.

In the event of non-compliance by the Originator of all or any of the Guaranteed Obligations, the Beneficiary, in accordance with what is provided for in the Contract, shall communicate said non-compliance to the Bank in its offices located at [\_\_\_\_\_], within the term of validity of this Letter of Credit. On the same date on which the aforementioned communication is received by the Bank, the Bank shall proceed to unconditionally pay, to the order of the Beneficiary, the amounts indicated in the communication of non-compliance, without at any time exceeding the total guaranteed amount, against this Letter of Credit, in (i) pesos, legal tender currency in the Republic of Colombia, or (ii) United States of America dollars. In the event that the Beneficiary makes partial use of this guarantee, the unused portion shall continue to guarantee the Guaranteed Obligations and may be called by the Beneficiary in the event of non-compliance by the Originator, through the aforementioned term of validity indicated above.

If the aforementioned communication of non-compliance is not received within the term of this Letter of Credit, the Bank's responsibility derived from it shall cease.

#### Versión para Firma Anexo F Modelo Carta de Crédito Stand-By

The communication in which the Bank is notified of the non-fulfillment of the Guaranteed Obligations shall consist of a document duly signed by the legal representative of the Beneficiary, in his condition as spokesperson for the Beneficiary, or by whomever is acting as such, in which he states the non-fulfillment by the Originator of the Guaranteed Obligations and requesting the total or partial payment of this guarantee. In this communication, the number of this Letter of Credit is to be cited, and the amount for which it is used. In case the Beneficiary opts for using this Letter of Credit in pesos, legal tender currency in the Republic of Colombia, the nominal value of the Letter of Credit shall be converted at the market representative exchange rate certified by the Finance Superintendence of Colombia for the date on which the communication is sent to the Bank.

This document shall be governed by the International Stand-by Practices (ISP98) of the International Chamber of Commerce.

# Schedule G

# Methodology for the Calculation of the Tariff (Attachment P of the AMI)

#### 1. General

The Shareholder Tariff shall be determined in order to grant Bicentenario a 10.5% annual internal rate of return (IRR) (or whatever rate that the General Shareholders Assembly may agree to for the tariff period), in real terms. The target return shall be calculated on the Free Cash Flow ("FCF", as defined below), which comprises the operational revenues, the costs and expenses for management, operations and maintenance of the business, the investments, taxes and working capital needs. The resulting target internal rate of return (IRR) for the project, measured on the FCF shall determine the Tariff. The resulting Free Cash Flow (FCF) shall be destined to cover the service of the debt to the Lenders and to return the resources invested to the Shareholders

#### 2. Calculation

The initial Tariff shall be established on the first date that occurs between the Date of Initiation of the Service or the Date of Initiation of the Payment of the Tariff, on the basis of the Bicentenario financial forecasts that arise from the Model for the Calculation of the Tariff.

The Tariff for the following year shall be determined during the month of October of each year, following the aforementioned methodology.

The Tariff shall be reviewed every 3 months. If in the interim reviews as a result of changes in the projections, the Tariff is modified by 5% or more, the Tariff shall be adjusted as of the month following said review, in order to avoid the persistence of a potential deficit or surplus during the period. The adjustments to the Tariff shall not consider possible variations in the costs of financing.

The process consists on determining the annual FCFs for a period that goes from November 2010 through the fifteenth year, as of the entry into operation of the Pipeline. The estimated annual FCF shall consider both known historical values as well as future estimated values.

The Tariff shall be adjusted with the required frequency as a result of the quarterly reviews established above, and in accordance with the denomination of the currency for the Bicentenario financial obligations; that is to say, there will be a percentage (%) of the Tariff in dollars, which shall be adjusted with the CPI for the United States, and, similarly, there will be a percentage (%) of the Tariff in pesos, which shall be adjusted with the COI for the United States, and, similarly, there will be a percentage (%) of the Tariff in pesos, which shall be adjusted with the COI for the United States, and, similarly, there will be a percentage (%) of the Tariff in pesos, which shall be adjusted with the Colombian CPI.

# 3. Definition of the FCF

The concept behind the FCF is the determination of the cash flow that Bicentenario would have, or would have had, if it did not have a financial debt. This shall be constructed with actual and forecast figures.

The FCF is calculated as follows:

# VERSION FOR SIGNATURE Schedule G Methodology for the Calculation of the Tariff

The revenues are calculated on the basis of numeral 3.1.1 of this Schedule (the "Calculated Revenues").

# Minus

All Bicentenario management, operational and maintenance costs and expenses.

# Minus

- The operational taxes.

# Minus

- The unleveraged estimate for the payment of income taxes (the taxes that would have been paid or that would be paid if there were no financial debt or cash flow surpluses).

# Minus (Plus)

- The increase (or reduction) in working capital.

# Minus

- The capital investments required for the construction of the Pipeline, including expenses that can be capitalized.

The calculation of the FCF shall be explained in detail in the Model for the Calculation of the Tariff (as this term is defined below).

# 3.1. Procedure for the Calculation of the Tariff

- 3.1.1. The Line for Calculated Revenues included in the FCF is calculated as follows:
  - 3.1.1.1. For historical periods: One multiplies (i) the respective Tariff for each historical period by (ii) the greater value between (A) the entire Contracted Capacity by all of the Shareholders or their Affiliates on the Date of Signature, and (B) the number of Barrels actually transported during each period. The historical revenues on account of transport royalties are added to this amount, calculated in accordance with the tariff of the Agencia Nacional de Hidrocarburos established in the Transporter's Manual, as well as any other revenues that are received by Bicentenario for other services.

#### Version for Signature Schedule G Methodology for the Calculation of the Tariff

- 3.1.1.2. For forecast periods: One multiplies (i) the entire Contracted Capacity by all of the Shareholders or their Affiliates on the Date of Signature by (ii) a base tariff (the "<u>Base Tariff</u>") that shall initially be the tariff in force. The Base Tariff is escalated every year, projected on the basis of inflation through the fifteenth year as of the date of entry of the Pipeline into operation. In turn, this shall be indexed in accordance with what is described in point 2 above, in accordance with the composition of currencies of the Bicentenario financial obligations. The forecast revenues on account of transport royalties shall be added to this amount, that are calculated in accordance with the tariff of the Agencia Nacional de Hidrocarburos established in the Transporter's Manual, as well as any other revenues that Bicentenario receives on account of other services.
- 3.1.2. The other components of the FCF are obtained on the basis of the premises of the Tariff Calculation Model, previously approved by the Board of Directors and on line with the conditions of the Bicentenario financial obligations. The amounts are to be nominal (that is to say, that they are to take into account the effects of inflation on the prices that comprise them).
- 3.1.3. Once the annual series of the historical and projected FCF have been obtained, the nominal figures shall be affected by dividing them by the historical and projected inflation, accumulated since 2010, thus obtaining the FCF in constant terms in 2010 values (the "<u>Constant FCF</u>").
- 3.1.4. The internal rate of return for the Constant FCF is calculated.
- 3.1.5. The Base Tariff is adjusted until the internal rate of return for the Constant FCF is 10.50% with a  $\pm 0.01\%$  tolerance level.

# 3.2. Model for the Calculation of the Tariff

The Board of Directors of Bicentenario shall approve a model for the calculation of the Bicentenario Tariff (the "<u>Model for the Calculation of the Tariff</u>"), that permits performing the calculations for the Tariff on the basis of the methodology that has been described. The Model for the Calculation of the Tariff shall also be known to the creditors of Bicentenario, in line with the Local Syndicated Loan Contract or with the rest of the indebtedness agreements that may be in force from time to time.

The first Tariff that will be applicable on the Date of commencement of the Service or on the Date of Commencement of payment of the Tariff, whichever occurs first, shall be the one approved by the Bicentenario Board of Directors, with 60 Days advance notice to said dates.

# 3.3. Example for the Calculation of the Tariff

With the sole purpose to clarify the calculation of the Tariff and to provide an example of it, an example is provided for the calculation of the Tariff:

#### VERSION FOR SIGNATURE Schedule G Methodology for the Calculation of the Tariff

Financial Model – Version delivered to the Banks (November 30<sup>th</sup>, 2011)

#### Bicentenario Pipeline Control Sheet

Figures in Millions of Current Pesos

CASH	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24	Dec-25	Dec-26	Dec-27
FLOW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Revenues	-		235.014	574.439	591.652	609.381	629.357	646.452	665.824	685.778	708.260	727.499	749.303	771.761	797.063	818.716	843.255	868.531
Opex	(10.248)	(32.957)	(74.531)	(91.220)	(98.327)	(97.764)	(100.699)	(107.101)	(113.323)	(115.419)	(115.456)	(116.750)	(123.986)	(131.028)	(131.238)	(133.744)	(137.737)	(143.545)
EBITDA	(10.248)	(32.957)	160.483	483.218	493.325	511.617	528.658	539.351	552.502	570.359	592.804	610.749	625.317	640.733	665.825	684.972	705.519	724.986
Income																		
Tax	-	-	(2.112)	(5.392)	(25.883)	(33.377)	(43.013)	(52.828)	(60.706)	(70.052)	(81.152)	(94.261)	(106.426)	(121.225)	(133.796)	(148.684)	(156.356)	(164.614)
Working																		
Capital	(995)	72.137	(45.680)	(7.397)	1.004	273	282	572	558	215	45	151	647	632	64	257	382	535
Capex	(127.879)	(1.253.766)	(1.422.453)	(38.903)	-						-					-		
Free Cash																		
Flow	(139.123)	(1.214.586)	(1.309.762)	431.527	468.445	478.514	485.927	487.094	492.354	500.522	511.697	516.639	519.539	520.140	532.093	536.545	549.545	560.907

The table above corresponds to the Annual Free Cash Flow for the Project, calculated by taking the following assumptions:

# 1. Operational Assumptions:

- a. Date of Initiation of Operations of the Unloading Dock: January 2012.
- b. Barrels discharged per day: 1,000.
- c. Discharge Tariff: \$USD 1.4075 per Barrel. (Average Tariff between USD 1.35 for Shareholders and USD 1.60 for third parties)
- d. Date of Commencement of Operations for the Line: August 2012.
- e. Barrels transported per day: 110,000.
- f. Opex: According to the budget for the Bicentenario Operations Area (COP\$ 91,220 million current pesos for the year 2013).

# 2. Investment Assumptions:

- a. Total value of the Investments: August 2011 \$USD 1,487 MM (budget for Stages 0 and 1).
- b. Investment Schedule: In accordance with the budget delivered by Bicentenario.

# 3. Historical Information:

a. Reconstruction of the monthly cash flow for the project, using the financial information for the Oleoducto Bicentenario Pipeline, from December 2010 through October 2011.

# 4. Investment Amortization:

- a. Investments in the Unloading Dock: 10 Years
- b. Investments in the Line: 15 Years

# 5. Working Capital:

- a. Turnover on Accounts Receivable: 7 days.
- b. Turnover on Accounts Payable: 30 days.

With the aforementioned assumptions, and bearing in mind the methodology for the calculation of the Transport Tariff determined in Schedule G, "Methodology for the Calculation of the Tariff" (Attachment P of the AMI), the Transport Tariff per Barrel was determined. Under this preliminary scenario, a Tariff of June 2010 \$USD 7.085 per Barrel was determined.

# <u>Schedule H</u> <u>Point of Entry and Point of Exit</u>

Point #	Type of Point	Name of the Point	Distance (in km)
1	Point of Entry	The point of entry is considered to be the valve manifold of exit from the ECOPETROL VIT at the Araguaney Plant, in the course to the Bicentenario storage tanks.	00+00
2	Point of Exit	The point of exit is considered to be the point of exit of the Pipeline, located at the last flange of the measuring point at the exit of the Pipeline at the Banadía Station.	229+300

# <u>Schedule I</u> Rules for the Sale of Retained Crude (Section 3.07)

1. **Provisional Notification:** Bicentenario shall deliver a Provisional Notification to the Shipper, for which the Shipper shall have the term established in said Provisional Notification (which cannot be less than 10 business days), to express its consent for the sale of Retained Crude to be made by Bicentenario, without the need to resort to the Commissioner.

# 2. Entrusted for the Sale:

- (a) In the event that the Shipper, within the term established in the Provisional Notification, authorizes Bicentenario to undertake the sale of the Crude without resorting to the Commissioner, said sale shall be made in accordance to the rules established in this <u>Anexo I</u>.
- (b) If the Shipper does not authorize Bicentenario under the terms of the Provisional Notification and within the established term, the sale of the Crude shall be made by a Commissioner, in accordance with the rules established in this <u>Anexo I</u>.
- 3. Value of the Sale: Bicentenario, directly or through the Commissioner, as the case may be, shall make a Reasonable Effort to sell the retained Crude at market prices and, in any event, at a price of not less than 75% of the Declared Value and in United States of America dollars, which shall be indicated in the Offer for Retained Crude.
- 4. **Crude Offering**: The Commissioner or Bicentenario, as the case may be, shall offer the retained Crude in accordance with the following rules:
  - (a) <u>Right of Preference of the Shareholders</u>: The retained Crude is to be offered initially to the Shareholders that are in compliance of their payment obligations under their corresponding Transport Contracts, who shall have the right to purchase the retained Crude preferentially in an equivalent prorated amount to their shareholding in Bicentenario at the time of the sale, for which:
    - (i) The Commissioner or Bicentenario, as applicable, shall send an Offering for the Retained Crude to the Shareholders within 2 Days following the expiration of the term established in Section Clause 14(b)(i) of the Contract (150 Days as of the date on which the payment of the corresponding invoice should have been made).
    - (ii) The performing Shareholders shall have a 10-Day term to send a communication to the Commissioner or to Bicentenario, as the case may be, in which they accept or reject the offer.

petróleo por Colombia

- If a Shareholder does not pronounce itself within the 10-Day term, it shall be understood that the offer has been rejected.
- If the 10 Day term has gone by and a Shareholder has not pronounced itself or rejects the offer, those Shareholders that did accept the offer shall acquire the retained Crude on a pro rata basis to their shareholding in Bicentenario at the time of the sale, under the terms indicated in the Offer for Retained Crude.
- If the 10 Day term has gone by without any Shareholder accepting the offer, or not making a pronouncement about it, the Commissioner or Bicentenario, as the case may be, shall proceed in accordance with literal (d) below.
- If the 10 Day term has gone by and a Shareholder has pronounced itself and there is still retained Crude that has not been sold, it shall be proceeded in accordance with literal (b) below, in order to sell said Crude.
- (b) <u>Public Sale</u>: The Commissioner or Bicentenario, as the case may be, shall proceed to offer the retained Crude by means of a public procedure and, in the event that it is the Commissioner, this shall be done in accordance with the internal regulation of the Commissioner for public offerings by means of an auction for goods similar to the retained Crude. In any event, the minimum conditions under which the retained Crude is to be offered shall be those indicated in the Offer for Retained Crude.
- 5. Destination of the Value of the Sale: The product of the sale of the retained Crude shall be applied, within the 3 Days following its receipt, as follows: (i) to the unfulfilled monetary obligation or to the reparation of the damages caused by said monetary obligation, after the deduction of the costs and expenses incurred by Bicentenario in the storage, marketing or auction or sale of the retained Crude, if any; and if there is any remaining amount, (ii) (1) a credit note shall be issued in favor of the Shipper, which shall be included in the invoices that are issued in subsequent months, until the amount of it is extinguished, in the case that the Contract has not been terminated, or (2) said amount shall be deposited in the bank account indicated by the Shipper, in the event that the Contract has been terminated.

# <u>Schedule J</u> Quality and Specifications of the Crude to be Transported

# I. <u>STAGE 1</u>

# 1. Estimated Quantities of Crude to be Transported in Stage 1:

	Daily average
Product	(Barrels/calendar day)
Crude	60,502.19

# 2. **Properties of the Products to be Transported:**

The Quality Specifications indicated in Table No. 1 correspond to the ones that are to be fulfilled by the final mix of Crudes to be transported through Bicentenario in Stage 1:

# TABLE No. 1

TEST PARAMETER	VALUE OF THE PARAMETER	TEST STANDARD
Sediment and water or particles	Not to exceed 0.5% on volume	Sediments – ASTM D473 Water – Karl Fisher
API at 60°F	Greater than 24 degrees API and less than 50 degrees API	D1298
Viscosity at the reference Temperature	Not greater than 50 cSt at 30°C	ASTM D445 or D446
Vapor Pressure	Not to exceed 11 lb/square inch Reid Vapour Pressure	ASTM D323
Receipt Temperature	Not to exceed 120°F	
Salt Content	Not to exceed 20 PTB	ASTM D 3230
Pour Point	Not to be greater than 12 °C	ASTM D 93
Sulphur	Less than or equal to 0.9%	ASTM D4294 Fluorescence Spectrometry

The above, without prejudice that the Operator, through its quality analysis, verifies parameters such as metals, TAN, among others. Based on these tests, Bicentenario shall notify the Shipper of the actions that are to be taken in order to prevent impacts on the operations of the system or affectations to the quality of other Crudes.

#### Versión para Firma Anejo J Calidad y Especificaciones del Crudo a Transportar

Bicentenario shall transport this mix received from Ecopetrol S.A. at the Araguaney Station through the Araguaney - Banadía Segment and shall deliver it at the Banadía Station with the same quality specification received at the CLC System.

# II. <u>SUBSEQUENT STAGES</u>

In Subsequent Stages, the Pipeline shall operate on the basis of a system of segregations and volumetric compensations, the terms of which are regulated in the Transporter's Manual, and the Shipper is to guarantee that the Crudes to be transported comply with the specifications indicated in Table No. 2 or Table No. 3 of this Schedule, as the case may be.

Batches of the mix of intermediate and heavy Crudes shall be transported in a segregated manner, in accordance with the following detail:

1. The Quality Specifications indicated in Table No. 2, correspond to those that the mix of intermediate Crudes to be transported through Bicentenario are to comply with:

#### TABLE No. 2

TEST PARAMETER	PARAMETER	TEST STANDARD
Sediment and water or particles	Not to exceed 0.5% in volume	Sediments – ASTM D473 Water – Karl Fisher
API at 60°F	Greater than 24 degrees API and less than 50 degrees API	D1298
Viscosity at the reference Temperature	Not greater than 50 cSt at 30°C	ASTM D445 or D446
Vapor Pressure	Not to exceed 11 lb/square inch	ASTM D323
	Reid Vapour Pressure	
Receipt Temperature	Not to exceed 120°F	
Salt Content	Not to exceed 20 PTB	ASTM D 3230
Pour Point	Not to be greater than 12°C	ASTM D 93
Sulphur	Less than or equal to 0.9%	ASTM D4294
-	-	Fluorescence Spectrometry

The above, without prejudice that the Operator, through its quality analysis, verifies parameters such as, TAN, among others. Based on these tests, it shall notify the Shipper of the actions that are to be taken in order to prevent impacts on the operations of the system or affectations to the quality of other Crudes.

# Versión para Firma Anejo J Calidad y Especificaciones del Crudo a Transportar

Bicentenario, on the basis of its present or future facilities, shall exercise its best efforts to permit the entry of the Shipper's Crude volumes with specifications that are less than 24° API and/or greater than 50 Cst. The costs associated with the operations of dilution or of the necessary infrastructure to bring the Crude to the specifications agreed to in Table No. 2 and that permit its transport through the Pipeline shall be for the account of the Shipper.

2. The Quality Specifications indicated in Table No. 3, correspond to those heavy crude segregations that are to be transported through Bicentenario:

# TABLE NO. 3

TEST PARAMETER	VALUE OF THE PARAMETER	TEST STANDARD
Sediment and water or particles	Not to exceed 0.5% on volume	Sediments – ASTM D473 Water – Karl Fisher
API at 60°F	Greater than 18 degrees API but less than 50 degrees API	D1298
Viscosity at the reference Temperature	Not to exceed 300 cSt at 30°C	ASTM D445 or D446
Vapor Pressure	Not to exceed 11 lb/square inch. Reid Vapour Pressure	ASTM D323
Receipt Temperature	Not to exceed 120°F	
Salt Content	Not to exceed 20 PTB	ASTM D 3230
Pour Point	Nor to be greater than 12°C	ASTM D 93
Sulphur	Less than or equal to 2%	ASTM D4294 Fluorescence Spectrometry

The above, without prejudice that the Operator, through its quality analysis, verifies parameters such as metals, TAN, among others. Based on these tests, Bicentenario shall notify the Shipper of the actions that are to be taken in order to prevent impacts on the operations of the system or affectations to the quality of other Crudes.

# Versión para Firma Anejo J Calidad y Especificaciones del Crudo a Transportar

Bicentenario, on the basis of its present or future facilities, shall exercise its best efforts to permit the entry of the Shipper's heavier Crudes with specifications that are less than 18° API and/or greater than 300 cSt. The costs associated with the operations of dilution or of the necessary infrastructure to bring the Crude to the specifications agreed to in Table No. 3 and that permit its transport through the Pipeline shall be for the account of the Shipper.

**3.** Bicentenario may opt to receive and transport the Shipper's heavier Crude volumes or to accept to transport segregated crudes, other than those indicated in Table 2 and Table 3 above, provided that it is technically and economically feasible.

If said operation is technically and economically feasible, Bicentenario shall submit it for the approval of the Bicentenario Board of Directors, together with the scheme for the acknowledgement of the costs associated for the infrastructure and the operation proposed, which in all cases shall be for the account of the interested Shipper.

# Subsidiaries of Ecopetrol S.A.

The following table sets forth our subsidiaries, their respective countries of incorporation, our percentage ownership in each (both directly and indirectly through other subsidiaries) and our voting percentage in each at March 31, 2014.

COMPANY	COUNTRY OF INCORPORATION	OWNERSHIP %	VOTING %
Andean Chemicals Ltd.	Bermuda	100	100
Bioenergy S.A.**	Colombia	91.43	91.43
Bioenergy Zona Franca S.A.S.**	Colombia	91.43	91.43
Black Gold Re	Bermuda	100	100
Cenit Transporte y Logística de Hidrocaburos S.A.S.*	Colombia	100	100
Colombia Pipelines Limited**	United Kingdom	51	51
COMAI - Compounding and Masterbatching Industry Ltda.**	Colombia	100	100
Ecopetrol America Inc.**	United States	100	100
Ecopetrol Capital AG	Switzerland	100	100
Ecopetrol del Perú S.A.**	Perú	100	100
Ecopetrol Global Capital S.L.U.	Spain	100	100
Ecopetrol Global Energy S.L.U.	Spain	100	100
Ecopetrol Óleo e Gás do Brasil Ltda.**	Brazil	100	100
EPI - Ecopetrol Pipelines International Limited	Bermuda	100	100
Equión Energía Limited	United Kingdom	51	51
Hocol Petroleum Limited	Bermuda	100	100
Hocol S.A.**	Cayman Islands	100	100
ODL Finance S.A**.	Panama	65	65
Oleoducto Bicentenario de Colombia S.A.S.**	Colombia	55.97	55.97
Oleoducto Central S.A.**	Colombia	72.65	72.6
Oleoducto de Colombia S.A.**	Colombia	73	73
Oleoducto de los Llanos Orientales S.A. **	Panama	65	65
Propilco S.A.*	Colombia	100	100
Refinería de Cartagena S.A.*	Colombia	100	100
Santiago Oil Company**	Cayman Islands	51	51

\*

Direct and indirect participation. Solely indirect participation through other subsidiaries or affiliates. \*\*

#### CERTIFICATION

I, Javier G. Gutiérrez, certify that:

- 1. I have reviewed this annual report on Form 20-F of Ecopetrol S.A.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Dated: April 25, 2014

By: /s/ Javier G. Gutiérrez

Name: Javier G. Gutiérrez Title: Chief Executive Officer

#### CERTIFICATION

I, Magda Manosalva, certify that:

- 1. I have reviewed this annual report on Form 20-F of Ecopetrol S.A.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Dated: April 25, 2014

By: /s/ Magda Manosalva

Name: Magda Manosalva Title: Chief Financial Officer

#### Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Ecopetrol S.A. (the "Company"), does hereby certify, to such officer's knowledge, that:

The annual report on Form 20-F for the fiscal year ended December 31, 2013 (the "Form 20-F") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 20-F fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: April 25, 2014

By: /s/ Javier G. Gutiérrez

Name:Javier G. GutiérrezTitle:Chief Executive Officer

Dated: April 25, 2014

By: /s/ Magda Manosalva

Name: Magda Manosalva Title: Chief Financial Officer

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form F-3 No. 333-190198 of Ecopetrol S. A. of our report dated April 25, 2014 relating to the financial statements and the effectiveness of internal control over financial reporting which appears in this Form 20-F. We also consent to the references to us under "Selected Financial Data" in this form 20-F.

/s/PricewaterhouseCoopers Ltda.

Bogotá, Colombia April 25, 2014

#### **Consent of Independent Registered Public Accounting Firm**

The Board of Directors Ecopetrol S.A.:

We consent to the incorporation by reference in the Registration Statement (No. 333-190198) on Form F-3 of Ecopetrol, S.A of our report dated April 29, 2013, with respect to the consolidated balance sheet of Ecopetrol, S.A. and subsidiaries as of December 31, 2012 and the related consolidated statements of Financial, Economic, Social and Environmental Activities, Changes in Stockholders' Equity, and Cash Flows for the years ended December 31, 2012 and 2011, which appear in this annual report on Form 20-F of Ecopetrol S.A. for the year ended December 31, 2013.

/s/KPMG Limitada

Bogotá, Colombia April 25, 2014



**TBPE REGISTERED ENGINEERING FIRM F-1580** 1100 LOUISIANA **SUITE 4600** 

HOUSTON, TEXAS 77002-5294

FAX (713) 651-0849 TELEPHONE (713) 651-9191

# **CONSENT OF INDEPENDENT PETROLEUM ENGINEERS**

Ryder Scott Company, L.P. ("Ryder Scott") consents to the references to our firm and our report dated February 28, 2014 (our "Report") included in Ecopetrol S.A.'s annual report on Form 20-F for the year ended December 31, 2013 (the "Annual Report"), the inclusion of our Report as Exhibit 99.1 to the Annual Report and references to and information derived from our Report in the Annual Report, as well as to the incorporation by reference of this consent and our Report into Ecopetrol's S.A.'s registration statement on Form F-3 filed with the United States Securities and Exchange Commission on or about July 26, 2013 (the "Registration Statement"). Ryder Scott further consents to the references to Ryder Scott as set forth in the Registration Statement under the heading "Experts".

/s/ RYDER SCOTT COMPANY, L.P.

RYDER SCOTT COMPANY, L.P. TBPE Firm Registration No. F-1580

Houston, Texas April 21, 2014

SUITE 600, 1015 4TH STREET, S.W. CALGARY, ALBERTA T2R 1J4 TEL (403) 262-2799 FAX (403) 262-2790 621 17TH STREET, SUITE 1550 DENVER, COLORADO 80293-1501 TEL (303) 623-9147 FAX (303) 623-4258

# Gaffney, Cline & Associates

Gaffney, Cline & Associates, Inc.

5555 San Felipe Street Suite 550 Houston, TX 77056, USA Telephone: +1 713 850 9955

www.gaffney-cline.com

April 21, 2014

#### DKM/gjh/AH-13-2048.00/gcah.138.14

Board of Directors **Ecopetrol, S. A.** Edificio Principal Cr 13 No.36-24 Bogotá, Colombia

# **CONSENT OF GAFFNEY, CLINE & ASSOCIATES**

Dear Sirs,

As independent reserve engineers for Ecopetrol S.A.(Ecopetrol), Gaffney, Cline & Associates (GCA) hereby confirms that it has granted and not withdrawn its consent to the references to GCA and to the inclusion of information contained in our report entitled "Reserve Audit for Sixty Six Fields in Colombia as of December 31, 2013", dated March 03, 2014, prepared for Ecopetrol, and to the annexation of our report as an exhibit in Ecopetrol's annual report on Form 20-F for the year ended December 31, 2013, as well as to the incorporation by reference of this consent and our report into Ecopetrol S.A.'s registration statement on Form F-3 filed with the United States Securities and Exchange Commission on July 26, 2013 (the Registration Statement). GCA further consents to the reference to "GCA" as set forth in the Registration Statement under the heading "Experts".

Yours faithfully,

GAFFNEY, CLINE & ASSOCIATES, INC.

David & Magar

David K. Morgan Technical Director

DeGolyer and MacNaughton 5001 Spring Valley Road Suite 800 East Dallas, Texas 75244

April 21, 2014

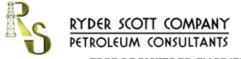
Board of Directors Ecopetrol S.A. Calle 35 No. 7-21 Piso 1 Bogota, D.C. Colombia

Ladies and Gentlemen:

We hereby consent to the references to DeGolyer and MacNaughton and to the inclusion of and information derived from our third party letter report dated February 27, 2014, containing our opinions regarding our estimates, as of December 31, 2013, of the proved oil, condensate, natural gas liquids, natural gas, and oil equivalent reserves of certain selected properties owned by Ecopetrol S.A. in Colombia and Peru (our Third Party Letter Report) as set forth under the headings "Presentation of Information Concerning Reserves," "Item 4. Information on the Company—Overview by Business Segment—Reserves," "Item 18. Financial Statements, Table IV—Reserve Information," "Item 19. Exhibits," and as Exhibit 99.3 in the Annual Report on Form 20-F of Ecopetrol S.A. for the year ended December 31, 2013 (the Annual Report) and as incorporated by reference into Ecopetrol S.A.'s registration statement on Form F-3 filed with the United States Securities and Exchange Commission on July 26, 2013 (the Registration Statement) and we further consent to the references to DeGolyer and MacNaughton as set forth in the Registration Statement under the heading "Experts"; provided, however, that we are necessarily unable to verify the accuracy of the reserves estimates contained in the Annual Report because our estimates of reserves have been combined with estimates of reserves prepared by other petroleum consultants.

Very truly yours,

/s/ DeGolyer and MacNaughton DeGOLYER and MacNAUGHTON Texas Registered Engineering Firm F-716



TBPE REGISTERED ENGINEERING FIRM F-1580 1100 LOUISIANA SUITE 4600 HOUSTON, T

HOUSTON, TEXAS 77002-5294

FAX (713) 651-0849 TELEPHONE (713) 651-9191

February 28, 2014

ECOPETROL Cra. 13 No. 36-24 Edificio Principal, Piso 7 Bogotá, D.C., Colombia

At the request of ECOPETROL, Ryder Scott Company (Ryder Scott) has prepared an estimate of the proved reserves attributable to certain properties of ECOPETROL, as of December 31, 2013. The subject properties are located in the country of Colombia and the United States of America. Ryder Scott estimated the reserves based on the definitions and disclosure guidelines of the United States Securities and Exchange Commission (SEC) contained in Title 17, Code of Federal Regulations, Modernization of Oil and Gas Reporting, Final Rule released January 14, 2009 in the Federal Register (SEC Regulations). Our third party study, completed on January 4, 2014 and presented herein, was prepared for public disclosure by ECOPETROL in filings made with the SEC in accordance with the disclosure requirements set forth in the SEC regulations.

The properties evaluated by Ryder Scott account for a portion of ECOPETROL's total net proved reserves as of December 31, 2013. Based on information provided by ECOPETROL, the third party estimate conducted by Ryder Scott addresses 43 percent of the total proved developed net liquid hydrocarbon reserves, and 29 percent of the total proved undeveloped net liquid hydrocarbon reserves, of ECOPETROL. Ryder Scott review also addresses 76 percent of the total proved developed net gas reserves and 34 percent of the total proved undeveloped net gas reserves, of ECOPETROL.

The estimated reserve amounts presented in this report, as of December 31, 2013, are related to hydrocarbon prices. The hydrocarbon prices used in the preparation of this report are based on the average prices during the 12-month period prior to the ending date of the period covered in this report, determined as the unweighted arithmetic averages of the prices in effect on the first-day-of-the-month for each month within such period, unless prices were defined by contractual arrangements, as required by the SEC regulations. Actual future prices may vary significantly from the prices required by SEC regulations; therefore, volumes of reserves actually recovered may differ significantly from the estimated quantities presented in this report. The results of Ryder Scott's estimates are summarized below.

SUITE 600, 1015 4TH STREET, S.W. 621 17TH STREET, SUITE 1550 CALGARY, ALBERTA T2R 1J4 DENVER, COLORADO 80293-1501 TEL (403) 262-2799 TEL (303) 623-9147 FAX (403) 262-2790 FAX (303) 623-4258

#### SEC PARAMETERS Estimated Net Reserves Certain Interests of ECOPETROL As of December 31, 2013

		Proved	
	Developed	Undeveloped	Total Proved
Net Remaining Reserves			
Oil/Condensate - MBarrels	349,479	139,989	489,468
Plant Products - MBarrels	48,434	2,860	51,294
Sales Gas - MMCF	2,027,119	135,893	2,163,012

Liquid hydrocarbons are expressed in thousand standard 42 gallon barrels. All gas volumes are reported on an "as sold" basis expressed in millions of cubic feet (MMCF) at the official temperature and pressure bases of the areas in which the gas reserves are located. These proved reserves volumes are exclusive of royalties. Further, they include ECOPETROL's participation interest in properties operated by Equion Energía Ltd. and Hocol Petroleum Ltd.

# **Reserves Included in This Report**

The proved reserves included herein conform to the definition as set forth in the Securities and Exchange Commission's Regulations Part 210.4-10(a). An abridged version of the SEC reserves definitions from 210.4-10(a) entitled "Petroleum Reserves Definitions" is included as an attachment to this report. The various proved reserve status categories are defined under the attachment entitled "Petroleum Reserves Status, Definitions and Guidelines" in this report.

No attempt was made to quantify or otherwise account for any accumulated gas production imbalances that may exist. The proved gas volumes included herein do not attribute gas consumed in operations as reserves. Non-hydrocarbon or inert gas volumes have been excluded from the reserves reported herein.

Reserves are those estimated remaining quantities of petroleum that are anticipated to be economically producible, as of a given date, from known accumulations under defined conditions. All reserve estimates involve an assessment of the uncertainty relating the likelihood that the actual remaining quantities recovered will be greater or less than the estimated quantities determined as of the date the estimate is made. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves, and may be further sub-classified as probable and possible reserves to denote progressively increasing uncertainty in their recoverability. At ECOPETROL's request, this report addresses only the proved reserves attributable to the properties evaluated herein.

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." The proved reserves included herein were estimated using deterministic methods. If deterministic methods are used, the SEC has defined reasonable certainty for proved reserves as a "high degree of confidence that the quantities will be recovered."

#### RYDER SCOTT COMPANY PETROLEUM CONSULTANTS

# ECOPETROL February 28, 2014 Page 3

Proved reserve estimates will generally be revised only as additional geologic or engineering data become available or as economic conditions change. For proved reserves, the SEC states that "as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to the estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase or remain constant than to decrease." Moreover, estimates of proved reserves may be revised as a result of future operations, effects of regulation by governmental agencies or geopolitical or economic risks. Therefore, the proved reserves included in this report are estimates only and should not be construed as being exact quantities, and if recovered, the revenues therefrom, and the actual costs related thereto, could be more or less than the estimated amounts.

The proved reserves reported herein are limited to the period prior to expiration of current contracts providing the legal rights to produce, or a revenue interest in such production, unless evidence indicates that contract renewal is reasonably certain. Furthermore, properties in the different countries may be subjected to significantly varying contractual fiscal terms that affect the net revenue to ECOPETROL for the production of these volumes. The prices and economic return received for these net volumes can vary significantly based on the terms of these contracts. Therefore, when applicable, Ryder Scott reviewed the fiscal terms of such contracts and discussed with ECOPETROL the net economic benefit attributed to such operations for the determination of the net hydrocarbon volumes and income thereof. Ryder Scott has not conducted an exhaustive audit or verification of such contractual information. Neither our review of such contractual information nor our acceptance of ECOPETROL's representations regarding such contractual information should be construed as a legal opinion on this matter.

Ryder Scott did not evaluate the country and geopolitical risks in the countries where ECOPETROL operates or has interests. ECOPETROL's operations may be subject to various levels of governmental controls and regulations. These controls and regulations may include, but may not be limited to, matters relating to land tenure and leasing, the legal rights to produce hydrocarbons including the granting, extension or termination of production sharing contracts, the fiscal terms of various production sharing contracts, drilling and production practices, environmental protection, marketing and pricing policies, royalties, various taxes and levies including income tax, and foreign trade and investment and are subject to change from time to time. Such changes in governmental regulations and policies may cause volumes of proved reserves actually recovered and amounts of proved income actually received to differ significantly from the estimated quantities.

The estimates of proved reserves presented herein were based upon a detailed study of the properties in which ECOPETROL owns an interest; however, we have not made any field examination of the properties. No consideration was given in this report to potential environmental liabilities that may exist nor were any costs included for potential liabilities to restore and clean up damages, if any, caused by past operating practices.

# Estimates of Reserves

The estimation of reserves involves two distinct determinations. The first determination results in the estimation of the quantities of recoverable oil and gas and the second determination results in the estimation of the uncertainty associated with those estimated quantities in accordance with the definitions set forth by the Securities and Exchange Commission's Regulations Part 210.4-10(a). The process of estimating the quantities of recoverable oil and gas reserves relies on the use of certain generally accepted analytical procedures. These analytical procedures fall into three broad categories or methods: (1) performance-based methods; (2) volumetric-based methods; and (3) analogy. These methods may be used singularly or in combination by the reserve evaluator in the process of estimating the quantities of reserves. Reserve evaluators must select the method or combination of methods which in their professional judgment is most appropriate given the nature and amount of reliable geoscience and engineering data available at the time of the estimate, the established or anticipated performance characteristics of the reservoir being evaluated and the stage of development or producing maturity of the property.

RYDER SCOTT COMPANY PETROLEUM CONSULTANTS

In many cases, the analysis of the available geoscience and engineering data and the subsequent interpretation of this data may indicate a range of possible outcomes in an estimate, irrespective of the method selected by the evaluator. When a range in the quantity of reserves is identified, the evaluator must determine the uncertainty associated with the incremental quantities of the reserves. If the reserve quantities are estimated using the deterministic incremental approach, the uncertainty for each discrete incremental quantity of the reserves is addressed by the reserve category assigned by the evaluator. Therefore, it is the categorization of reserve quantities as proved, probable and/or possible that addresses the inherent uncertainty in the estimated quantities reported. For proved reserves, uncertainty is defined by the SEC as reasonable certainty wherein the "quantities actually recovered are much more likely than not to be achieved." The SEC states that "probable reserves are those additional reserves are those additional reserves that are less certain to be recovered than proved reserves but which, together with proved reserves, are as likely as not to be recovered from a project have a low probability of exceeding proved plus probable plus possible reserves." All quantities of reserves within the same reserve category must meet the SEC definitions as noted above.

Estimates of reserves quantities and their associated reserve categories may be revised in the future as additional geoscience or engineering data become available. Furthermore, estimates of reserves quantities and their associated reserve categories may also be revised due to other factors such as changes in economic conditions, results of future operations, effects of regulation by governmental agencies or geopolitical economic risks as previously noted herein.

The proved reserves for the properties included herein were estimated by performance methods, the volumetric method, or a combination of performance and volumetric methods. The following table summarizes the approximate percent of reserves estimated by each of these methods.

Approximate Percent Proved Reserves Estimated by the Various Methods						
		Gas	5	Liquid Hydrocarbons		
	Method	Developed	Undeveloped	Developed	Undeveloped	
Volumetric		-	100%	-	18%	
Performance		-	-	72%	-	
Analogy		-	-	-	54%	
Combination		100%	-	28%	28%	

These performance methods include, but may not be limited to, decline curve analysis and analogy which utilized extrapolations of historical production and pressure data available through November 2013 in those cases where such data were considered to be definitive. The data utilized in this analysis were supplied to Ryder Scott by ECOPETROL and were considered sufficient for the purpose thereof. The volumetric method was used where there were inadequate historical performance data to establish a definitive trend and where the use of production performance data as a basis for the reserve estimates was considered to be inappropriate. The volumetric analysis utilized pertinent well and seismic data supplied to Ryder Scott by ECOPETROL that were available through November, 2013. The data utilized from the well and seismic data incorporated into our volumetric analysis were considered sufficient for the purpose thereof.

## ECOPETROL February 28, 2014 Page 5

To estimate economically recoverable proved oil and gas reserves and related future net cash flows, we consider many factors and assumptions including, but not limited to, the use of reservoir parameters derived from geological, geophysical and engineering data that cannot be measured directly, economic criteria based on current costs and SEC pricing requirements, and forecasts of future production rates. Under the SEC regulations 210.4-10(a)(22)(v) and (26), proved reserves must be anticipated to be economically producible from a given date forward based on existing economic conditions including the prices and costs at which economic producibility from a reservoir is to be determined. While it may reasonably be anticipated that the future prices received for the sale of production and the operating costs and other costs relating to such production may increase or decrease from those under existing economic conditions, such changes were, in accordance with rules adopted by the SEC, omitted from consideration in making this evaluation.

ECOPETROL has informed us that they have furnished us all of the material accounts, records, geological and engineering data, and reports and other data required for this investigation. In preparing our forecast of future proved production and income, we have relied upon data furnished by ECOPETROL with respect to property interests owned, production and well tests from examined wells, normal direct costs of operating the wells or leases, other costs such as transportation and/or processing fees, ad valorem and production taxes, recompletion and development costs, abandonment costs after salvage, product prices based on the SEC regulations, adjustments or differentials to product prices, geological structural and isochore maps, well logs, core analyses, and pressure measurements. Ryder Scott reviewed such factual data for its reasonableness; however, we have not conducted an independent verification of the data furnished by ECOPETROL. We consider the factual data used in this report appropriate and sufficient for the purpose of preparing the estimates of reserves herein.

In summary, we consider the assumptions, data, methods and analytical procedures used in this report appropriate for the purpose hereof, and we have used all such methods and procedures that we consider necessary and appropriate to prepare the estimates of reserves herein. The proved reserves included herein were determined in conformance with the United States Securities and Exchange Commission (SEC) Modernization of Oil and Gas Reporting; Final Rule, including all references to Regulation S-X and Regulation S-K, referred to herein collectively as the "SEC Regulations." In our opinion, the proved reserves presented in this report comply with the definitions, guidelines and disclosure requirements as required by the SEC regulations.

## Future Production Rates

For wells currently on production, our forecasts of future production rates are based on historical performance data. If no production decline trend has been established, future production rates were held constant, or adjusted for the effects of curtailment where appropriate, until a decline in ability to produce was anticipated. An estimated rate of decline was then applied to depletion of the reserves. If a decline trend has been established, this trend was used as the basis for estimating future production rates.

Test data and other related information were used to estimate the anticipated initial production rates for those wells or locations that are not currently producing. For reserves not yet on production, sales were estimated to commence at an anticipated date furnished by ECOPETROL. Wells or locations that are not currently producing may start producing earlier or later than anticipated in our estimates due to unforeseen factors causing a change in the timing to initiate production. Such factors may include delays due to weather, the availability of rigs, the sequence of drilling, completing and/or recompleting wells and/or constraints set by regulatory bodies.

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The future production rates from wells currently on production or wells or locations that are not currently producing may be more or less than estimated because of changes including, but not limited to, reservoir performance, operating conditions related to surface facilities, compression and artificial lift, pipeline capacity and/or operating conditions, producing market demand and/or allowables or other constraints set by regulatory bodies.

## Hydrocarbon Prices

The hydrocarbon prices used herein are based on SEC price parameters using the average prices during the 12-month period prior to the ending date of the period covered in this report, determined as the unweighted arithmetic averages of the prices in effect on the first-day-of-the-month for each month within such period, unless prices were defined by contractual arrangements. For hydrocarbon products sold under contract, the contract prices, including fixed and determinable escalations, exclusive of inflation adjustments, were used until expiration of the contract. Upon contract expiration, the prices were adjusted to the 12-month unweighted arithmetic average as previously described.

ECOPETROL furnished us with the above mentioned average prices in effect on December 31, 2013. These initial SEC hydrocarbon prices were determined using the 12-month average first-day-of-the-month benchmark prices appropriate to the geographic area where the hydrocarbons are sold. These benchmark prices are prior to the adjustments for differentials as described herein. The table below summarizes the "benchmark prices" and "price reference" used for the geographic area included in the report. In certain geographic areas, the price reference and benchmark prices may be defined by contractual arrangements. In cases where there are numerous contracts or price references within the same geographic area, the benchmark price is represented by the unweighted arithmetic average of the initial 12-month average first-day-of-the-month benchmark prices used.

The product prices that were actually used to determine the future gross revenue for each property reflect adjustments to the benchmark prices for gravity, quality, local conditions and/or distance from market, referred to herein as "differentials." The differentials used in the preparation of this report were furnished to us by ECOPETROL. The differentials furnished to us were accepted as factual data and reviewed by us for their reasonableness; however, we have not conducted an independent verification of the data used by ECOPETROL to determine these differentials.

In addition, the following table summarizes the net volume weighted benchmark prices adjusted for differentials and referred to herein as the "average realized prices." The average realized prices shown in the table below were determined from the total future gross revenue before production taxes and the total net reserves for the geographic area and presented in accordance with SEC disclosure requirements for each of the geographic areas included in the report.

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			Average	Average
		Price	Benchmark	Realized
Geographic Area	Product	Reference	Prices	Prices
	Oil/Condensate	Brent Spot Price	\$108.32/Bbl	\$90.61/Bbl
South America	NGLs	Brent Spot Price	\$108.32/Bbl	\$52.40/Bbl
	Gas	Contract	Contract	\$4.34/MCF
North America	Oil/Condensate	Brent Spot Price	\$108.32/Bbl	\$103.29/Bbl
Morun America	Gas	Henry Hub	\$3.72/MMBTU	\$4.63/MCF

For the properties reviewed by Ryder Scott, approximately 85 percent of the future gross income is derived from the sale of liquid hydrocarbons and 15 percent from gas sales.

#### Costs

Operating costs used in our evaluation were based on the operating expense reports of ECOPETROL and include only those costs directly applicable to the evaluated assets. The operating costs include a portion of general and administrative costs allocated directly to the leases and wells. The operating costs furnished to us were accepted as factual data and reviewed by us for their reasonableness; however, we have not conducted an independent verification of the operating cost data used by ECOPETROL. No deduction was made for loan repayments, interest expenses, or exploration and development prepayments that were not charged directly to the assets.

Development costs were furnished to us by ECOPETROL and are based on authorizations for expenditure for the proposed work or actual costs for similar projects. The development costs furnished to us were accepted as factual data and reviewed by us for their reasonableness; however, we have not conducted an independent verification of these costs. The estimated net cost of abandonment after salvage was included for properties where abandonment costs net of salvage were significant. The estimates of the net abandonment costs furnished by ECOPETROL were accepted without independent verification.

The proved developed and undeveloped reserves in this report have been incorporated herein in accordance with ECOPETROL's plans to develop these reserves as of December 31, 2013. The implementation of ECOPETROL's development plans as presented to us and incorporated herein is subject to the approval process adopted by ECOPETROL's management. As the result of our inquires during the course of preparing this report, ECOPETROL has informed us that the development activities included herein have been subjected to and received the internal approvals required by ECOPETROL's management at the appropriate local, regional and/or corporate level. In addition to the internal approvals as noted, certain development activities may still be subject to specific partner AFE processes, Joint Operating Agreement (JOA) requirements or other administrative approvals external to ECOPETROL. Additionally, ECOPETROL has informed us that they are not aware of any legal, regulatory, political or economic obstacles that would significantly alter their plans.

Current costs used by ECOPETROL were held constant throughout the life of the properties.

#### Standards of Independence and Professional Qualification

Ryder Scott is an independent petroleum engineering consulting firm that has been providing petroleum consulting services throughout the world for over seventy years. Ryder Scott is employee-owned and maintains offices in Houston, Texas; Denver, Colorado; and Calgary, Alberta, Canada. We have over eighty engineers and geoscientists on our permanent staff. By virtue of the size of our firm and the large number of clients for which we provide services, no single client or job represents a material portion of our annual revenue. We do not serve as officers or directors of any privately-owned or publicly-traded oil and gas company and are separate and independent from the operating and investment decision-making process of our clients. This allows us to bring the highest level of independence and objectivity to each engagement for our services.

Ryder Scott actively participates in industry-related professional societies and organizes an annual public forum focused on the subject of reserves evaluations and SEC regulations. Many of our staff have authored or co-authored technical papers on the subject of reserves related topics. We encourage our staff to maintain and enhance their professional skills by actively participating in ongoing continuing education.

Prior to becoming an officer of the Company, Ryder Scott requires that staff engineers and geoscientists have received professional accreditation in the form of a registered or certified professional engineer's license or a registered or certified professional geoscientist's license, or the equivalent thereof, from an appropriate governmental authority or a recognized self-regulating professional organization.

We are independent petroleum engineers with respect to ECOPETROL. Neither we nor any of our employees have any interest in the subject properties and neither the employment to do this work nor the compensation is contingent on our estimates of reserves for the properties which were reviewed.

The results of this study, presented herein, are based on technical analysis conducted by teams of geoscientists and engineers from Ryder Scott. The professional qualifications of the undersigned, the technical person primarily responsible for overseeing, reviewing and approving the evaluation of the reserves information discussed in this report, are included as an attachment to this letter.

# Terms of Usage

The results of our third party study, presented in report form herein, were prepared in accordance with the disclosure requirements set forth in the SEC regulations and intended for public disclosure as an exhibit in filings made with the SEC by ECOPETROL.

We have provided ECOPETROL with a digital version of the original signed copy of this report letter. In the event there are any differences between the digital version included in filings made by ECOPETROL and the original signed report letter, the original signed report letter shall control and supersede the digital version.

The data and work papers used in the preparation of this report are available for examination by authorized parties in our offices. Please contact us if we can be of further service.

Very truly yours,

## **RYDER SCOTT COMPANY, L. P.** TBPE Firm Registration No. F-1580

\s\ Herman G. Acuña

Herman G. Acuna, P.E. Texas P.E. License No. 92254 Managing Senior Vice President–International

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## **Professional Qualifications**

The conclusions presented in this report for Ecopetrol for properties located in Colombia are the result of technical analysis conducted by teams of geoscientists and engineers from Ryder Scott Company, L.P. Herman G. Acuña was the primary technical person responsible for overseeing the independent estimation of the reserves, future production and income to render the audit conclusions of the report.

Mr. Acuña, an employee of Ryder Scott Company, L.P. (Ryder Scott) since 1997, is a Managing Senior International Vice President and Board Member. He serves as an Engineering Group Coordinator responsible for coordinating and supervising staff and consulting engineers of the company in ongoing reservoir evaluation studies worldwide. Before joining Ryder Scott, Mr. Acuña served in a number of engineering positions with Exxon. For more information regarding Mr. Acuña's geographic and job specific experience, please refer to the Ryder Scott Company website at www.ryderscott.com.

Mr. Acuña earned a Bachelor (Cum Laude) and a Masters (Magna Cum Laude) of Science degree in Petroleum Engineering from The University of Tulsa in 1987 and 1989 respectively. He is a registered Professional Engineer in the State of Texas, a member of the Association of International Petroleum Negotiators (AIPN) and the Society of Petroleum Engineers (SPE).

In addition to gaining experience and competency through prior work experience, the Texas Board of Professional Engineers requires a minimum of fifteen hours of continuing education annually, including at least one hour in the area of professional ethics, which Mr. Acuña fulfills. Mr. Acuña has attending formalized training and conferences including dedicated to the subject to the definitions and disclosure guidelines contained in the United States Securities and Exchange Commission Title 17, Code of Federal Regulations, Modernization of Oil and Gas Reporting, Final Rule released January 14, 2009 in the Federal Register. Mr. Acuña has recently taught various company reserves evaluation schools in Argentina, China, Denmark, Spain and the U.S.A. Mr. Acuña has participated in various capacities in reserves conferences such as being a panelist at Trinidad and Tobago's Petroleum Conference, delivering the reserves evaluation seminar during IAPG conversion in Mendoza, Argentina and chairing the first Reserves Evaluation Conference in the Middle East in Dubai, U.A.E.

Based on his educational background, professional training and over 20 years of practical experience in petroleum engineering and the estimation and evaluation of petroleum reserves, Mr. Acuña has attained the professional qualifications as a Reserves Estimator and Reserves Auditor set forth in Article III of the "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information" promulgated by the Society of Petroleum Engineers as of February 19, 2007.

## PETROLEUM RESERVES DEFINITIONS

#### As Adapted From: RULE 4-10(a) of REGULATION S-X PART 210 UNITED STATES SECURITIES AND EXCHANGE COMMISSION (SEC)

## PREAMBLE

On January 14, 2009, the United States Securities and Exchange Commission (SEC) published the "Modernization of Oil and Gas Reporting; Final Rule" in the Federal Register of National Archives and Records Administration (NARA). The "Modernization of Oil and Gas Reporting; Final Rule" includes revisions and additions to the definition section in Rule 4-10 of Regulation S-X, revisions and additions to the oil and gas reporting requirements in Regulation S-K, and amends and codifies Industry Guide 2 in Regulation S-K. The "Modernization of Oil and Gas Reporting; Final Rule", including all references to Regulation S-X and Regulation S-K, shall be referred to herein collectively as the "SEC Regulations". The SEC Regulations take effect for all filings made with the United States Securities and Exchange Commission as of December 31, 2009, or after January 1, 2010. Reference should be made to the full text under Title 17, Code of Federal Regulations, Regulation S-X Part 210, Rule 4-10(a) for the complete definitions, as the following definitions, descriptions and explanations rely wholly or in part on excerpts from the original document (direct passages excerpted from the aforementioned SEC document are denoted in italics herein).

Reserves are those estimated remaining quantities of petroleum which are anticipated to be economically producible, as of a given date, from known accumulations under defined conditions. All reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves and may be further sub-classified as probable and possible reserves to denote progressively increasing uncertainty in their recoverability. Under the SEC Regulations as of December 31, 2009, or after January 1, 2010, a company may optionally disclose estimated quantities of probable or possible oil and gas reserves in documents publicly filed with the Commission. The SEC Regulations continue to prohibit disclosure of estimates of oil and gas resources other than reserves and any estimated values of such resources in any document publicly filed with the Commission unless such information is required to be disclosed in the document by foreign or state law as noted in §229.1202 Instruction to Item 1202.

Reserves estimates will generally be revised as additional geologic or engineering data become available or as economic conditions change.

Reserves may be attributed to either natural energy or improved recovery methods. Improved recovery methods include all methods for supplementing natural energy or altering natural forces in the reservoir to increase ultimate recovery. Examples of such methods are pressure maintenance, natural gas cycling, waterflooding, thermal methods, chemical flooding, and the use of miscible and immiscible displacement fluids. Other improved recovery methods may be developed in the future as petroleum technology continues to evolve.

Reserves may be attributed to either conventional or unconventional petroleum accumulations. Petroleum accumulations are considered as either conventional or unconventional based on the nature of their in-place characteristics, extraction method applied, or degree of processing prior to sale. Examples of unconventional petroleum accumulations include coalbed or coalseam methane (CBM/CSM), basin-centered gas, shale gas, gas hydrates, natural bitumen and oil shale deposits. These unconventional accumulations may require specialized extraction technology and/or significant processing prior to sale.

RESERVES STATUS DEFINITIONS AND GUIDELINES Page 2

Reserves do not include quantities of petroleum being held in inventory.

Because of the differences in uncertainty, caution should be exercised when aggregating quantities of petroleum from different reserves categories.

# **RESERVES (SEC DEFINITIONS)**

Securities and Exchange Commission Regulation S-X §210.4-10(a)(26) defines reserves as follows:

# (A)

(B) **Reserves**. Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.

(C)

(D) <u>Note to paragraph (a)(26)</u>: Reserves should not be assigned to adjacent reservoirs isolated by major, potentially sealing, faults until those reservoirs are penetrated and evaluated as economically producible. Reserves should not be assigned to areas that are clearly separated from a known accumulation by a non-productive reservoir (<u>i.e.</u>, absence of reservoir, structurally low reservoir, or negative test results). Such areas may contain prospective resources (<u>i.e.</u>, potentially recoverable resources from undiscovered accumulations).

## PROVED RESERVES (SEC DEFINITIONS)

Securities and Exchange Commission Regulation S-X §210.4-10(a)(22) defines proved oil and gas reserves as follows:

**(E)** 

(F) **Proved oil and gas reserves.** 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.

*(i)* The area of the reservoir considered as proved includes:

The area identified by drilling and limited by fluid contacts, if any, and

Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.

# RESERVES STATUS DEFINITIONS AND GUIDELINES Page 3

# PROVED RESERVES (SEC DEFINITIONS) CONTINUED

(ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons (LKH) as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.

(iii) Where direct observation from well penetrations has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establish the higher contact with reasonable certainty.

(iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when:

(A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and

The project has been approved for development by all necessary parties and entities, including governmental entities.

(v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be 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 further conditions.

#### RESERVES STATUS DEFINITIONS AND GUIDELINES As Adapted From: RULE 4-10(a) OF REGULATION S-X PART 210 UNITED STATES SECURITIES AND EXCHANGE COMMISSION (SEC) and PETROLEUM RESOURCES MANAGEMENT SYSTEM (SPE-PRMS) Sponsored and Approved by: SOCIETY OF PETROLEUM ENGINEERS (SPE), WORLD PETROLEUM COUNCIL (WPC) AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS (AAPG) SOCIETY OF PETROLEUM EV ALUATION ENGINEERS (SPEE)

Reserves status categories define the development and producing status of wells and reservoirs. Reference should be made to Title 17, Code of Federal Regulations, Regulation S-X Part 210, Rule 4-10(a) and the SPE-PRMS as the following reserves status definitions are based on excerpts from the original documents (direct passages excerpted from the aforementioned SEC and SPE-PRMS documents are denoted in italics herein).

# DEVELOPED RESERVES (SEC DEFINITIONS)

Securities and Exchange Commission Regulation S-X §210.4-10(a)(6) defines developed oil and gas reserves as follows:

- 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 extracting equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

## Developed Producing (SPE-PRMS Definitions)

While not a requirement for disclosure under the SEC regulations, developed oil and gas reserves may be further sub-classified according to the guidance contained in the SPE-PRMS as Producing or Non-Producing.

## **Developed Producing Reserves**

Developed Producing Reserves are expected to be recovered from completion intervals that are open and producing at the time of the estimate. Improved recovery reserves are considered producing only after the improved recovery project is in operation.

# RESERVES STATUS DEFINITIONS AND GUIDELINES Page 5

## **Developed Non-Producing**

Developed Non-Producing Reserves include shut-in and behind-pipe reserves.

## Shut-In

Shut-in Reserves are expected to be recovered from:

- (1) completion intervals which are open at the time of the estimate but which have not yet started producing;
  - (2) wells which were shut-in for market conditions or pipeline connections; or
- (3) wells not capable of production for mechanical reasons.

# **Behind-Pipe**

Behind-pipe Reserves are expected to be recovered from zones in existing wells which will require additional completion work or future re-completion prior to start of production.

In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.

# **UNDEVELOPED RESERVES (SEC DEFINITIONS)**

Securities and Exchange Commission Regulation S-X §210.4-10(a)(31) defines undeveloped oil and gas reserves as follows:

Undeveloped oil and gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

- (i) Reserves on undrilled acreage shall be 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.
- (ii) Undrilled locations can be 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.
- (iii) Under no circumstances shall estimates for undeveloped reserves be 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, as defined in paragraph (a)(2) of this section, or by other evidence using reliable technology establishing reasonable certainty.



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March 03, 2014

Mrs. Magda Manosalva Vice-President of Finance (CFO) **Ecopetrol, S. A.** Vicepresidencia Financiera Edificio Principal, Piso 7 Bogotá, Colombia

#### SEC RESERVE STATEMENT FOR SIXTY SIX FIELDS IN COLOMBIA AS OF DECEMBER 31, 2013

Dear Mrs. Manosalva:

This Proved reserves statement has been prepared by Gaffney, Cline & Associates (GCA) and issued on March 03, 2014 at the request of Ecopetrol, S.A. (Ecopetrol or the "Client"), a participant operator and investor in sixty six fields in the Lower, Middle and Upper Magdalena Valley, Catatumbo, Putumayo, Llanos Orientales and Nororiente Basins, Colombia. This report is based on prior audits conducted by GCA and is intended for use in conjunction with Ecopetrol' December 31, 2013 filings with the United States Securities and Exchange Commission (SEC).

This report relates specifically and solely to the subject matter as defined in the scope of work in the Proposal for Services and is conditional upon the assumptions described herein. The report must be considered in its entirety and must only be used for the purpose for which it was intended.

GCA has conducted an independent audit examination as of December 31, 2013, of the hydrocarbon liquids and natural gas reserves of the above mentioned fields. On the basis of technical and other information made available to us concerning these property units, we hereby provide the reserve statement given in the table below.

## Statement Of Hydrocarbon Reserves Volumes Sixty Six Fields, Colombia as of December 31, 2013

	Gross Field Volumes		Gross Ecopetrol (including royalties)		Net to Ecopetrol	
Reserve Category	Liquids	Gas	Liquids	Gas	Liquids	Gas
	MMstb	Bscf	MMstb	Bscf	MMstb	Bscf
Proved						
Developed	341	1,361	312	778	277	621
Undeveloped	245	418	244	247	215	197
Total Proved	586	1,779	556	1,025	492	818

Hydrocarbon liquid volumes represent crude oil and condensate, natural gasoline and LPG estimated to be recovered during field separation and plant processing, and are reported in millions of barrels (MMstb). Natural gas volumes represent expected gas sales, and are reported in billions (10<sup>9</sup>) of cubic feet (Bscf) at standard conditions of 14.7 psia and 60 degrees Fahrenheit. These volumes have been reduced for fuel usage in the field and shrinkage due to processing. Royalties payable to the State have been deducted from reported net volumes.

Ecopetrol has advised GCA that these audited hydrocarbon volumes represent the following proportionate shares of Ecopetrol's total reserves on a net basis:

Proved Developed Liquids – 30%

Proved Developed Gas – 23%

Proved Undeveloped Liquids - 43%

Proved Undeveloped Gas - 49%

Total Proved Oil Equivalent - 32%

GCA is not in a position to verify these values as it was not requested to review Ecopetrol's other oil and gas assets.

## **RESERVE ASSESSMENT**

Proved gas volumes are based on firm and existing gas contracts and on the reasonable expectation that such gas sales contracts will be renewed on similar terms in the future.

This audit examination was based on reserve estimates and other information provided by Ecopetrol to GCA through December 2013, and included such tests, procedures and adjustments as were considered necessary. Field data and information provided by Ecopetrol varies from field to field, Ecopetrol provided production data sets, depending on the field, up to September or July 2013. All questions that arose during the course of the audit process were resolved to our satisfaction.

Technical information and comments related to the methodology followed to audit the reserves volumes for each one of the fields is presented in separate individual reports. As these reports are quite extensive and detailed, the significant points of the work performed are summarized below.

Recoverable volume estimates as derived from profiles of expected future performance were checked for consistency with the development plans provided by Ecopetrol. These were further verified on the basis of individual well decline analysis, typical well performance models, material balance calculations, reservoir simulation results, analogies, etc. as appropriate to the available information and category of the reserves. Gross reserves and those net to Ecopetrol's interests were verified on the basis of the fiscal and contractual terms applicable for each field.

In order to confirm estimates of petroleum initially in place, the structural and stratigraphic descriptions of the accumulations, various reservoir limits, rock petrophysical parameters and reservoir fluid properties were reviewed, checked for reasonableness and/or modified as appropriate based on information and data supplied by Ecopetrol. Reservoir and individual well performance was analyzed in order to assess the predominant reservoir drive mechanisms currently active in the fields and those expected to affect the future production performance.



The economic tests for the December 31, 2013 reserve volumes were based on a prior twelve-month first-day-of-the-month average reference price for the Brent crude of US108.32/Bbl, corrected for location and quality to an average wellhead price in the range of US5108.32/Bbl, depending on the specific field. Sales gas and plant product prices were advised by Ecopetrol according to existing contracts and/or regulations. No price escalation has been included, other than as provided for in existing contracts. The following tables include additional details of these prices:

# OIL AND CONDENSATE PRICES

Note	Price US\$/Bbl
12 month average price for Brent Crude used as reference for the crude prices in Colombia.	108.32
Unweighted average of the prices adjusted for location and quality used to determine oil and condensate proved reserves for the different fields in Colombia	88.69

# PRODUCT PLANT PRICES

Note	Products Plants	Price US\$/Bbl
	Propane	42.01
12 month average reference price (Mont Belvieu, Texas)	Butane	58.56
	Gasoline	89.27
	Propane	29.56
Unweighted average price adjusted for location and quality used to determine proved reserves in Colombia Assets	Butane	45.00
1	Gasoline	87.49

# GAS PRICES

Note	Location/Fields	Price US\$/MMBTU	
	Guajira (Benchmark Price)	5.82	
Average benchmark natural gas price - Colombia	Opón (Benchmark Price)	6.56	
	Cusiana (Benchmark Price)	3.61	
Natural gas average price defined by contract / agreements used to determine proved reserves in some Colombia fields	All fields audited by GCA except Guajira fields.	4.12	
Adjusted gas price used to determine proved reserves in the remaining Colombia Fields	Guajira fields: Ballena, Chuchupa and Riohacha.	5.56	

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Future capital costs for the fields were derived from development program forecasts prepared by field operators. Recent historical operating expense data were utilized as the basis for operating cost projections. GCA has found that sufficient capital investments and operating expenses have been projected by the operators to produce the projected volumes.

## **BASIS OF OPINION**

This document must be considered in its entirety. It reflects GCA's informed professional judgment based on accepted standards of professional investigation and, as applicable, the data and information provided by the Client, the limited scope of engagement, and the time permitted to conduct the evaluation.

In line with those accepted standards, this document does not in any way constitute or make a guarantee or prediction of results, and no warranty is implied or expressed that actual outcome will conform to the outcomes presented herein. GCA has not independently verified any information provided by or at the direction of the Client, and has accepted the accuracy and completeness of these data. GCA has no reason to believe that any material facts have been withheld from it, but does not warrant that its inquiries have revealed all of the matters that a more extensive examination might otherwise disclose.

The opinions expressed herein are subject to and fully qualified by the generally accepted uncertainties associated with the interpretation of geoscience and engineering data and do not reflect the totality of circumstances, scenarios and information that could potentially affect decisions made by the report's recipients and/or actual results. The opinions and statements contained in this report are made in good faith and in the belief that such opinions and statements are representative of prevailing physical and economic circumstances.

This assessment has been conducted within the context of GCA's understanding of the effects of petroleum legislation and other regulations that currently apply to these properties. However, GCA is not in a position to attest to property title or rights, conditions of these rights including environmental and abandonment obligations, and any necessary licenses and consents including planning permission, financial interest relationships or encumbrances thereon for any part of the appraised properties.

In carrying out this study, GCA is not aware that any conflict of interest has existed. As an independent consultancy, GCA is providing impartial technical, commercial and strategic advice within the energy sector. In the preparation of this document, GCA has maintained, and continues to maintain, a strict independent consultant-client relationship with Ecopetrol. Furthermore, the management and employees of GCA have no interest in any of the assets evaluated or related with the analysis carried out as part of this report.

Staff members who prepared this report are professionally-qualified with appropriate educational qualifications and levels of experience and expertise to perform the scope of work set out in the Proposal for Services.

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GCA has not undertaken a site visit and inspection because it was not deemed necessary. As such, GCA is not in a position to comment on the operations or facilities in place, their appropriateness and condition and whether they are in compliance with the regulations pertaining to such operations. Further, GCA is not in a position to comment on any aspect of health, safety or environment of such operation. Nevertheless, GCA was informed about increasing the disposal of Castilla Area's produced water into the Guayuriba River; this was approved by the environmental authority, and now subject to the approval of local authorities. If not granted, could force Ecopetrol to implement a more costly alternative of injecting such water, which may have an impact in the economic limit and in consequence in the estimated reserve volumes for the fields in such area.

In the preparation of this report GCA has used Part 210 Rule 4-10(a) of Regulation S-X of the United States Securities and Exchange Commission

There are numerous uncertainties inherent in estimating reserves and resources, and in projecting future production, development expenditures, operating expenses and cash flows. Oil and gas reserve engineering and resource assessment must be recognized as a subjective process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact way. Estimates of oil and gas reserves or resources prepared by other parties may differ, perhaps materially, from those contained within this report. The accuracy of any reserve or resource estimate is a function of the quality of the available data and of engineering and geological interpretation. Results of drilling, testing and production that post-date the preparation of the estimates may justify revisions, some or all of which may be material. Accordingly, reserve and resource estimates are often different from the quantities of oil and gas that are ultimately recovered, and the timing and cost of those volumes that are recovered may vary from that assumed.

GCA's review and audit involved reviewing pertinent facts, interpretations and assumptions made by Ecopetrol or others in preparing estimates of reserves or resources. GCA carried out procedures necessary to enable it to render an opinion on the appropriateness of the methodologies employed, adequacy and quality of the data relied upon, the depth and thoroughness of the reserves estimation process, the classification and categorization of reserves appropriate to the relevant definitions used and the reasonableness of the estimated reserves.

It is GCA's opinion that the estimates of total remaining recoverable hydrocarbon liquids and gas volumes at December 31, 2013 are, in the aggregate, reasonable and the reserves classification and categorization is appropriate and consistent with the definitions and guidelines for reserves.

GCA concludes that the methodologies employed by Ecopetrol in the derivation of the volume estimates are appropriate and that the quality of the data relied upon, the depth and thoroughness of the estimation process are adequate. GCA is not aware of any potential changes in regulations applicable to these fields that could affect the ability of Ecopetrol to produce the estimated reserves.

Reserves are those quantities of petroleum that are anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must further satisfy four criteria: they must be discovered, recoverable, commercial and remaining (as of the evaluation date) based on the development project(s) applied. Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status. All categories of reserve volumes quoted herein have been determined within the context of an economic limit test (pre-tax and exclusive of accumulated depreciation amounts) assessment prior to any NPV analysis.

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## NOTICE

This document is confidential and has been prepared for the exclusive use of the Client or parties named herein. It may not be distributed or made available, in whole or in part, to any other company or person without the prior knowledge and written consent of GCA. No person or company other than those for whom it is intended may directly or indirectly rely upon its contents. GCA is acting in an advisory capacity only and, to the fullest extent permitted by law, disclaims all liability for actions or losses derived from any actual or purported reliance on this document (or any other statements or opinions of GCA) by the Client or by any other person or entity.

Very truly yours,

**GAFFNEY, CLINE & ASSOCIATES** 

Project Manager – Alberto S. Finol Principal Advisor - Petroleum Engineering

Reviewer – Sergio O. Paredes Senior Technical Manager

Attachments Appendices

I: Technical Qualifications of Person Responsible for Audit.

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Gaffney, Cline & Associates

Appendix I:

Technical Qualifications of Person Responsible for Audit

## Statement of Qualification Sergio O. Paredes

Sergio O. Paredes is a Senior Technical Manager with Gaffney, Cline & Associates (GCA) in Houston and was responsible for overseeing the preparation of this audit. Mr. Paredes has over 25 years of diversified international industry experience mainly in in geosciences, reservoir development and management in exploration and production. After 18 years working for Repsol, where he became Technical Director in 2003, he decided to join GCA in 2006, as Latin-American Regional Manager. From this initial position in GCA, where he was involved in evaluation and audit of reserves, he was appointed to the position of Director of Field Development in 2010 in the Reservoir Development group of Baker Hughes, holding company of GCA since 2009. In 2013, he returned to GCA to the current position of Senior Technical Manager. Over the past twelve years he has been responsible for project review and oversight as it pertains to exploration and production activities, including the reserves audits and evaluations conducted on behalf of Ecopetrol, Colombia. He is a member of the IAPG Houston. He has a MSc in Nuclear Engineering from the Instituto Balseiro, Argentina and a MBA in International Management from the Daniel's College of Business, University of Denver, Colorado, USA.

**DeGolyer and MacNaughton** 5001 Spring Valley Road Suite 800 East Dallas, Texas 75244

February 27, 2014

Board of Directors Ecopetrol S.A. Calle 35 No. 7-21 Piso 1 Bogota, D.C. Colombia

#### Ladies and Gentlemen:

Pursuant to your request, we have audited the net proved hydrocarbon reserves, as of December 31, 2013, of certain selected properties in Colombia and Peru in which Ecopetrol S.A. has represented are owned by Ecopetrol S.A., its wholly owned subsidiary Hocol Petroleum Limited, and through its ownership interest in Savia Peru S.A. (collectively, "ECOPETROL"). This evaluation was completed on February 27, 2014. ECOPETROL has represented that these properties account for 20 percent on a net equivalent barrel basis of ECOPETROL's net proved reserves as of December 31, 2013. ECOPETROL has also represented that these properties account for 27 percent of ECOPETROL's total proved developed net liquid hydrocarbon (oil, condensate, and natural gas liquids (NGL)) reserves, 1 percent of its total proved developed net gas reserves, 28 percent of its total proved undeveloped net liquid hydrocarbon reserves, and 15 percent of its total proved undeveloped net gas reserves. The net proved reserves estimates have been prepared in accordance with the reserves definitions of Rules 4–10(a) (1)–(32) of Regulation S–X of the Securities and Exchange Commission (SEC) of the United States. This report was prepared in accordance with guidelines specified in Item 1202 (a)(8) of Regulation S-K and is to be used for inclusion in certain SEC filings by ECOPETROL.

Reserves included herein are expressed as net reserves. Gross reserves are defined as the total estimated petroleum to be produced from these properties after December 31, 2013. Net reserves are defined as that portion of the gross reserves attributable to the interests owned by ECOPETROL after deducting all interests owned by others, including royalties paid in kind.

Estimates of oil, condensate, NGL, and natural gas reserves should be regarded only as estimates that may change as further production history and additional information become available. Not only are such reserves estimates based on that information which is currently available, but such estimates are also subject to the uncertainties inherent in the application of judgmental factors in interpreting such information.

Data used in this audit were obtained from reviews with ECOPETROL personnel, ECOPETROL files, from records on file with the appropriate regulatory agencies, and from public sources. In the preparation of this report we have relied, without independent verification, upon such information furnished by ECOPETROL with respect to property interests, production from such properties, current costs of operation and development, current prices for production, agreements relating to current and future operations and sale of production, and various other information and data that were accepted as represented. We believe the data used in this audit are appropriate for the purposes of this report.

# Methodology and Procedures

Estimates of reserves were prepared by the use of appropriate geologic, petroleum engineering, and evaluation principles and techniques that are in accordance with practices generally recognized by the petroleum industry as presented in the publication of the Society of Petroleum Engineers entitled "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information (Revision as of February 19, 2007)." The method or combination of methods used in the analysis of each reservoir was tempered by experience with similar reservoirs, stage of development, quality and completeness of basic data, and production history.

When applicable, the volumetric method was used to estimate the original oil in place (OOIP) and the original gas in place (OGIP). Structure and isopach maps were constructed to estimate reservoir volume. Electrical logs, radioactivity logs, core analyses, and other available data were used to prepare these maps as well as to estimate representative values for porosity and water saturation. When adequate data were available and when circumstances justified, material balance and other engineering methods were used to estimate OOIP or OGIP.

Estimates of ultimate recovery were obtained after applying recovery factors to OOIP or OGIP. These recovery factors were based on consideration of the type of energy inherent in the reservoirs, analyses of the petroleum, the structural positions of the properties, and the production histories. When applicable, material balance and other engineering methods were used to estimate recovery factors. In such cases, an analysis of reservoir performance, including production rate, reservoir pressure, and gas-oil ratio behavior, was used in the estimation of reserves.

For depletion-type reservoirs or those whose performance disclosed a reliable decline in producing-rate trends or other diagnostic characteristics, reserves were estimated by the application of appropriate decline curves or other performance relationships. In the analyses of production-decline curves, reserves were estimated only to the limits of economic production or to the limit of the production licenses as appropriate.

Gas quantities estimated herein are expressed as sales gas. Sales gas is defined as the total gas to be produced from the reservoirs, measured at the point of delivery, after reduction for fuel usage, flare, and shrinkage resulting from field separation and processing. Gas reserves are expressed at a temperature base of 60 degrees Fahrenheit and a pressure base of 14.7 pounds per square inch absolute. Condensate reserves estimated herein are those to be recovered by conventional field separation.

In this report NGL are defined to be liquefied petroleum gas (LPG) and  $C_{5+}$ . LPG is defined to be propane and butane.

The proved reserves for the properties included herein were estimated by the performance method, the volumetric method, or a combination of performance and volumetric methods. The following table summarizes the approximate percentage of net reserves estimated by each of these methods.

Percent Net Proved Reserves Estimated by Method						
	G	as	Liquid Hydrocarbons			
Method	Developed (%)	Undeveloped (%)	Developed (%)	Undeveloped (%)		
Volumetric	0	0	2	18		
Performance	100	8	54	31		
Combination	0	92	44	51		

## **Definition of Reserves**

Petroleum reserves included in this report are classified as proved. Only proved reserves have been evaluated for this report. Reserves classifications used in this report are in accordance with the reserves definitions of Rules 4-10(a) (1)–(32) of Regulation S–X of the SEC. Reserves are judged to be economically producible in future years from known reservoirs under existing economic and operating conditions and assuming continuation of current regulatory practices using conventional production methods and equipment. In the analyses of production-decline curves, reserves were estimated only to the limit of economic rates of production under existing economic and operating prices and costs consistent with the effective date of this report, including consideration of changes in existing prices provided only by contractual arrangements but not including escalations based upon future conditions. The petroleum reserves are classified as follows:

*Proved oil and gas reserves* – 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.

(i) The area of the reservoir considered as proved includes:

(A) The area identified by drilling and limited by fluid contacts, if any, and (B) Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.

(ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons (LKH) as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.

(iii) Where direct observation from well penetrations has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establish the higher contact with reasonable certainty.

(iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when:

(A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and (B) The project has been approved for development by all necessary parties and entities, including governmental entities.

(v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be 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.

Developed oil and gas reserves - 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 by means not involving a well.

*Undeveloped oil and gas reserves* – Undeveloped oil and gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

(i) Reserves on undrilled acreage shall be 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.

(ii) Undrilled locations can be 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.

(iii) Under no circumstances shall estimates for undeveloped reserves be 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, as defined in [section 210.4–10 (a) Definitions], or by other evidence using reliable technology establishing reasonable certainty.

## **Primary Economic Assumptions**

The following economic assumptions were used for estimating existing and future prices and costs:

#### Oil, Condensate, and NGL Prices

ECOPETROL has represented that the oil, condensate, and NGL prices were based on a 12-month average price, calculated as the unweighted 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. The volume-weighted average adjusted product prices attributable to estimated proved reserves for the properties in Colombia evaluated herein were U.S.\$89.78 per barrel for crude oil and condensate and U.S.\$83.16 per barrel for NGL, based on a 12-month average Brent reference price of U.S.\$108.32 per barrel. ECOPETROL supplied differentials by field to the Brent reference price, and the prices were held constant thereafter. ECOPETROL has also represented that the volume-weighted average adjusted product prices attributable to estimated proved reserves for the properties in Peru evaluated herein were U.S.\$105.68 per barrel for crude oil and condensate and U.S.\$60.08 per barrel for NGL based on the 12-month average Ardjuna and Minas crude reference prices, and the prices were held constant thereafter.

#### Natural Gas Prices

ECOPETROL has represented that the natural gas prices for the properties in Colombia evaluated herein are defined by contractual agreements based on specific market conditions. The volume-weighted average adjusted product price attributable to estimated proved reserves was U.S.\$4.37 per thousand cubic feet, and the prices were held constant thereafter. ECOPETROL has also represented that the natural gas prices for the properties in Peru evaluated herein are defined by contractual agreements based on specific market conditions, and the average adjusted product price was U.S.\$0.92 per thousand cubic feet, and the prices were held constant thereafter.

# Operating Expenses and Capital Costs

Operating expenses and capital costs, based on information provided by ECOPETROL, were used in estimating future costs required to operate the properties. In certain cases, future costs, either higher or lower than existing costs, may have been used because of anticipated changes in operating conditions. These costs were not escalated for inflation.

While the oil and gas industry may be subject to regulatory changes from time to time that could affect an industry participant's ability to recover its oil and gas reserves, we are not aware of any such governmental actions which would restrict the recovery of the December 31, 2013, estimated proved oil and gas reserves. The reserves estimated in this report can be produced under current regulatory guidelines.

Our estimates of ECOPETROL's net proved reserves attributable to the reviewed properties are based on the definitions of proved reserves of the SEC and are as follows, expressed in millions of barrels (MMbbl), millions of cubic feet (MMcf), and millions of barrels of oil equivalent (MMboe):

	Ňet	Estimated by DeGolyer and MacNaughton Net Proved Reserves as of December 31, 2013		
	Oil, Condensate, and NGL (MMbbl)	Natural Gas (MMcf)	Oil Equivalent (MMboe)	
South America				
Proved Developed	247.696	13,552.527	250.110	
Proved Undeveloped	141.266	61,457.347	152.211	
South America Total Proved	388.962	75,009.874	402.321	

Note: Gas is converted to oil equivalent using a factor of 5,615 cubic feet of gas per 1 barrel of oil equivalent.

In our opinion, the information relating to estimated proved reserves of oil, condensate, natural gas liquids, and gas contained in this report has been prepared in accordance with Paragraphs 932-235-50-4, 932-235-50-6, 932-235-50-7, and 932-235-50-9 of the Accounting Standards Update 932-235-50, *Extractive Industries – Oil and Gas (Topic 932): Oil and Gas Reserve Estimation and Disclosures* (January 2010) of the Financial Accounting Standards Board and Rules 4–10(a) (1)–(32) of Regulation S–X and Rules 302(b), 1201, 1202(a) (1), (2), (3), (4), (8), and 1203(a) of Regulation S–K of the Securities and Exchange Commission; provided, however, that estimates of proved developed and proved undeveloped reserves are not presented at the beginning of the year.

# DeGolyer and MacNaughton

To the extent the above-enumerated rules, regulations, and statements require determinations of an accounting or legal nature, we, as engineers, are necessarily unable to express an opinion as to whether the above-described information is in accordance therewith or sufficient therefor.

DeGolyer and MacNaughton is an independent petroleum engineering consulting firm that has been providing petroleum consulting services throughout the world since 1936. DeGolyer and MacNaughton does not have any financial interest, including stock ownership, in ECOPETROL. Our fees were not contingent on the results of our evaluation. This letter report has been prepared at the request of ECOPETROL. DeGolyer and MacNaughton has used all assumptions, data, procedures, and methods that it considers necessary and appropriate to prepare this report.

Submitted,

/s/ DeGolyer and MacNaughton

DeGOLYER and MacNAUGHTON Texas Registered Engineering Firm F-716

/s/ R. M. Shuck, P.E. R. M. Shuck, P.E. Senior Vice President DeGolyer and MacNaughton

# **CERTIFICATE of QUALIFICATION**

I, R. M. Shuck, Petroleum Engineer with DeGolyer and MacNaughton, 5001 Spring Valley Road, Suite 800 East, Dallas, Texas, 75244 U.S.A., hereby certify:

- 1. That I am a Senior Vice President with DeGolyer and MacNaughton, which company did prepare the letter report addressed to ECOPETROL dated February 27, 2014, and that I, as Senior Vice President, was responsible for the preparation of this report.
- 2. That I attended the University of Houston, and that I graduated with a Bachelor of Science degree in Chemical Engineering in the year 1977; that I am a Registered Professional Engineer in the State of Texas; that I am a member of the Society of Petroleum Engineers; and that I have in excess of 36 years of experience in oil and gas reservoir studies and evaluations.