

TOTAL S.A.
Form 20-F
March 17, 2017
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Form 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

Commission file number: 1-10888

TOTAL S.A.

(Exact Name of Registrant as Specified in Its Charter)

Republic of France

(Jurisdiction of Incorporation or Organization)

2, place Jean Millier

La Défense 6

92400 Courbevoie

France

(Address of Principal Executive Offices)

Patrick de La Chevardière

Chief Financial Officer

TOTAL S.A.

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92400 Courbevoie

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Tel: +33 (0)1 47 44 45 46

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(Name, Telephone, Email 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 Shares American Depositary Shares	Name of each exchange on which registered New York Stock Exchange* New York Stock Exchange
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* Not for trading, but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.
Securities registered or to be registered pursuant to Section 12(g) of the Act.

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

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

2,430,365,862 Shares, par value €2.50 each, as of December 31, 2016

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 website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).**

Yes No

** This requirement is not currently applicable to the registrant.

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 Non-accelerated filer

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

U.S. GAAP International Financial Reporting Standards as issued by the International Other

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Accounting Standards Board

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

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Basis of presentation

References in this Annual Report on Form 20-F to pages and sections of the 2016 Registration Document are references only to those pages and sections of TOTAL's Registration Document for the year ended December 31, 2016 attached in Exhibit 15.1 to this Form 20-F. Other than as expressly provided herein, the 2016 Registration Document is not incorporated herein by reference.

TOTAL's Consolidated Financial Statements, which start on page 205 of the 2016 Registration Document and are incorporated herein by reference, are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and IFRS as adopted by the European Union (EU) as of December 31, 2016.

In addition, this Annual Report on Form 20-F and the 2016 Registration Document contain certain measures that are not defined by generally accepted accounting principles (GAAP) such as IFRS. Our management uses these financial measures, along with the most directly comparable GAAP financial measures, in evaluating our operating performance. We believe that presentation of this information, along with comparable GAAP measures, is useful to investors because it allows investors to understand the primary method used by management to evaluate performance on a meaningful basis. Non-GAAP financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with GAAP. Non-GAAP financial measures as reported by us may not be comparable with similarly titled amounts reported by other companies.

Statements regarding competitive position

Unless otherwise indicated, statements made in Item 4. Information on the Company referring to TOTAL's competitive position are based on the Company's estimates, and in some cases rely on a range of sources, including investment analysts' reports, independent market studies and TOTAL's internal assessments of market share based on publicly available information about the financial results and performance of market participants.

Additional information

This Annual Report on Form 20-F reports information primarily regarding TOTAL's business, operations and financial information relating to the fiscal year ended December 31, 2016. For more recent updates regarding TOTAL, you may inspect any reports, statements or other information TOTAL files with the United States Securities and Exchange Commission (SEC). All of TOTAL's SEC filings made after December 31, 2001, are available to the public at the SEC website at <http://www.sec.gov> and from certain commercial document retrieval services. See also Item 10. Documents on display.

No material on the TOTAL website forms any part of this Annual Report on Form 20-F. References in this document to documents on the TOTAL website are included as an aid to their location and are not incorporated by reference into this document.

Certain terms, abbreviations and conversion table

For the meanings of certain terms used in this document, as well as certain abbreviations and a conversion table, refer to the Glossary starting on page 369 of the 2016 Registration Document, which is incorporated herein by reference.

Cautionary statement concerning forward-looking statements

TOTAL has made certain forward-looking statements in this document and in the documents referred to in, or incorporated by reference into, this Annual Report. Such statements are subject to risks and uncertainties. These statements are based on the beliefs and assumptions of the management of TOTAL and on the information currently available to such management. Forward-looking statements include information concerning forecasts, projections, anticipated synergies, and other information concerning possible or assumed future results of TOTAL, and may be preceded by, followed by, or otherwise include the words *believes*, *expects*, *anticipates*, *intends*, *plans*, *targets*, *estimates* or similar expressions.

Forward-looking statements are not assurances of results or values. They involve risks, uncertainties and assumptions. TOTAL's future results and share value may differ materially from those expressed in these forward-looking statements. Many of the factors that will determine these results and values are beyond TOTAL's ability to control or predict. Except for its ongoing obligations to disclose material information as required by applicable securities laws, TOTAL does not have any intention or obligation to update forward-looking statements after the distribution of this document, even if new information, future events or other circumstances have made them incorrect or misleading.

Various factors, certain of which are discussed elsewhere in this document and in the documents referred to in, or incorporated by reference into, this document, could affect the future results of TOTAL and could cause actual results to differ materially from those expressed in such forward-looking statements, including:

- material adverse changes in general economic conditions or in the markets served by TOTAL, including changes in the prices of oil, natural gas, refined products, petrochemical products and other chemicals;
- changes in currency exchange rates and currency devaluations;
- the success and the economic efficiency of oil and natural gas exploration, development and production programs, including, without limitation, those that are not controlled and/or operated by TOTAL;
- uncertainties about estimates of changes in proven and potential reserves and the capabilities of production facilities;
- uncertainties about the ability to control unit costs in exploration, production, refining and marketing (including refining margins) and chemicals;
- changes in the current capital expenditure plans of TOTAL;
- the ability of TOTAL to realize anticipated cost savings, synergies and operating efficiencies;
- the financial resources of competitors;
- changes in laws and regulations, including tax and environmental laws and industrial safety regulations;
- the quality of future opportunities that may be presented to or pursued by TOTAL;
- the ability to generate cash flow or obtain financing to fund growth and the cost of such financing and liquidity conditions in the capital markets generally;
- the ability to obtain governmental or regulatory approvals;
- the ability to respond to challenges in international markets, including political or economic conditions (including national and international armed conflict) and trade and regulatory matters (including actual or proposed sanctions on companies that conduct business in certain countries);
- the ability to complete and integrate appropriate acquisitions, strategic alliances and joint ventures;
- changes in the political environment that adversely affect exploration, production licenses and contractual rights or impose minimum drilling obligations, price controls, nationalization or expropriation, and regulation of refining and marketing, chemicals and power generating activities;

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the possibility that other unpredictable events such as labor disputes or industrial accidents will adversely affect the business of TOTAL; and

the risk that TOTAL will inadequately hedge the price of crude oil or finished products.

For additional factors, please read the information set forth under Item 3. 3. Risk Factors , Item 5. Operating and Financial Review and Prospects and Item 11. Quantitative and Qualitative Disclosures About Market Risk .

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Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION**1. Selected financial data**

The following table presents selected consolidated financial data for TOTAL on the basis of IFRS as issued by the IASB and IFRS as adopted by the EU for the years ended December 31, 2016, 2015, 2014, 2013 and 2012. Effective January 1, 2014, TOTAL changed the presentation currency of the Group's Consolidated Financial Statements from the Euro to the US Dollar. Comparative 2013 and 2012 information in the table below has been restated. Following the retrospective application of the accounting interpretation IFRIC 21 effective January 1, 2014, the information for 2013 and 2012 has been restated; however, the impact on such restated results is not significant. ERNST & YOUNG Audit and KPMG Audit, a division of KPMG S.A., independent registered public accounting firms and the Company's auditors, audited the historical consolidated financial statements of TOTAL for these periods from which the financial data presented below for such periods are derived, except for the application of IFRIC 21. All such data should be read in conjunction with the Consolidated Financial Statements and the Notes thereto starting on [page 205](#) of the 2016 Registration Document, which are incorporated herein by reference.

(M\$, except share and per share data) ^(a)	2016	2015	2014	2013	2012
INCOME STATEMENT DATA					
Revenues from sales	127,925	143,421	212,018	227,969	234,216
Net income, Group share	6,196	5,087	4,244	11,228	13,648
Earnings per share	2.52	2.17	1.87	4.96	6.05
Fully diluted earnings per share	2.51	2.16	1.86	4.94	6.02
CASH FLOW STATEMENT DATA					
Cash flow from operating activities	16,521	19,946	25,608	28,513	28,858
Total expenditures	20,530	28,033	30,509	34,431	29,475
BALANCE SHEET DATA					
Total assets	230,978	224,484	229,798	239,223	225,886

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Non-current financial debt	43,067	44,464	45,481	34,574	29,392
Non-controlling interests	2,894	2,915	3,201	3,138	1,689
Shareholders' equity					
Group share	98,680	92,494	90,330	100,241	93,969
Common shares	7,604	7,670	7,518	7,493	7,454
DIVIDENDS					
Dividend per share (euros)	€2.4 ^(a)	€2.44	€2.44	€2.38	€2.34
Dividend per share (dollars)	\$2.61 ^{(b)(c)}	\$2.67	\$2.93	\$3.24	\$3.05
COMMON SHARES^(d)					
Average number outstanding of common shares €2.50 par value (shares undiluted)	2,379,182,155	2,295,037,940	2,272,859,512	2,264,349,795	2,255,801,563
Average number outstanding of common shares €2.50 par value (shares diluted)	2,389,713,936	2,304,435,542	2,281,004,151	2,271,543,658	2,266,635,745

(a) Following the retrospective application of the accounting interpretation IFRIC 21 effective January 1, 2014, the information for 2013 has been restated; however, the impact on such restated results is not significant.

(b) Subject to approval by the shareholders' meeting on May 26, 2017.

(c) Estimated dividend in dollars includes the first quarterly interim ADR dividend of \$0.67 paid in October 2016 and the second quarterly interim ADR dividend of \$0.65 paid in January 2017, as well as the third quarterly interim ADR dividend of \$0.64 payable in April 2017 and the proposed final interim ADR dividend of \$0.65 payable in June 2017, both converted at a rate of \$1.05/€.

(d) The number of common shares shown has been used to calculate per share amounts.

2. Exchange rate information

For information regarding the effects of currency fluctuations on TOTAL's results, see Item 5. Operating and Financial Review and Prospects.

Most currency amounts in this Annual Report on Form 20-F are expressed in U.S. dollars (dollars or \$) or in euros (euros or €). For the convenience of the reader, this Annual Report on Form 20-F presents certain translations into dollars of certain euro amounts (\$1.10/€ 1.00).

The following table sets out the average dollar/euro exchange rates expressed in dollars per €1.00 for the years indicated, based on an average of the daily European Central Bank (ECB) reference exchange rates. Such rates are used by TOTAL in preparation of its Consolidated Statement of Income and Consolidated Statement of Cash Flow in its Consolidated Financial Statements. No representation is made that the euro could have been converted into dollars at the rates shown or at any other rates for such periods or at such dates.

Dollar/euro exchange rates for the years provided	Average rate
2012	1.2848
2013	1.3281
2014	1.3285
2015	1.1095
2016	1.1069

⁽¹⁾ For the period 2012-2016, the averages of the ECB reference exchange rates expressed in dollars per €1.00 on the last business day of each month during the relevant year are as follows: 2012 1.29; 2013 1.33; 2014 1.32; 2015 1.10; and 2016 1.10.

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The table below shows the high and low dollar/euro exchange rates for the four months ended December 31, 2016, and for the first months of 2017, based on the daily ECB reference exchange rates published during the relevant month expressed in dollars per €1.00.

Dollar/euro exchange rates for the periods provided	High	Low
September 2016	1.1296	1.1146
October 2016	1.1236	1.0872
November 2016	1.1095	1.0548
December 2016	1.0762	1.0364
January 2017	1.0755	1.0385
February 2017	1.0808	1.0513
March 2017 ^(a)	1.0663	1.0514

^(a) *Through March 14, 2017.*

The ECB reference exchange rate on March 14, 2017 for the dollar against the euro was \$1.0631/€ .

3. Risk factors

The Group and its businesses are subject to various risks relating to changing competitive, economic, political, legal, social, industry, business and financial conditions, including changes in such conditions. Point 1 (Risk factors) of chapter 4 of the 2016 Registration Document (starting on [page 62](#)) is incorporated herein by reference.

For additional information on these conditions, along with TOTAL's approaches to managing certain of these risks, please refer to [Item 5. Operating and Financial Review and Prospects](#) and [Item 11. Quantitative and Qualitative Disclosures About Market Risk](#) , as well as point 4 (Internal control and risk management procedures) of chapter 4 of the 2016 Registration Document (starting on [page 76](#)), which is incorporated herein by reference.

ITEM 4. INFORMATION ON THE COMPANY

The following information concerning the Group's history and development from the 2016 Registration Document is incorporated herein by reference:

history and development (point 1.1 of chapter 2, on [page 6](#));

Group organization fully effective since January 1, 2017 (point 1.3 of chapter 2, on [page 7](#)); and

information concerning the Group's principal capital expenditures and divestitures (point 3 of chapter 2, starting on [page 42](#)). See also [Item 5. 2. Results 2014-2016](#) and [Item 5. 3. Liquidity and capital resources](#) .

The following information providing an overview of the Group's businesses and activities from the 2016 Registration Document is incorporated herein by reference:

TOTAL's strategy (point 1.2 of chapter 2, on [page 6](#));
business overview for fiscal year 2016 (point 2 of chapter 2, starting on [page 8](#)); and
geographical breakdown of the Group's sales, property, plants and equipment, intangible assets and capital expenditures over the past three years (Note 4 to the Consolidated Financial Statements, on [page 227](#)).
The following other matters from the 2016 Registration Document are incorporated herein by reference:

property, plant and equipment (point 5 of chapter 2, on [page 48](#));
organizational structure (points 6 and 7 of chapter 2, starting on [page 49](#));
discussion of the Group's investments (point 3 of chapter 2, starting on [page 42](#));
insurance and risk management (point 3 of chapter 4, starting on [page 75](#));
social, environmental and societal information (introduction and points 1.2 to 4 of chapter 7, starting on [page 144](#));
factors likely to have an impact in the event of a public offering (point 4.5 of chapter 8, starting on [page 190](#));
and
information on investor relations (point 6 of chapter 8, starting on [page 192](#)).

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

This section is the Company's analysis of its financial performance and of significant trends that may affect its future performance. It should be read in conjunction with the Consolidated Financial Statements and the Notes thereto in the 2016 Registration Document (starting on [page 205](#)), which are incorporated herein by reference. The Consolidated Financial Statements and the Notes thereto are prepared in accordance with IFRS as issued by the IASB and IFRS as adopted by the EU.

This section contains forward-looking statements that are subject to risks and uncertainties. For a list of important factors that could cause actual results to differ materially from those expressed in the forward-looking statements, see [Cautionary Statement Concerning Forward-Looking Statements](#) starting on [page i](#).

For an overview of TOTAL's critical accounting policies, including policies involving management's judgment and estimates, refer to the Introduction to the Notes to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 212](#)), which is incorporated herein by reference.

1. Overview

TOTAL's results are affected by a variety of factors, including changes in crude oil and natural gas prices as well as refining and marketing margins, which are all generally expressed in dollars, and changes in exchange rates, particularly the value of the euro compared to the dollar. Lower crude oil and natural gas prices generally have a negative effect on the income of TOTAL, since its Upstream oil and gas business is negatively impacted by the resulting decrease in revenues realized from production. Higher crude oil and natural gas prices generally have a

corresponding positive effect. The effect of changes in crude oil prices on TOTAL's Refining & Chemicals and Marketing & Services activities depends upon the speed at which the prices of refined petroleum products adjust to reflect such changes. TOTAL's results are also significantly affected by the costs of its activities, in particular those related to exploration and production, and by the outcome of its strategic decisions with respect to cost reduction efforts. In addition, TOTAL's results are affected by general economic and political conditions and changes in governmental laws and regulations, as well as by the impact of decisions by OPEC on production levels. For more information, see [Item 3. 3. Risk Factors](#) and [Item 4. Other Matters](#).

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After falling from \$100/b in 2014 to \$52/b on average in 2015, Brent prices were highly volatile in 2016, fluctuating between \$27/b and \$58/b, with an average of \$44/b for the year. In this difficult environment, the Group demonstrated its resilience by generating the highest profitability among the majors due to the strength of its integrated model and commitment of its teams to reduce the breakeven.

In this context, TOTAL's net income (Group share) in 2016 increased by 22% to \$6,196 million from \$5,087 million in 2015, mainly due to a less negative impact on net income (Group share) of special items in 2016, with the Group demonstrating its resilience despite the 19% drop in hydrocarbon prices. Adjustments to net income (Group share), which include special items and the after-tax inventory valuation effect, had a negative impact of \$2,091 million in 2016. Excluding these items, adjusted net income declined by 21% to \$8,287 million in 2016 compared to \$10,518 million in 2015, primarily due to the impact of lower Brent prices on Upstream results, partially offset by the contribution from downstream activities. For additional information, refer to [2. Results 2014-2016](#).

The Group's resilience was supported by outstanding production growth over the past two years (14.3%, including 4.5% in 2016). In the Upstream, the Group strengthened its position in the Middle East by entering the Al Shaheen field in Qatar, and in the United States with the acquisition of shale gas assets. The Group is preparing future growth with the signing of major deals in Brazil with Petrobras, in Uganda and in Iran on the giant South Pars 11 project. The Group renewed its reserves with a replacement rate of 136% at constant prices and delivered promising exploration results, with two major discoveries in the United States (North Platte) and Nigeria (Owowo).

Despite lower refining margins, the Downstream⁽¹⁾ once again achieved its objectives and thereby demonstrated that its results are sustainable, with operating cash flow before working capital changes at replacement cost⁽²⁾ of \$7 billion and ROACE⁽³⁾ above 30%, the highest among the majors. Results from the Refining & Chemicals segment were underpinned by the strong performance of its Asia and Middle East integrated platforms, while Marketing & Services results were driven by growth in retail and lubricants.

Financial discipline was successfully maintained across all business segments both for investments (\$18.3 billion including resource acquisitions) and operating costs, with savings of \$2.8 billion in 2016, exceeding the objective of \$2.4 billion. Production costs were reduced to \$5.9/boe in 2016, compared to \$9.9/boe in 2014.

The \$10 billion asset sale program is around 80% complete following the closing of the Atotech sale, and this contributed to the Group's financial strength with a net-debt-to-equity ratio at 27%, lower than it was in 2014.

In this context, the Board of Directors proposed to increase the dividend, despite the volatility of hydrocarbon prices, to €2.45/share, corresponding to a fourth quarter dividend of €0.62/share, a 1.6% increase compared to the previous three quarterly dividends. This demonstrates the Board's confidence in the strength of the Group's results and balance sheet as well as its prospects for cash flow growth.

Outlook

Brent increased following the announced production cuts agreed by OPEC and non-OPEC countries, including Russia. However, inventory levels are high and prices are likely to remain volatile. In this context, the Group is continuing to cut costs with the objective of achieving \$3.5 billion of cost savings in 2017 and bringing production costs down to \$5.5/boe for the year. Investments are moving into the sustainable range needed to deliver profitable future growth and are expected to be between \$16 billion and \$17 billion in 2017 including resource acquisitions.

In the Upstream, production is set to grow by more than 4% in 2017, supporting the objective of increasing production on average by 5% per year from 2014 to 2020. As a result of this growth, the sensitivity of the portfolio to Brent increases to \$2.5 billion⁽⁴⁾ for a \$10/b change in Brent in 2017. The Group plans to take advantage of the favorable cost environment by launching around 10 projects over the next 18 months and adding attractive resources to the portfolio.

In 2017, the Downstream is expected to continue generating stable operating cash flow before working capital changes at replacement cost of around \$7 billion thanks to its diverse portfolio of activities. Refining & Chemicals performance has been strengthened by the restructuring and the segment will continue to benefit from the quality of its integrated platforms, notably in Antwerp, in the United States, in Asia and in the Middle East. The final investment decision to launch the Port Arthur side-cracker is expected to be made in 2017. The Marketing & Services segment is pursuing its cash generation growth strategy by leveraging its strong position in high-potential retail and lubricant markets.

In 2017, the Group expects its breakeven will continue to fall, reaching less than \$40/b pre-dividend. Cash flow from operations is expected to cover investments and the cash portion of the dividend at \$50/b. TOTAL confirms its medium-term objective to achieve a net-debt-to-equity ratio of 20%.

The Group is committed to maintaining attractive returns for its shareholders and will eliminate the discount on the scrip dividend with Brent at \$60/b.

(1) *Refining & Chemicals and Marketing & Services segments, excluding New Energies.*

(2) *For information on the replacement cost method, refer to 2. Results 2014-2016 Business segment reporting and Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 215), which is incorporated herein by reference.*

(3) *Based on adjusted net operating income and average capital employed at replacement cost.*

(4) *Estimated impact on cash flow from operations.*

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As of and for the year ended December 31, (M\$, except per share data)	2016	2015	2014
Non-Group sales	149,743	165,357	236,122
Adjusted net operating income from business segments ^(a)			
Upstream	3,633	4,774	10,504
Refining & Chemicals	4,201	4,889	2,489
Marketing & Services	1,586	1,699	1,254
Equity in net income (loss) of affiliates	2,214	2,361	2,662
Fully-diluted earnings per share (\$)	2.51	2.16	1.86
Fully-diluted weighted-average shares (millions)	2,390	2,304	2,281
Net income (Group share)	6,196	5,087	4,244
Gross investments ^(b)	20,530	28,033	30,509
Divestments	2,877	7,584	6,190
Net investments ^(c)	17,757	20,360	24,140
Organic investments ^(d)	17,484	22,976	26,430
Cash flow from operating activities	16,521	19,946	25,608
Includes (increase)/decrease in working capital ^(e)	(1,119)	1,683	4,480

^(a) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes for fair value. See Business segment reporting below for further details.

^(b) Including acquisitions and increases in non-current loans. For additional information on investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on page 42), which is incorporated herein by reference.

^(c) Net investments = gross investments - divestments - repayment of non-current loans - other operations with non-controlling interests. For additional information on investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on page 42), which is incorporated herein by reference.

^(d) Organic investments = net investments excluding acquisitions, asset sales and other operations with non-controlling interests. For additional information on investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on page 42), which is incorporated herein by reference.

^(e) The change in working capital as determined using the replacement cost method was \$(467) million in 2016, \$570 million in 2015, and \$1,011 million in 2014. For information on the replacement cost method, refer to Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 215), which is incorporated herein by reference.

Group results 2016 vs. 2015

After falling from \$100/b in 2014 to \$52/b on average in 2015, Brent prices were highly volatile in 2016, fluctuating between \$27/b and \$58/b, with an average of \$44/b for the year. In 2016, TOTAL's average liquids price realization^(A) decreased by 15% to \$40.3/b from \$47.4/b in 2015. TOTAL's average natural gas price realization for the Group's consolidated subsidiaries decreased in 2016 by 25% to \$3.56/Mbtu from \$4.75/Mbtu in 2015. In the downstream, the Group's European refining margin indicator (ERMI) was \$34/t in 2016, a 30% decrease compared to the high levels in

2015 (\$48.5/t), in the context of high petroleum stocks. In the fourth quarter of 2016, the ERMI was \$41.0/t. The environment for petrochemicals remained favorable.

The Euro remained stable in 2016 compared to the US Dollar, with the euro-dollar exchange rate averaging \$1.11/€ in 2016 and 2015.

In this less favorable environment, non-Group sales in 2016 were \$149,743 million, a decrease of 9% compared to \$165,357 million for 2015. The decrease in hydrocarbon prices and refining margins were partially offset by production growth and strong results for petrochemicals. Non-Group sales decreased 13% for the Upstream segment, 7% for the Refining & Chemicals segment and 11% for the Marketing & Services segment.

Net income (Group share) in 2016 increased by 22% to \$6,196 million from \$5,087 million in 2015, mainly due to a less negative impact on net income (Group share) in 2016 of special items (as further discussed below), with the Group demonstrating its resilience despite the 19% drop in hydrocarbon prices due to the strength of its integrated model and commitment of its teams to reducing the breakeven. In 2016, adjustments to net income (Group share), which included special items of \$(2,567) million and after-tax inventory valuation effect of \$479 million, had a negative impact on net income (Group share) of \$2,091 million in 2016. Special items included impairments on Gladstone LNG in Australia, Angola LNG, and Laggan-Tormore in the United Kingdom, reflecting the decrease in gas price assumptions for the coming years. For a detailed overview of adjustment items for 2016, refer to Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference. In 2015, adjustment items, which included special items of \$(4,675) million and after-tax inventory valuation effect of \$(747) million, had a negative impact on net income (Group share) of \$5,431 million. Special items included impairments on Fort Hills in Canada and Gladstone LNG in Australia as well as in Libya, an adjustment to depreciation on Usan in Nigeria following the cancellation of the sale process and the impairment of exploration projects that will not be developed. Excluding these items, adjusted net income declined by 21% to \$8,287 million in 2016 compared to \$10,518 million in 2015, primarily due to the impact of lower Brent prices on Upstream results, partially offset by the contribution from downstream activities.

Income taxes in 2016 amounted to \$970 million, a decrease of 41% compared to \$1,653 million in 2015, due to the relative weight and lower tax rates in the Upstream in a lower hydrocarbon price environment.

In 2016, the Company bought back 100,331,268 TOTAL treasury shares owned by Group affiliates under the authorization granted by the shareholders at the meeting of May 24, 2016, which were subsequently canceled by the Company's Board of Directors (for additional information, refer to point 3 (Share buybacks) of chapter 8 of the 2016 Registration Document (starting on [page 183](#)), which is incorporated herein by reference). TOTAL bought back approximately 4.7 million of its own shares in 2015 (*i.e.*, approximately 0.19% of the share capital as of December 31, 2015) under the authorization granted by the shareholders at the meeting of May 29, 2015. The number of fully-diluted shares at December 31, 2016, was 2,436 million compared to 2,336 million at December 31, 2015.

Fully-diluted earnings per share, based on 2,390 million weighted-average shares, was \$2.51 in 2016 compared to \$2.16 in 2015, an increase of 16%.

Asset sales were \$1,864 million in 2016, mainly comprised of the sale of a 15% interest in the Gina Krog field in Norway, the FUKA gas pipeline network in the North Sea and the retail network in Turkey. Asset sales were \$5,968 million in 2015.

Acquisitions were \$2,033 million in 2016, including \$780 million of resource acquisitions, mainly comprised of the additional 75% interest in the Barnett shale gas field in the United States, and the acquisitions of Saft, Lampiris and a retail network in the Dominican Republic. Acquisitions were \$3,441 million in 2015, including \$2,808 million of resource acquisitions.

(1) *Consolidated subsidiaries, excluding fixed margins.*

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Cash flow from operating activities was \$16,521 million in 2016, a decrease of 17% compared to \$19,946 million in 2015, essentially due to the decrease in cash flow from operations as a result of lower hydrocarbon prices and refining margins. The change in working capital as determined in accordance with IFRS was \$(1,119) million in 2016, compared to \$1,683 million in 2015. In 2016, the change in working capital at replacement cost, which is the difference between the change in working capital of \$(1,119) million and the pre-tax inventory valuation effect of \$652 million, was \$(467) million compared to \$570 million in 2015. Operating cash flow in 2016 excluding the change in working capital at replacement cost⁽¹⁾ was \$16,988 million, a decrease of 12% compared to \$19,376 million in 2015.

See also 3. Liquidity and Capital Resources, below.

Group results 2015 vs. 2014

Market conditions were less favorable in 2015 compared to 2014, with the average Brent price having decreased by 47% to \$52.4/b in 2015 compared to \$99.0/b in 2014. In 2015, TOTAL's average liquids price realization decreased by 47% to \$47.4/b from \$89.4/b in 2014. TOTAL's average natural gas price realization for the Group's consolidated subsidiaries decreased in 2015 by 28% to \$4.75/Mbtu from \$6.57/Mbtu in 2014. In the downstream, the ERMI more than doubled to \$48.5/t in 2015 compared to \$18.7/t in 2014. In the fourth quarter of 2015, the ERMI was \$38.1/t. Petrochemical margins in Europe increased in 2015 due to a strong demand for polymers and the decrease in raw material costs.

The Euro depreciated in 2015 compared to the US Dollar, with the euro-dollar exchange rate averaging \$1.11/€ in 2015 compared to \$1.33/€ in 2014.

In this context, non-Group sales in 2015 were \$165,357 million, a decrease of 30% compared to \$236,122 million for 2014, due mainly to the decrease of oil and gas prices, with non-Group sales decreasing 28% for the Upstream segment, 33% for the Refining & Chemicals segment and 27% for the Marketing & Services segment.

Net income (Group share) in 2015 increased by 20% to \$5,087 million from \$4,244 million in 2014, mainly due to a less negative impact on net income (Group share) in 2015 of special items, with the strong performance of the Group's integrated model and its cost reduction program being demonstrated despite the 47% drop in the Brent price. Adjustments to net income (Group share), which included special items of \$(4,675) million and after-tax inventory valuation effect of \$(747) million, had a negative impact on net income (Group share) of \$5,431 million in 2015. Special items included impairments on Fort Hills in Canada and Gladstone LNG in Australia as well as in Libya, an adjustment to depreciation on Usan in Nigeria following the cancellation of the sale process and the impairment of exploration projects that will not be developed. In 2014, adjustment items, which included special items of \$(6,165) million and after-tax inventory valuation effect of \$(2,453) million, had a negative impact on net income (Group share) of \$8,593 million. Special items included impairments of oil sands in Canada, unconventional gas notably in the United States, refining in Europe and certain other assets in the Upstream, which was partially offset by a gain on asset sales, including for the Group's interests in Shah Deniz in Azerbaijan and GTT. Excluding these items, adjusted net income (Group share) declined by 18% to \$10,518 million in 2015 compared to \$12,837 million in 2014, primarily due to the impact of lower Brent prices on Upstream results, partially offset by a higher contribution from downstream activities.

Income taxes in 2015 amounted to \$1,653 million, a decrease of 81% compared to \$8,614 million in 2014, as a result of the decrease in taxable income and the Group's lower tax rate.

TOTAL bought back in 2015 approximately 4.7 million of its own shares (*i.e.*, approximately 0.19% of the share capital as of December 31, 2015) under the authorization granted by the shareholders at the meeting of May 29, 2015. The number of fully-diluted shares at December 31, 2015, was 2,336 million compared to 2,285 million at December 31, 2014.

Fully-diluted earnings per share, based on 2,304 million weighted-average shares, was \$2.16 in 2015 compared to \$1.86 in 2014, an increase of 16%.

Asset sales were \$5,968 million in 2015, comprised mainly of the sales of Bostik, interests in onshore blocks in Nigeria, Totalgaz, the Schwedt Refinery, the Geosel oil storage facility, coal mining assets in South Africa and partial interests in Laggan-Tormore and Fort Hills. Asset sales were \$4,650 million in 2014.

Acquisitions were \$3,441 million in 2015, including \$2,808 million of resource acquisitions, comprised mainly of the renewal of the ADCO license in the United Arab Emirates, the acquisition of a further 0.7% in the capital of Novatek in Russia bringing the Group participation to 18.9%, and the carry on the Utica gas and condensate field in the United States. Acquisitions were \$2,539 million in 2014, including \$1,765 million of resource acquisitions.

Cash flow from operating activities was \$19,946 million in 2015, a decrease of 22% compared to \$25,608 million in 2014, essentially due to the decrease in cash flow from operations in the context of a 47% lower Brent price. The change in working capital as determined in accordance with IFRS was \$1,683 million in 2015, compared to \$4,480 million in 2014. In 2015, the change in working capital at replacement cost, which is the difference between the change in working capital of \$1,683 million and the pre-tax inventory valuation effect of \$(1,113) million, was \$570 million compared to \$1,011 million in 2014. Operating cash flow in 2015 excluding the change in working capital at replacement cost was \$19,376 million, a decrease of 21% compared to \$24,597 million in 2014.

See also 3. Liquidity and Capital Resources , below.

Business segment reporting

The financial information for each business segment is reported on the same basis as that used internally by the chief operating decision-maker in assessing segment performance and the allocation of segment resources. Due to their particular nature or significance, certain transactions qualifying as special items are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. In certain instances, certain transactions such as restructuring costs or asset disposals, which are not considered to be representative of the normal course of business, may qualify as special items although they may have occurred in prior years or are likely to recur in following years.

In accordance with IAS 2, the Group values inventories of petroleum products in its financial statements according to the First-In, First-Out (FIFO) method and other inventories using the weighted-average cost method. Under the FIFO method, the cost of inventory is based on the historic cost of acquisition or manufacture rather than the current replacement cost. In volatile energy markets, this can have a significant distorting effect on the reported income. Accordingly, the adjusted results of the Refining & Chemicals and Marketing & Services segments are presented according to the replacement cost method in order to facilitate the comparability of the Group's results with those of its competitors and to help illustrate the operating performance of these segments excluding the impact of oil price changes on the replacement of inventories. In the replacement cost method, which approximates the Last-In, First-Out (LIFO) method, the variation of inventory values in the statement of income is, depending on the nature of the inventory, determined using either the month-end price differential between one

- (1) *Operating cash flow excluding the change in working capital at replacement cost provides information on underlying cash flow without the short-term impacts of changes in inventory and other working capital elements at replacement cost. For information on the replacement cost method, refer to 2. Results 2014-2016 Business segment reporting and Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 215), which is incorporated herein by reference.*

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period and another or the average prices of the period. The inventory valuation effect is the difference between the results under the FIFO and replacement cost methods.

The effect of changes in fair value presented as an adjustment item reflects, for trading inventories and storage contracts, differences between internal measures of performance used by TOTAL's management and the accounting for these transactions under IFRS, which requires that trading inventories be recorded at their fair value using period-end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories recorded at their fair value based on forward prices. Furthermore, TOTAL, in its trading activities, enters into storage contracts, the future effects of which are recorded at fair value in the Group's internal economic performance. IFRS, by requiring accounting for storage contracts on an accrual basis, precludes recognition of this fair value effect.

The adjusted business segment results (adjusted operating income and adjusted net operating income) are defined as replacement cost results, adjusted for special items, excluding the effect of changes in fair value. For further information on the adjustments affecting operating income on a segment-by-segment basis, and for a reconciliation of segment figures to figures reported in the Company's audited consolidated financial statements, see Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

The Group measures performance at the segment level on the basis of adjusted net operating income. Net operating income comprises operating income of the relevant segment after deducting the amortization and the depreciation of intangible assets other than leasehold rights, translation adjustments and gains or losses on the sale of assets, as well as all other income and expenses related to capital employed (dividends from non-consolidated companies, income from equity affiliates and capitalized interest expenses) and after income taxes applicable to the above. The income and expenses not included in net operating income that are included in net income are interest expenses related to long-term liabilities net of interest earned on cash and cash equivalents, after applicable income taxes (net cost of net debt and non-controlling interests). Adjusted net operating income excludes the effect of the adjustments (special items and the inventory valuation effect) described above. For further discussion of the calculation of net operating income and the calculation of return on average capital employed (ROACE⁽¹⁾), see Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

Upstream segment

Environment	liquids and gas price realization ^(a)	2016	2015	2014
Brent (\$/b)		43.7	52.4	99.0
Average liquids price (\$/b)		40.3	47.4	89.4
Average gas price (\$/Mbtu)		3.56	4.75	6.57
Average hydrocarbons price (\$/boe)		31.9	39.2	66.2

^(a) Consolidated subsidiaries, excluding fixed margins.

Production	2016	2015	2014
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Combined production (kboe/d)	2,452	2,347	2,146
Liquids (kb/d)	1,271	1,237	1,034
Gas (Mcf/d)	6,447	6,054	6,063

Results (M\$)	2016	2015	2014
Non-Group sales	14,683	16,840	23,484
Operating income ^(a)	(274)	(2,941)	10,494
Equity in income (loss) of affiliates and other items	1,489	2,019	4,302
Effective tax rate ^(b)	26.6%	45.5%	57.1%
Tax on net operating income	363	(294)	(8,799)
Net operating income ^(a)	1,578	(1,216)	5,997
Adjustments affecting net operating income	2,055	5,990	4,507
Adjusted net operating income ^(c)	3,633	4,774	10,504
Investments	16,035	24,270	26,520
Divestments	2,331	3,215	5,764
Organic investments	14,316	20,508	22,959
Cash flow from operating activities	9,675	11,182	16,666
ROACE	3%	5%	11%

(a) For the definitions of operating income and net operating income, refer to Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

(b) $\text{Effective tax rate} = \frac{\text{tax on adjusted net operating income}}{(\text{adjusted net operating income} - \text{income from equity affiliates} - \text{dividends received from investments} - \text{impairment of goodwill} + \text{tax on adjusted net operating income})}$.

(c) Adjusted for special items. See Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

2016 vs. 2015

Market conditions were less favorable in 2016 compared to 2015. The average realized price of liquids decreased by 15% and the average realized gas prices by 25%.

For the full-year 2016, hydrocarbon production was 2,452 kboe/d, an increase of 4.5% compared to 2,347 kboe/d in 2015, due to the following:

+6% due to new start ups and ramp ups, notably Laggan-Tormore, Surmont Phase 2, Termokarstovoye, Gladstone LNG, Moho Phase 1b, and Vega Pleyade, and Incahuasi; and

-1.5% due to the security situation in Nigeria and Yemen, and wild fires in Canada.

Natural field decline was offset by a positive price effect⁽²⁾ and portfolio effects.

For a discussion of the Group's proved reserves, refer to point 2.1.1.2 (Reserves) of chapter 2 of the 2016 Registration Document (starting on [page 10](#)), which is incorporated herein by reference. See also point 1 (Oil and gas information pursuant to FASB Accounting Standards Codification 932) of chapter 11 of the 2016 Registration Document (starting on [page 308](#)), which is incorporated herein by reference, for additional information on proved reserves, including tables showing changes in proved reserves by region.

- (1) *ROACE = ratio of adjusted net operating income to average capital employed at replacement cost between the beginning and the end of the period.*
- (2) *The price effect refers to the impact of changing hydrocarbon prices on entitlement volumes from production sharing and buyback contracts. For example, as the price of oil or gas increases above certain pre-determined levels, TOTAL's share of production generally decreases.*

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Non-Group sales for the segment in 2016 were \$14,683 million compared to \$16,840 million in 2015, a decrease of 13%.

Adjusted net operating income from the Upstream segment was \$3,633 million in 2016, a decrease of 24% compared to 2015. The increase in production combined with the decrease in operating costs as well as the lower effective tax rate partially offset the impact of lower hydrocarbon prices.

Adjusted net operating income for the Upstream segment excludes special items. The exclusion of special items had a positive impact on the segment's adjusted net operating income in 2016 of \$2,055 million, comprised mainly of impairments on Gladstone LNG in Australia, Angola LNG, and Laggan-Tormore in the United Kingdom, reflecting the decrease in gas price assumptions for the coming years (for additional information, refer to Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference). In 2015, the exclusion of special items had a positive impact on the segment's adjusted net operating income of \$5,990 million, comprised mainly of impairments on Fort Hills in Canada and Gladstone LNG in Australia as well as in Libya, an adjustment to depreciation on Usan in Nigeria following the cancellation of the sale process and the impairment of exploration projects that will not be developed.

Technical costs⁽¹⁾ for consolidated subsidiaries, calculated in accordance with ASC 932⁽²⁾, were reduced to \$20.4/boe in 2016 compared to \$23.0/boe in 2015. This decrease was essentially due to the reduction in operating costs from \$7.4/boe in 2015 to \$5.9/boe in 2016.

Cash flow from operating activities was \$9,675 million in 2016, a decrease of 13% compared to \$11,182 million in 2015. Operating cash flow in 2016 for the segment excluding the change in working capital at replacement cost of \$(237) million (\$3 million in 2015) was \$9,912 million, a decrease of 11% compared to \$11,179 million in 2015, essentially due to the decrease in hydrocarbon prices, partially offset by the increase in production and decrease in operating costs.

For information on the Upstream segment's capital expenditures, refer to points 2.1.1.1 (Exploration and development) (on [page 10](#)) and 3 (Investments) (starting [on page 42](#)) of chapter 2 of the 2016 Registration Document, which are incorporated herein by reference. See also [3. Liquidity and Capital Resources](#) , below.

In this context, the segment's ROACE for the full-year 2016 was 3% compared to 5% for the full-year 2015.

2015 vs. 2014

Market conditions were less favorable in 2015. The average realized price of liquids fell by 47% and the average realized price of gas by 28% compared to 2014.

For the full-year 2015, hydrocarbon production was 2,347 kboe/d, an increase of 9.4% compared to 2014, due to the following:

- +6% for new project start ups and ramp ups, notably CLOV, West Franklin Phase 2, Eldfisk II and Termokarstovoye;
- +6% due to portfolio changes, mainly the extension of the ADCO concession in the United Arab Emirates, partially offset by asset sales in the North Sea, Nigeria and Azerbaijan;
- 4% due to shutdowns in Yemen and in Libya; and

+1% due to the price effect and field performance, net of natural field decline.

For a discussion of the Group's proved reserves, refer to point 2.1.1.2 (Reserves) of chapter 2 of the 2016 Registration Document (starting on [page 10](#)), which is incorporated herein by reference. See also point 1 (Oil and gas information pursuant to FASB Accounting Standards Codification 932) of chapter 11 of the 2016 Registration Document (starting on [page 308](#)), which is incorporated herein by reference, for additional information on proved reserves, including tables showing changes in proved reserves by region.

Non-Group sales for the segment in 2015 were \$16,840 million compared to \$23,484 million in 2014, a decrease of 28%.

Adjusted net operating income from the Upstream segment was \$4,774 million for the full-year 2015, a decrease of 55% compared to \$10,504 million for 2014, essentially due to the lower price of hydrocarbons, partially offset by an increase in production, a decrease in operating costs, and a lower effective tax rate.

Adjusted net operating income for the Upstream segment excludes special items. The exclusion of special items had a positive impact on the segment's adjusted net operating income in 2015 of \$5,990 million, comprised mainly of impairments on Fort Hills in Canada and Gladstone LNG in Australia as well as in Libya, an adjustment to depreciation on Usan in Nigeria following the cancellation of the sale process and the impairment of exploration projects that will not be developed. In 2014, the exclusion of special items had a positive impact on the segment's adjusted net operating income of \$4,507 million, comprised mainly of the impairment of the Group's oil sands assets in Canada, its unconventional gas assets, notably in the United States, and certain other assets in the Upstream segment.

Technical costs for consolidated subsidiaries, calculated in accordance with ASC 932, were \$23.0/boe in 2015 compared to \$28.3/boe in 2014. This reduction was essentially due to the execution of the Group's program to reduce operating costs (which decreased from \$9.9/boe in 2014 to \$7.4/boe in 2015) and lower depreciation (portfolio effect).

Cash flow from operating activities was \$11,182 million in 2015, a decrease of 33% compared to \$16,666 million in 2014. Operating cash flow in 2015 for the segment excluding the change in working capital at replacement cost of \$3 million (\$2,001 million in 2014) was \$11,179 million, a decrease of 40% compared to \$18,667 million in 2014.

For information on the Upstream segment's capital expenditures, refer to points 2.1.1.1 (Exploration and development) (on [page 10](#)) and 3 (Investments) (starting on [page 42](#)) of chapter 2 of the 2016 Registration Document, which are incorporated herein by reference. See also [3. Liquidity and Capital Resources](#), below.

In this context, the segment's ROACE for the full-year 2015 was 5% compared to 11% for the full-year 2014.

Refining & Chemicals segment

Refinery throughput and utilization rates^(a)	2016	2015	2014
Total refinery throughput (kb/d)	1,965	2,023	1,775
France	669	674	639
Rest of Europe	802	849	794
Rest of World	494	500	342
Utilization rates ^(b)			
Based on crude only	85%	86%	77%
Based on crude and other feedstock	87%	88%	81%

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^(a) *Includes share of TotalErg, as well as refineries in Africa and the French Antilles that are reported in the Marketing & Services segment. The condensate splitters at Port Arthur and Daesan are also included and 2015 figures have been restated accordingly.*

^(b) *Based on distillation capacity at the beginning of the year.*

⁽¹⁾ *Technical costs = (Production costs + exploration expenses + depreciation, depletion and amortization and valuation allowances)/production of the year.*

⁽²⁾ *Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 932, Extractive industries Oil and Gas.*

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Results (M\$, except ERMI)	2016	2015	2014
European refining margin indicator (ERMI) (\$/t)	34.1	48.5	18.7
Non-Group sales	65,632	70,623	106,124
Operating income ^(a)	5,000	4,544	(1,691)
Equity in income (loss) of affiliates and other items	833	1,780	90
Tax on net operating income	(1,245)	(1,105)	391
Net operating income ^(a)	4,588	5,219	(1,210)
Adjustments affecting net operating income	(387)	(330)	3,699
Adjusted net operating income ^(b)	4,201	4,889	2,489
Including specialty chemicals ^(c)	581	496	629
Investments	1,849	1,843	2,022
Divestments	86	3,488	192
Organic investments	1,636	827	1,944
Cash flow from operating activities	4,587	6,432	6,302
ROACE	38%	41%	15%

^(a) For the definitions of operating income and net operating income, refer to Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

^(b) Adjusted for special items. See Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

^(c) Hutchinson and Atotech. Bostik until February 2015.

2016 vs. 2015

The ERMI averaged \$34/t in 2016, a decrease of 30% compared to the high level of 2015, in the context of high petroleum product stocks. In the fourth quarter of 2016, the ERMI was \$41.0/t. Refinery throughput for the full-year 2016 decreased by 3% compared to 2015, notably due to shutdowns in Europe and the United States in the second quarter and the sale of the Schwedt refinery in Germany.

Non-Group sales for the segment in 2016 were \$65,632 million compared to \$70,623 million in 2015, a decrease of 7%.

The segment's adjusted net operating income was \$4,201 million in 2016, a decrease of 14% compared to 2015, essentially due to the decrease in refining margins. Petrochemicals continued to generate good results, notably due to the strong contribution from the Group's major integrated platforms in Asia and the Middle East.

Adjusted net operating income for the Refining & Chemicals segment excludes any after-tax inventory valuation effect and special items. The exclusion of the inventory valuation effect had a negative impact on the segment's adjusted net operating income in 2016 of \$500 million compared to a positive impact of \$590 million in 2015. The exclusion of special items had a positive impact on the segment's adjusted net operating income in 2016 of \$113 million compared to a negative impact in 2015 of \$920 million, consisting essentially of gains on asset sales.

Cash flow from operating activities was \$4,587 million in 2016, a decrease of 29% compared to \$6,432 million in 2015. Operating cash flow in 2016 for the segment excluding the change in working capital at replacement cost of (\$291) million (\$647 million in 2015) was \$4,878 million, a decrease of 16% compared to \$5,785 million in 2015.

For information on the Refining & Chemicals segment's investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on [page 42](#)), which is incorporated herein by reference. See also [3. Liquidity](#)

and Capital Resources , below.

In this context, the segment's ROACE for the full-year 2016 was 38% compared to 41% for the full year 2015.

2015 vs. 2014

In 2015, the segment benefited from a favorable environment, notably in Europe. The ERMI averaged \$48.5/t in 2015 compared to \$18.7/t in 2014, mainly due to strong demand for gasoline. In the fourth quarter of 2015, the ERMI was \$38.1/t. Refinery throughput in 2015 increased by 14% to 2,023 kb/d compared to 1,775 kb/d in 2014. Actions to improve the availability in Europe resulted in a high utilization rate of 89%. The segment also benefited from the ramp-up of SATORP in Saudi Arabia. Petrochemical margins in Europe increased in 2015 due to strong demand for polymers and the decrease in raw material costs.

Non-Group sales for the segment in 2015 were \$70,623 million compared to \$106,124 million in 2014, a decrease of 33%.

The segment's adjusted net operating income in 2015 was \$4,889 million, twice the level of \$2,489 million in 2014, due to strong industrial performance during a period of high margins and cost reduction programs.

Adjusted net operating income for the Refining & Chemicals segment excludes any after-tax inventory valuation effect and special items. The exclusion of the inventory valuation effect had a positive impact on the segment's adjusted net operating income in 2015 of \$590 million compared to a positive impact of \$2,114 million in 2014, for both periods essentially due to a reduction of stock. The exclusion of special items had a negative impact on the segment's adjusted net operating income in 2015 of \$920 million, consisting essentially of gains on asset sales, compared to a positive impact of \$1,585 million in 2014, consisting essentially of impairments of European refining assets.

Cash flow from operating activities was \$6,432 million in 2015, an increase of 2% compared to \$6,302 million in 2014. Operating cash flow in 2015 for the segment excluding the change in working capital at replacement cost of \$647 million (\$2,274 million in 2014) was \$5,785 million, an increase of 44% compared to \$4,028 million in 2014.

For information on the Refining & Chemicals segment's investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on page 42), which is incorporated herein by reference. See also 3. Liquidity and Capital Resources , below.

In this context, the segment's ROACE for the full-year 2015 was 41% compared to 15% for the full year 2014.

Marketing & Services segment

Petroleum product sales (kb/d) ^(a)	2016	2015	2014
Total Marketing & Services sales	1,793	1,818	1,769
Europe	1,093	1,092	1,100
Rest of world	700	726	669

^(a) Excludes trading and bulk Refining sales, which are reported under the Refining & Chemicals segment; includes share of TotalErg.

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Results (M\$)	2016	2015	2014
Non-Group sales	69,421	77,887	106,509
Operating income ^(a)	1,461	1,758	1,158
Equity in income (loss) of affiliates and other items	84	297	(140)
Tax on net operating income	(506)	(585)	(344)
Net operating income ^(a)	1,039	1,470	674
Adjustments affecting net operating income	547	229	580
Adjusted net operating income ^(b)	1,586	1,699	1,254
Including New Energies	26	108	10
Investments	2,506	1,841	1,818
Divestments	446	856	163
Organic investments	1,432	1,569	1,424
Cash flow from operating activities	1,623	2,323	2,721
ROACE	18%	20%	13%

^(a) For the definitions of operating income and net operating income, refer to Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

^(b) Adjusted for special items. See Note 3 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 215](#)), which is incorporated herein by reference.

2016 vs. 2015

In 2016, refined product sales decreased slightly compared to 2015, essentially due to the sale of the retail network in Turkey. Excluding portfolio effects, retail network sales increased by around 4%. Sales of land-based lubricants also increased by around 4%.

Non-Group sales for the segment in 2016 were \$69,421 million compared to \$77,887 million in 2015, a decrease of 11%.

Adjusted net operating income in 2016 for the segment was \$1,586 million in 2016, a decrease of 7% compared to 2015. Excluding New Energies, which benefited in 2015 from the delivery of the Quinto solar farm in the United States, adjusted net operating income was stable despite asset sales (retail network in Turkey).

Adjusted net operating income for the Marketing & Services segment excludes any after-tax inventory valuation effect and special items. The exclusion of the inventory valuation effect had a positive impact on the segment's adjusted net operating income in 2016 of \$13 million compared to a positive impact of \$169 million in 2015. The exclusion of special items had a positive impact on the segment's adjusted net operating income in 2016 of \$534 million, including restructuring charges related to New Energies, compared to a positive impact of \$60 million in 2015.

Cash flow from operating activities was \$1,623 million in 2016, a decrease of 30% compared to \$2,323 million in 2015. Operating cash flow in 2016 for the segment excluding the change in working capital at replacement cost of \$(208) million (\$258 million in 2015) was \$1,831 million, a decrease of 11% compared to \$2,065 million in 2015.

For information on the Marketing & Services segment's investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on [page 42](#)), which is incorporated herein by reference. See also [3. Liquidity and Capital Resources](#) , below.

In this context, the segment's ROACE for the full-year 2016 was 18% compared to 20% for the full year 2015.

2015 vs. 2014

The segment's petroleum product sales were 1,818 kb/d in 2015 compared to 1,769 kb/d in 2014, an increase of 3%. In addition to strong growth in Africa, the sector benefited from its strategic repositioning in Europe and demand stimulated by lower prices.

Non-Group sales for the segment in 2015 were \$77,887 million compared to \$106,509 million in 2014, a decrease of 27%.

Adjusted net operating income in 2015 for the segment was \$1,699 million compared to \$1,254 million in 2014, an increase of 35% benefiting from an increase in sales and margins in a favorable environment, and the contribution of SunPower.

Adjusted net operating income for the Marketing & Services segment excludes any after-tax inventory valuation effect and special items. The exclusion of the inventory valuation effect had a positive impact on the segment's adjusted net operating income in 2015 of \$169 million compared to a positive impact of \$384 million in 2014. The exclusion of special items had a positive impact on the segment's adjusted net operating income in 2015 of \$60 million compared to a positive impact of \$196 million in 2014.

Cash flow from operating activities was \$2,323 million in 2015, a decrease of 15% compared to \$2,721 million in 2014. Operating cash flow in 2015 for the segment excluding the change in working capital at replacement cost of \$258 million (\$705 million in 2014) was \$2,065 million, an increase of 2% compared to \$2,016 million in 2014.

For information on the Marketing & Services segment's investments, refer to point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on [page 42](#)), which is incorporated herein by reference. See also [3. Liquidity and Capital Resources](#) , below.

In this context, the segment's ROACE for the full-year 2015 was 20% compared to 13% for the full year 2014.

3. Liquidity and capital resources

(M\$)	2016	2015	2014
Cash flow from operating activities	16,521	19,946	25,608
Including (increase) decrease in working capital	(1,119)	1,683	4,480
Cash flow used in investing activities	(17,653)	(20,449)	(24,319)
Total expenditures	(20,530)	(28,033)	(30,509)
Total divestments	2,877	7,584	6,190
Cash flow from financing activities	3,532	1,060	5,909
Net increase (decrease) in cash and cash equivalents	2,400	577	7,198
Effect of exchange rates	(1,072)	(2,469)	(2,217)
Cash and cash equivalents at the beginning of the period	23,269	25,181	20,200
Cash and cash equivalents at the end of the period	24,597	23,269	25,181

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TOTAL's cash requirements for working capital, capital expenditures, acquisitions and dividend payments over the past three years were financed primarily by a combination of funds generated from operations, borrowings and divestments of non-core assets. In the current environment, TOTAL expects its external debt to be principally financed from the international debt capital markets. The Group continually monitors the balance between cash flow from operating activities and net expenditures. In the Company's opinion, its working capital is sufficient for its present requirements.

Capital expenditures

The largest part of TOTAL's capital expenditures in 2016 was made up of additions to intangible assets and property, plant and equipment (approximately 87%), with the remainder attributable to equity-method affiliates and to acquisitions of subsidiaries. In the Upstream segment, as described in more detail under point 1.6 (Cost incurred) of chapter 11 of the 2016 Registration Document (on [page 321](#)), which is incorporated herein by reference, capital expenditures in 2016 were principally development costs (approximately 90%, mainly for construction of new production facilities), exploration expenditures (successful or unsuccessful, approximately 4%) and acquisitions of proved and unproved properties (approximately 6%). In the Refining & Chemicals segment, about 75% of capital expenditures in 2016 were related to refining and petrochemical activities (essentially 50% for existing units including maintenance and major turnarounds and 50% for new construction), the balance being related to Specialty Chemicals. In the Marketing & Services segment, capital expenditures were split between marketing/retail activities (approximately 50%) and New Energies (approximately 50%). For additional information on capital expenditures, please refer to the discussion above in [1. Overview](#) and [2. Results 2014-2016](#), above, and point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on [page 42](#)), which is incorporated herein by reference.

Cash flow

Cash flow from operating activities in 2016 was \$16,521 million compared to \$19,946 million in 2015 and \$25,608 million in 2014. The \$3,425 million decrease in cash flow from operating activities from 2015 to 2016 was due mainly to an increase in working capital requirements in 2016 of \$1,119 million compared to a decrease of \$1,683 million in 2015. The Group's working capital requirement was affected by the effect of changes in oil and oil product prices. As IFRS rules require TOTAL to account for inventories of petroleum products according to the FIFO method, an increase in oil and oil products in 2016 compared to a decrease in 2015 generates, all other factors remaining equal, an increase in inventories, resulting in an increase in working capital requirements. In 2016, the Group's working capital requirement increased by \$1,119 million, due to increases in inventories and receivables partially offset by an increase in payables. The Group's working capital requirement decreased by \$1,683 million in 2015 and by \$4,480 million in 2014, in both cases mainly due to reductions in inventory and receivables.

Cash flow used in investing activities in 2016 was \$17,653 million compared to \$20,449 million in 2015 and \$24,319 million in 2014. The decrease from 2015 to 2016 was mainly due to lower expenditures on the Group's portfolio of Upstream projects and lower divestments mainly in the Refining & Chemicals segment, which had a higher level of divestments in 2015 due to the sale of Bostik. The decrease from 2014 to 2015 was due to lower expenditures on the Group's portfolio of Upstream projects, as various projects approached completion, and by the divestment of Bostik in the Refining & Chemicals segment, partly offset by the extension of the ADCO concession in Abu Dhabi. Total expenditures in 2016 were \$20,530 million compared to \$28,033 million in 2015 and \$30,509 million in 2014. During 2016, 78% of the expenditures were made by the Upstream segment (as compared to 87% in 2015 and 2014), 9% by the Refining & Chemicals segment (compared to 7% in 2015 and 2014) and 13% by the Marketing & Services segment (compared to 6% in 2015 and 2014). The main source of funding for these

expenditures has been cash from operating activities and issuances of non-current debt and perpetual subordinated notes. For additional information on expenditures, please refer to the discussions in 1. Overview and 2. Results 2014-2016, above, and point 3 (Investments) of chapter 2 of the 2016 Registration Document (starting on page 42), which is incorporated herein by reference.

Divestments, based on selling price and net of cash sold, in 2016 were \$2,877 million compared to \$7,584 million in 2015 and \$6,190 million in 2014. In 2016, the Group's principal divestments were asset sales of \$1,864 million, consisting mainly of interests in the FUKA and SIRGE gas pipelines, and the St. Fergus gas terminal in the United Kingdom. In 2015, the Group's principal divestments were asset sales of \$5,968 million, consisting mainly of sales of Bostik, interests in onshore blocks in Nigeria, Totalgaz, the Schwedt refinery, the Géosel oil storage facility, coal mining assets in South Africa, and partial interests in Laggan-Tormore and Fort Hills. In 2014, the Group's principal divestments were asset sales of \$4,650 million, consisting mainly of sales in the Upstream segment in Azerbaijan, Angola and the United States.

Cash flow raised from financing activities in 2016 was \$3,532 million compared to \$1,060 million in 2015 and \$5,909 million in 2014. The increase in cash flow from financing activities in 2016 compared to 2015 was primarily due to the variation of current financial assets and liabilities (\$1,396 million in 2016 compared to \$(5,517) million in 2015), partially offset by the decrease in variation of current borrowings \$(3,260) million in 2016 compared to \$(597) million in 2015), the lower issuance of perpetual subordinated notes in 2016 (\$4,711 million compared to \$5,616 million in 2015) and the decrease in net issuance of non-current borrowings (\$3,576 million in 2016 compared to \$4,166 million in 2015).

Indebtedness

The Company's non-current financial debt at year-end 2016 was \$43,067 million compared to \$44,464 million at year-end 2015 and \$45,481 million at year-end 2014. For further information on the Company's level of borrowing and the type of financial instruments, including maturity profile of debt and currency and interest rate structure, see Note 15 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 270), which is incorporated herein by reference. For further information on the Company's treasury policies, including the use of instruments for hedging purposes and the currencies in which cash and cash equivalents are held, see Item 11.

Quantitative and Qualitative Disclosures About Market Risk

On February 22, 2016, Standard & Poor's downgraded TOTAL's long term credit rating from AA- to A+ with a negative outlook. The short term credit rating was also downgraded from A-1+ to A-1. On April 8, 2016, Moody's downgraded TOTAL's long term credit rating from Aa1 to Aa3 with a stable outlook.

Cash and cash equivalents at year-end 2016 were \$24,597 million compared to \$23,269 million at year-end 2015 and \$25,181 million at year-end 2014.

Shareholders equity

Shareholders' equity at year-end 2016 was \$101,574 million compared to \$95,409 million at year-end 2015 and \$93,531 million at year-end 2014. Changes in shareholders' equity in 2016 were primarily due to the impacts of comprehensive income, dividend payments, the issuance of perpetual subordinated notes and the issuance of common shares. Changes in shareholders' equity in 2015 were primarily due to the impacts of dividend payments, the issuance of perpetual subordinated notes and the issuance of common shares. Changes in shareholders' equity in 2014 were primarily due to the impacts of dividend payments, variations in foreign exchange and impairments (for information concerning the impairments, refer to 2. Results 2014-2016, above).

- ⁽¹⁾ *Excludes net current and non-current financial debt of \$(140) million as of December 31, 2016, \$141 million as of December 31, 2015 and \$(56) million as of December 31, 2014, related to assets classified in accordance with IFRS 5 non-current assets held for sale and discontinued operations .*

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At the meeting held on December 15, 2016, and pursuant to the authorization of the Extraordinary Shareholders Meeting of May 11, 2012, the Board of Directors of TOTAL S.A. decided to cancel 100,331,268 treasury shares (*i.e.*, 4.13% of the share capital as of December 31, 2016) that TOTAL S.A. had bought back off-market in December 2016 from four of its 100% indirectly controlled subsidiaries. Following this transaction, Group affiliates no longer hold any treasury shares. This buyback of shares had no impact on the consolidated financial statements of TOTAL S.A. For additional information, refer to point 3 of chapter 8 (Share buybacks) of the 2016 Registration Document (starting on [page 183](#)), which is incorporated herein by reference. In 2015, TOTAL S.A. bought back nearly 4.7 million of its own shares (*i.e.*, 0.19% of the share capital as of December 31, 2015) under the previous authorization granted by the shareholders at the meeting of May 29, 2015. In 2014, TOTAL S.A. bought back nearly 4.4 million of its own shares (*i.e.*, 0.18% of the share capital as of December 31, 2014) under the authorization granted by the shareholders at the meeting of May 16, 2014.

Net-debt-to-equity

As of December 31, 2016, TOTAL's net-debt-to-equity ratio^(b) was 27.1% compared to 28.3% and 31.3% at year-ends 2015 and 2014, respectively. The decrease from 2014 to 2015 was mostly due to the issuance of perpetual subordinated notes.

As of December 31, 2016, TOTAL S.A. had \$10,076 million of long-term confirmed lines of credit, of which \$10,076 million were unused.

4. Guarantees and other off-balance sheet arrangements

As of December 31, 2016, the guarantees provided by TOTAL S.A. in connection with the financing of the Ichthys LNG project amounted to \$7,800 million.

Guarantees given against borrowings also include the guarantee given in 2008 by TOTAL S.A. in connection with the financing of the Yemen LNG project for an amount of \$551 million and the guarantee given in 2016 by TOTAL S.A. in connection with the financing of the Yamal LNG project for an amount of \$3,147 million.

In 2015, TOTAL S.A. has confirmed and extended guarantees for TOTAL Refining SAUDI ARABIA SAS shareholders' advances for an amount of \$1,013 million. As of December 31, 2016, the guarantees amounted to \$1,230 million.

These guarantees and other information on the Company's commitments and contingencies are presented in Note 13 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 263](#)), which is incorporated herein by reference.

The Group does not currently consider that these guarantees, or any other off-balance sheet arrangements of TOTAL S.A. nor any other members of the Group, have or are reasonably likely to have, currently or in the future, a material effect on the Group's financial condition, changes in financial condition, revenues or expenses, results of operation, liquidity, capital expenditures or capital resources.

5. Contractual obligations

Payment due by period (M\$)	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
Non-current debt obligations ^(a)		9,963	8,486	23,398	41,847
Current portion of non-current debt obligations ^(b)	4,614				4,614
Finance lease obligations ^(c)	8	59	44	208	319
Asset retirement obligations ^(d)	685	1,325	944	9,711	12,665
Operating lease obligations ^(c)	1,582	1,831	1,122	1,943	6,478
Purchase obligations ^(e)	10,898	8,731	11,839	73,740	105,208
Total	17,787	21,909	22,435	109,000	171,131

^(a) *Non-current debt obligations are included in the items Non-current financial debt and Hedging instruments of non-current financial debt of the Consolidated Balance Sheet (refer to point 4 of chapter 10 of the 2016 Registration Document (on page 209), which is incorporated herein by reference). The figures in this table are net of the non-current portion of issue swaps and swaps hedging bonds, and exclude non-current finance lease obligations of \$311 million and net current and non-current financial debt of \$(140) million related to assets classified in accordance with IFRS 5 non-current assets held for sale and discontinued operations .*

^(b) *The current portion of non-current debt is included in the items Current borrowings , Current financial assets and Other current financial liabilities of the balance sheet. The figures in this table are net of the current portion of issue swaps and swaps hedging bonds and exclude the current portion of finance lease obligations of \$8 million.*

^(c) *Finance lease obligations and operating lease obligations: the Group leases real estate, retail stations, ships, and other equipment through non-cancelable capital and operating leases. These amounts represent the future minimum lease payments on non-cancelable leases to which the Group is committed as of December 31, 2016, less the financial expense due on finance lease obligations for \$74 million.*

^(d) *The discounted present value of Upstream asset retirement obligations, primarily asset removal costs at the completion date.*

^(e) *Purchase obligations are obligations under contractual agreements to purchase goods or services, including capital projects. These obligations are enforceable and legally binding on TOTAL and specify all significant terms, including the amount and the timing of the payments. These obligations mainly include: hydrocarbon unconditional purchase contracts (except where an active, highly liquid market exists and when the hydrocarbons are expected to be re-sold shortly after purchase), reservation of transport capacities in pipelines, unconditional exploration works and development works in the Upstream segment, and contracts for downstream capital investment projects. This disclosure does not include contractual exploration obligations with host states where a monetary value is not attributed and purchases of booking capacities in pipelines where the Group has a participation superior to the capacity used.*

For additional information on the Group's contractual obligations, see Note 13 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 263), which is incorporated herein by reference. The Group has other obligations in connection with pension plans which are described in Note 10 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 254), which is incorporated herein by reference. As these obligations are not contractually fixed as to timing and amount, they have not been included in this

disclosure. Other non-current liabilities, detailed in Note 12 to the Consolidated Financial Statements in the 2016 Registration Document (starting on page 260), which is incorporated herein by reference, are liabilities related to risks that are probable and amounts that can be reasonably estimated. However, no contractual agreements exist related to the settlement of such liabilities, and the timing of the settlement is not known.

⁽¹⁾ *Net-debt-to-equity ratio = net debt (i.e., the sum of current borrowings, other current financial liabilities and non-current financial debt, net of current financial assets, net financial assets and liabilities related to assets classified in accordance with IFRS 5 as non-current assets held for sale, hedging instruments on non-current financial debt and cash and cash equivalents) divided by the sum of shareholders' equity and non-controlling interests after expected dividends payable.*

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6. Research and development

For a discussion of the Group's R&D policies and activities, refer to point 4 (Research & Development) of chapter 2 of the 2016 Registration Document (starting on page 44), which is incorporated herein by reference.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

The following information concerning directors and senior management from the 2016 Registration Document is incorporated herein by reference:

composition of the Board of Directors and related information (introduction and point 1.1 of chapter 5, starting on page 86); and

General Management (point 2 of chapter 5, on page 112).

The following information concerning compensation from the 2016 Registration Document is incorporated herein by reference:

approach to overall compensation (point 1.1.3 of chapter 7, starting on page 146); and

compensation of the administration and management bodies (points 1 to 6 of chapter 6, starting on page 116).

The following information concerning board practices and corporate governance from the 2016 Registration Document is incorporated herein by reference:

practices of the Board of Directors (point 1.2 of chapter 5, starting on page 97); and

statement regarding corporate governance (point 1.3 of chapter 5, on page 111).

The following information concerning employees and share ownership from the 2016 Registration Document is incorporated herein by reference:

Group employees as of December 31, 2016 (point 1.1.1 of chapter 7, on page 145);

employees joining and leaving TOTAL (point 1.1.2 of chapter 7, on page 146);

shares held by the administration and management bodies (point 3 of chapter 5, starting on page 112); and

employee shareholding (point 4.2 of chapter 8, on page 189).

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

The following information concerning shareholders from the 2016 Registration Document is incorporated herein by reference:

major shareholders (point 4.1 of chapter 8, starting on [page 187](#)); and shareholding structure (point 4.3 of chapter 8, on [page 190](#)).

The Group's main transactions with related parties (principally all the investments carried under the equity method) and the balances receivable from and payable to them are shown in Note 8 to the Consolidated Financial Statements in the 2016 Registration Document (starting on [page 239](#)), which is incorporated herein by reference). In the ordinary course of its business, TOTAL enters into transactions with various organizations with which certain of its directors or executive officers may be associated, but no such transactions of a material or unusual nature have been entered into during the period commencing on January 1, 2014, and ending on March 15, 2017.

ITEM 8. FINANCIAL INFORMATION

The following information from the 2016 Registration Document is incorporated herein by reference:

Consolidated Financial Statements and Notes thereto (points 2 to 7 of chapter 10, starting on [page 205](#)); supplemental oil and gas information (points 1 and 2 of chapter 11, starting on [page 308](#)); report on payments made to governments (point 3 of chapter 11, starting on [page 329](#)); legal and arbitration proceedings (point 2 of chapter 4, starting on [page 73](#)); and dividend policy and other related information (point 2 of chapter 8, starting on [page 181](#)).

Except for certain events mentioned in [Item 5. Operating and Financial Review and Prospects](#) and point 2 (Legal and arbitration proceedings) of chapter 4 (starting on [page 73](#)) and Note 17 (Post closing events) to the Consolidated Financial Statements (on [page 289](#)) of the 2016 Registration Document, which are incorporated herein by reference, no significant changes to the Group's financial or commercial situation have occurred since the date of the Company's Consolidated Financial Statements.

Refer to [Item 18. Financial Statements](#) for the reports of the statutory auditors.

ITEM 9. THE OFFER AND LISTING

1. Markets

The principal trading markets for the Company's shares are the Euronext Paris exchange in France and the New York Stock Exchange (NYSE) in the United States. The shares are also listed on Euronext Brussels and the London Stock Exchange.

2. Offer and listing details

Provided below is certain information on trading on Euronext Paris and the New York Stock Exchange. For additional information on listing details and share performance, refer to point 1 (Listing details) of chapter 8 of the 2016 Registration Document (starting on [page 178](#)), which is incorporated herein by reference.

Trading on Euronext Paris

Official trading of listed securities on Euronext Paris, including the shares, is transacted through French investment service providers that are members of Euronext Paris and takes place continuously on each business day in Paris from 9:00 a.m. to 5:30 p.m. (Paris time), with a fixing of the closing price at 5:35 p.m. Euronext Paris may suspend or resume trading in a security listed on Euronext Paris if the quoted price of the security exceeds certain price limits defined by the regulations of Euronext Paris.

The markets of Euronext Paris settle and transfer ownership two trading days after a transaction (T+2). Highly liquid shares, including those of the Company, are eligible for deferred settlement (*Service de Règlement Différé* – SRD). Payment and delivery for shares under the SRD occurs on the last trading day of each month. Use of the SRD service requires payment of a commission.

In France, the shares are included in the principal index published by Euronext Paris (the CAC 40 Index). The CAC 40 Index is derived daily by comparing the total market capitalization of forty stocks traded on Euronext Paris to the total market capitalization of the stocks that made up the CAC 40 Index on December 31, 1987. Adjustments are made to allow for expansion of the sample due to new issues. The CAC 40 index indicates trends in the French stock market as a whole and is one of the most widely followed stock price indices in France. In the UK, the shares are listed in both the FTSE Eurotop 100 and FTSEurofirst 300 index. As a result of the creation of Euronext, the shares are included in Euronext 100, the index representing Euronext's blue chip companies based on market capitalization. The shares are also included in the Dow Jones Stoxx Europe 50 and Dow Jones Euro Stoxx 50, blue chip indices comprised of the fifty most highly capitalized and most actively traded equities throughout Europe and within the European Monetary Union, respectively. Since June 2000, the shares have been included in the Dow Jones Global Titans 50 Index which consists of fifty global companies selected based on market capitalization, book value, assets, revenue and earnings.

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The table below sets forth, for the periods indicated, the reported high and low quoted prices in euros for the currently outstanding shares on Euronext Paris.

Price per share (€)	High	Low
2012	42.970	33.420
2013	45.670	35.175
2014	54.710	38.250
2015	50.300	36.920
First Quarter	48.600	39.345
Second Quarter	50.300	43.285
Third Quarter	46.500	36.920
Fourth Quarter	47.400	40.255
2016	48.885	35.210
First Quarter	43.430	35.210
Second Quarter	45.225	38.065
Third Quarter	44.955	40.530
September	44.955	40.530
Fourth Quarter	48.885	41.825
October	44.840	42.160
November	45.405	41.825
December	48.885	44.110
2017 (through February 28)	49.500	46.140
January	49.500	46.385
February	48.985	46.140

Trading on the New York Stock Exchange

ADSs evidenced by ADRs have been listed on the NYSE since October 25, 1991. JPMORGAN CHASE BANK, N.A. serves as depository with respect to the ADSs evidenced by ADRs traded on the NYSE. One ADS corresponds to one TOTAL share. The table below sets forth, for the periods indicated, the reported high and low prices quoted in dollars for the currently outstanding ADSs evidenced by ADRs on the NYSE.

Price per ADR (\$)	High	Low
2012	57.06	41.75
2013	62.45	45.93
2014	74.220	48.433
2015	54.790	40.930
First Quarter	55.860	46.610
Second Quarter	54.790	48.530
Third Quarter	50.870	40.930
Fourth Quarter	52.340	44.190
2016	51.360	39.050
First Quarter	48.000	39.050
Second Quarter	51.300	43.550

Third Quarter	50.210	45.355
September	50.210	45.355
Fourth Quarter	51.360	45.050
October	49.105	47.410
November	48.040	45.050
December	51.360	47.380
2017 (through February 28)	52.040	49.330
January	52.040	49.567
February	51.980	49.330

ITEM 10. ADDITIONAL INFORMATION

1. Share capital

The information set forth in point 1 (Share capital) of chapter 9 (starting on page 196) and point 3 (Share buybacks) of chapter 8 (starting on page 183) of the 2016 Registration Document is incorporated herein by reference.

2. Memorandum and articles of association

The information set forth in point 2 (Articles of incorporation and bylaws; other information) of chapter 9 of the 2016 Registration Document (starting on page 198) is incorporated herein by reference.

3. Material contracts

There have been no material contracts (not entered into in the ordinary course of business) entered into by members of the Group since March 15, 2015.

4. Exchange controls

Under current French exchange control regulations, no limits exist on the amount of payments that TOTAL may remit to residents of the United States. Laws and regulations concerning foreign exchange controls do require, however, that an accredited intermediary must handle all payments or transfer of funds made by a French resident to a non-resident.

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5. Taxation

General

This section generally summarizes the material U.S. federal income tax and French tax consequences of owning and disposing of shares or ADSs of TOTAL to U.S. Holders that hold their shares or ADSs as capital assets for tax purposes. A U.S. Holder is a beneficial owner of shares or ADSs that is (i) a citizen or resident of the United States for U.S. federal income tax purposes, (ii) a domestic corporation or other domestic entity treated as a corporation for U.S. federal income tax purposes, (iii) an estate whose income is subject to U.S. federal income tax regardless of its source, or (iv) a trust if a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons are authorized to control all substantial decisions of the trust.

This section does not address the Medicare tax on net investment income and does not apply to members of special classes of holders subject to special rules, including:

- dealers in securities;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- tax-exempt organizations;
- life insurance companies;
- U.S. pension funds;
- U.S. Regulated Investment Companies (RICs), Real Estate Investment Trusts (REITs), and Real Estate Mortgage Investment Conduits (REMICs);
- persons who are liable for the alternative minimum tax;
- persons that actually or constructively own 10% or more of the share capital or voting rights in TOTAL;
- persons that purchase or sell shares or ADSs as part of a wash sale for U.S. federal income tax purposes;
- persons that hold the shares or ADSs as part of a straddle or a hedging or conversion transaction; or
- persons whose functional currency is not the U.S. dollar.

If a partnership or other entity treated as a partnership for U.S. federal income tax purposes holds shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and upon the activities of the partnership. Partners of a partnership holding these shares or ADSs should consult their tax advisors as to the tax consequences of owning or disposing of shares or ADSs, as applicable.

Under French law, specific rules apply to trusts, in particular specific tax and filing requirements as well as modifications to wealth, estate and gift taxes as they apply to trusts. Given the complex nature of these rules and the fact that their application varies depending on the status of the trust, the grantor, the beneficiary and the assets held in the trust, the following summary does not address the tax treatment of ADSs or shares held in a trust. If ADSs or shares are held in trust, the grantor, trustee and beneficiary are urged to consult their own tax advisor regarding the specific tax consequences of acquiring, owning and disposing of ADSs or shares.

In addition, the discussion below is limited to U.S. Holders that (i) are residents of the United States for purposes of the Treaty (as defined below), (ii) do not maintain a permanent establishment or fixed base in France to which the shares or ADSs are attributable and through which the respective U.S. Holders carry on, or have carried on, a business

(or, if the holder is an individual, performs or has performed independent personal services), and (iii) are otherwise eligible for the benefits of the Treaty in respect of income and gain from the shares or ADSs (in particular, under the Limitation on Benefits provision of the Treaty). In addition, this section is based in part upon 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.

This section is based on the Internal Revenue Code of 1986, as amended (IRC), its legislative history, existing and proposed regulations, published rulings and court decisions, and with respect to the description of the material French tax consequences, the laws of the Republic of France and French tax regulations, all as currently in effect, as well as on the Convention Between the United States and the Republic of France for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital dated August 31, 1994, as amended (the Treaty). These laws, regulations and the Treaty are subject to change, possibly on a retroactive basis.

This discussion is intended only as a descriptive summary and does not purport to be a complete analysis or listing of all potential tax effects of the ownership or disposition of the shares and ADSs and is not intended to substitute competent professional advice. Individual situations of holders of shares and ADSs may vary from the description made below. The following summary does not address the French tax treatment applicable to dividends paid in so-called Non Cooperative Countries and Territories (NCCT) within the meaning of Section 238-0 A of the French Tax Code. It does not apply to dividends paid to persons established or domiciled in such a NCCT, or paid to a bank account opened in a financial institution located in such a NCCT.

Holders are urged to consult their own tax advisors regarding the U.S. federal, state and local, and French and other tax consequences of owning and disposing shares or ADSs of TOTAL in their respective circumstances. In particular, a holder is encouraged to confirm with its advisor whether the holder is a U.S. Holder eligible for the benefits of the Treaty.

Taxation of dividends

French taxation

The term dividends used in the following discussion means dividends within the meaning of the Treaty.

Dividends paid to non-residents of France are in principle subject to a French withholding tax at a rate of 30%, regardless of whether they are paid in cash, in shares or a mix of both.

However, under the Treaty, a U.S. Holder is generally entitled to a reduced rate of French withholding tax of 15% with respect to dividends, provided that certain requirements are satisfied.

Administrative guidelines (*Bulletin Officiel des Finances Publiques*, BOI-INT-DG-20-20-20-20-20120912) (the Administrative Guidelines) set forth the conditions under which the reduced French withholding tax at the rate of 15% may be available. The immediate application of the reduced 15% rate is available to those U.S. Holders that may benefit from the so-called simplified procedure (within the meaning of the Administrative Guidelines).

Under the simplified procedure , U.S. Holders may claim the immediate application of withholding tax at the rate of 15% on the dividends to be received by them, provided that:

- (i) they furnish to the U.S. financial institution managing their securities account a certificate of residence conforming with form No. 5000-FR. The immediate application of the 15% withholding tax will be available

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only if the certificate of residence is sent to the U.S. financial institution managing their securities account no later than the dividend payment date. Furthermore, each financial institution managing the U.S. Holders securities account must also send to the French paying agent the figure of the total amount of dividends to be received which are eligible to the reduced withholding tax rate before the dividend payment date; and

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- (ii) the U.S. financial institution managing the U.S. Holder's securities account provides to the French paying agent a list of the eligible U.S. Holders and other pieces of information set forth in the Administrative Guidelines. Furthermore, the financial institution managing the U.S. Holders' securities account should certify that the U.S. Holder is, to the best of its knowledge, a United States resident within the meaning of the Treaty. These documents must be sent to the French paying agent within a time frame that will allow the French paying agent to file them no later than the end of the third month computed as from the end of the month of the dividend payment date.

Where the U.S. Holder's identity and tax residence are known by the French paying agent, the latter may release such U.S. Holder from furnishing to (i) the financial institution managing its securities account, or (ii) as the case may be, the U.S. Internal Revenue Service (IRS), the abovementioned certificate of residence, and apply the 15% withholding tax rate to dividends it pays to such U.S. Holder.

For a U.S. Holder that is not entitled to the simplified procedure and whose identity and tax residence are not known by the paying agent at the time of the payment, the 30% French withholding tax will be levied at the time the dividends are paid. Such U.S. Holder, however, may be entitled to a refund of the withholding tax in excess of the 15% rate under the standard procedure, as opposed to the simplified procedure, provided that the U.S. Holder furnishes to the French paying agent an application for refund on forms No. 5000-FR and 5001-FR (or any other relevant form to be issued by the French tax authorities) certified by the U.S. financial institution managing the U.S. Holder's securities account (or, if not, by the competent U.S. tax authorities) before December 31 of the second year following the date of payment of the withholding tax at the 30% rate to the French tax authorities, according to the requirements provided by the Administrative Guidelines.

Copies of forms No. 5000-FR and 5001-FR (or any other relevant form to be issued by the French tax authorities) as well as the form of the certificate of residence and the U.S. financial institution certification, together with instructions, are available from the IRS and the French tax authorities.

These forms, together with instructions, are to be provided by the Depositary to all U.S. Holders of ADRs registered with the Depositary. The Depositary is to use reasonable efforts to follow the procedures established by the French tax authorities for U.S. Holders to benefit from the immediate application of the 15% French withholding tax rate or, as the case may be, to recover the excess 15% French withholding tax initially withheld and deducted in respect of dividends distributed to them by TOTAL. To effect such benefit or recovery, the Depositary shall advise such U.S. Holder to return the relevant forms to it, properly completed and executed. Upon receipt of the relevant forms properly completed and executed by such U.S. Holder, the Depositary shall cause them to be filed with the appropriate French tax authorities, and upon receipt of any resulting remittance, the Depositary shall distribute to the U.S. Holder entitled thereto, as soon as practicable, the proceeds thereof in U.S. dollars.

The identity and address of the French paying agent are available from TOTAL.

In addition, subject to certain specific filing obligations, there is no withholding tax on dividend payments made by French companies to:

- (i) non-French collective investment funds formed under foreign law and established in a Member State of the European Union or in another State or territory, such as the United States, that has entered with France into an administrative assistance agreement for the purpose of combating fraud and tax evasion, and which fulfill the two following conditions: (a) the fund raises capital among a number of investors for the purpose of investing in accordance with a defined investment policy, in the interest of its investors, and (b) the fund has

characteristics similar to those of collective investment funds organized under French law (*i.e.*, among others, open-end mutual fund (OPCVM), open-end real estate fund (OPCI) and closed-end investment companies (SICAF)); and

- (ii) companies whose effective place of management is, or which have a permanent establishment receiving the dividends, in a Member State of the European Union or in another State or territory that has entered with France into an administrative assistance agreement for the purpose of combating fraud and tax evasion, such as the United States, that are in a loss-making position and subject, at the time of the distribution, to insolvency proceedings similar to the one set out in article L.640-1 of the French Commercial Code and that meet the other conditions set out in article 119 *quinquies* of the French Tax Code as specified by the administrative guidelines n° BOI-RPPM-RCM-30-30-20-80-20160406.

Collective investment funds and companies mentioned in (ii) above are urged to consult their own tax advisors to confirm whether they are eligible to such provisions and under which conditions.

U.S. taxation

For U.S. federal income tax purposes and subject to the passive foreign investment company rules discussed below, the gross amount of any dividend that a U.S. Holder must include in gross income equals the amount paid by TOTAL (*i.e.*, the net distribution received plus any tax withheld therefrom) to the extent of the current and accumulated earnings and profits of TOTAL (as determined for U.S. federal income tax purposes). Dividends paid to a non-corporate U.S. Holder that constitute qualified dividend income will be taxable to the holder at the preferential rates applicable to long-term capital gains provided that the shares or ADSs are held for more than sixty days during the 121-day period beginning sixty days before the ex-dividend date and the holder meets other holding period requirements. TOTAL believes that dividends paid by TOTAL with respect to its shares or ADSs will be qualified dividend income. The dividend will not be eligible for the dividends-received deduction allowed to a U.S. corporation under IRC Section 243. The dividend is taxable to the U.S. Holder when the holder, in the case of shares, or the Depository, in the case of ADSs, receives the dividend, actually or constructively. Because TOTAL does not currently maintain calculations of earnings and profits for U.S. federal income tax purposes, a U.S. Holder of shares or ADSs of TOTAL should expect to treat distributions with respect to the shares or ADSs as dividends

The amount of any dividend distribution includible in the income of a U.S. Holder equals the U.S. dollar value of the euro payment made, determined at the spot euro/dollar exchange rate on the date the dividend distribution is includible in the U.S. Holder's income, regardless of whether the payment is in fact converted into U.S. dollars. Any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is includible in the U.S. Holder's income to the date the payment is converted into U.S. dollars will generally be treated as ordinary income or loss and, for foreign tax credit limitation purposes, from sources within the United States and will not be eligible for the special tax rate applicable to qualified dividend income. **The U.S. federal income tax rules governing the availability and computation of foreign tax credits are complex. U.S. Holders should consult their own tax advisors concerning the implications of these rules in light of their particular circumstances.**

Subject to certain conditions and limitations, French taxes withheld in accordance with the Treaty and paid over to the French tax authorities will generally be eligible for credit against the U.S. Holder's U.S. federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. In addition, special rules apply in determining the foreign tax credit limitation with respect to dividends that are subject to the preferential tax rates. To the extent a refund of the tax withheld is available to a U.S. Holder under French law or under the Treaty, the amount of tax withheld that is refundable will not be eligible for credit against such holder's U.S. federal income tax liability.

For this purpose, dividends distributed by TOTAL will constitute passive income, or, in the case of certain U.S. Holders, general income, which are treated separately from one another for purposes of computing the foreign

tax credit allowable to the U.S. Holder. Alternatively, a U.S. Holder may claim all foreign taxes paid as an itemized deduction in lieu of claiming a foreign tax credit.

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If a U.S. Holder has the option to receive a distribution in shares (or ADSs) instead of cash, the distribution of shares (or ADSs) will be taxable as if the holder had received an amount equal to the fair market value of the distributed shares (or ADSs), and such holder's tax basis in the distributed shares (or ADSs) will be equal to such amount.

Taxation of disposition of shares

In general, a U.S. Holder will not be subject to French tax on any capital gain from the sale or exchange of the shares or ADSs or redemption of the underlying shares that the ADSs represent unless those shares or ADSs form part of a business property of a permanent establishment or fixed base that the U.S. Holder has in France. Special rules may apply to individuals who are residents of more than one country.

A financial transaction tax applies, under certain conditions, to the acquisition of shares of publicly traded companies registered in France having a market capitalization over €1 billion on December 31 of the year preceding the acquisition. A list of the companies within the scope of the financial transaction tax for 2017 is published in the French Guidelines *Bulletin Officiel des Finances Publiques*, BOI-ANX-000467-20161220. TOTAL is included in this list. The tax also applies to the acquisition of ADRs evidencing ADSs. The financial transaction tax is due at a rate of 0.3% on the price paid to acquire the shares as from January 1, 2017. The person or entity liable for the tax is generally the provider of investment services defined in Article L. 321-1 of the French Monetary and Financial Code (*prestataire de services d'investissement*). Investment service providers providing equivalent services outside France are subject to the tax under the same terms and conditions. Taxable transactions are broadly construed but several exceptions may apply. In general, non-income taxes, such as this financial transaction tax, paid by a U.S. Holder are not eligible for a foreign tax credit for U.S. federal income tax purposes. U.S. Holders should consult their own tax advisors as to the tax consequences and creditability of such financial transaction tax.

For U.S. federal income tax purposes and subject to the passive foreign investment company rules discussed below, a U.S. Holder generally will recognize capital gain or loss upon the sale or other disposition of shares or ADSs equal to the difference between the U.S. dollar value of the amount realized on the sale or disposition and the holder's tax basis, determined in U.S. dollars, in the shares or ADSs. The gain or loss generally will be U.S. source gain or loss and will be long-term capital gain or loss if the U.S. Holder's holding period of the shares or ADSs is more than one year at the time of the disposition. Long-term capital gain of a non-corporate U.S. Holder is generally taxed at preferential rates if specified minimum holding periods are met. The deductibility of capital losses is subject to limitation.

Passive foreign investment status

TOTAL believes that the shares or ADSs are not treated as stock of a passive foreign investment company (PFIC) for U.S. federal income tax purposes, and TOTAL does not expect that it will be treated as a PFIC in the current or future taxable years. This conclusion is a factual determination that is made annually and thus is subject to change. If TOTAL is treated as a PFIC, gain realized on the sale or other disposition of the shares or ADSs would in general not be treated as capital gain. Instead, unless a U.S. Holder elects to be taxed annually on a mark-to-market basis with respect to the shares or ADSs, a U.S. Holder would be treated as if he or she had realized such gain and certain excess distributions ratably over the holding period for the shares or ADSs and would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, in addition to an interest charge in respect of the tax attributable to each such year. With certain exceptions, a U.S. Holder's shares or ADSs will be treated as stock in a PFIC if TOTAL were a PFIC at any time during such holder's holding period in the shares or ADSs. Dividends paid will not be eligible for the preferential tax rates applicable to qualified dividend income if TOTAL is treated as a PFIC with respect to a U.S. Holder either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at

rates applicable to ordinary income.

French estate and gift taxes

In general, a transfer of shares or ADSs by gift or by reason of the death of a U.S. Holder that would otherwise be subject to French gift or inheritance tax, respectively, will not be subject to such French tax by reason of the Convention between the United States of America and the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Estates, Inheritances and Gifts, dated November 24, 1978, as amended, unless the donor or the transferor is domiciled in France at the time of making the gift, or at the time of his death, or if the shares or ADSs were used in, or held for use in, the conduct of a business through a permanent establishment or a fixed base in France.

French wealth tax

The French wealth tax does not apply to a U.S. Holder (i) that is not an individual, or (ii) in the case of individuals who are eligible for the benefits of the Treaty and who own, alone or with related persons, directly or indirectly, TOTAL shares which give right to less than 25% of TOTAL's earnings.

U.S. state and local taxes

In addition to U.S. federal income tax, U.S. Holders of shares or ADSs may be subject to U.S. state and local taxes with respect to their shares or ADSs. U.S. Holders should consult their own tax advisors.

6. Dividends and paying agents

The information set forth in point 2.2 (Dividend payment) of chapter 8 of the 2016 Registration Document (on [page 182](#)) is incorporated herein by reference.

7. Statements by experts

The independent third-party report of DeGolyer and MacNaughton, a petroleum engineering consulting firm with address at 5001 Spring Valley Road, Suite 800 East, Dallas, Texas 75244, is attached as Exhibit 15.3 to this Form 20-F. This report provided TOTAL estimates of proved crude oil, condensate and natural gas reserves, as of December 31, 2016, of certain properties owned by PAO NOVATEK. As evidenced by Exhibit 15.4 to this Form 20-F, DeGolyer and MacNaughton has consented to the inclusion of their report in this Form 20-F.

8. Documents on display

TOTAL files annual, periodic, and other reports and information with the Securities and Exchange Commission. You may inspect any reports, statements or other information TOTAL files with the United States Securities and Exchange Commission (SEC) at the SEC s public reference rooms by calling the SEC for more information at 1-800-SEC-0330. All of TOTAL s SEC filings made after December 31, 2001, are available to the public at the SEC website at <http://www.sec.gov> and from certain commercial document retrieval services. You may also inspect any document the Company files with the SEC at the offices of The New York Stock Exchange, 20 Broad Street, New York, New York 10005.

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Please refer to Notes 15.3 (starting on [page 279](#)) and 16.2 (starting on [page 288](#)) to the Consolidated Financial Statements in the 2016 Registration Document, which are incorporated herein by reference, for a qualitative and quantitative discussion of the Group's exposure to market risks. Please also refer to Notes 15.2 (starting on [page 274](#)) and 16 (starting on [page 285](#)) to the Consolidated Financial Statements in the 2016 Registration Document, which are incorporated herein by reference, for details of the different derivatives owned by the Group in these markets.

As part of its financing and cash management activities, the Group uses derivative instruments to manage its exposure to changes in interest rates and foreign exchange rates. These instruments are mainly interest rate and currency swaps. The Group may also occasionally use futures contracts and options. These operations and their accounting treatment are detailed in Notes 15.2 (starting on [page 274](#)) and 16 (starting on [page 285](#)) to the Consolidated Financial Statements in the 2016 Registration Document, which are incorporated herein by reference.

The financial performance of TOTAL is sensitive to a number of factors; the most significant being oil and gas prices, generally expressed in dollars, and exchange rates, in particular that of the dollar versus the euro. Generally, a rise in the price of crude oil has a positive effect on earnings as a result of an increase in revenues from oil and gas production. Conversely, a decline in crude oil prices reduces revenues. The impact of changes in crude oil prices on the activities of the Refining & Chemicals and Marketing & Services segments depends upon the speed at which the prices of finished products adjust to reflect these changes. All of the Group's activities are, to various degrees, sensitive to fluctuations in the dollar/euro exchange rate.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**American Depositary Receipts fees and charges**

JPMORGAN CHASE BANK, N.A., as depositary for the TOTAL S.A. ADR program, collects its fees for delivery and surrender of ADRs directly from investors depositing shares or surrendering ADRs 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 generally refuse to provide fee-attracting services until its fees for those services are paid. A copy of the depositary agreement is attached as Exhibit (a) to the registration statement on Form F-6 (Reg. No. 333-199737) filed by the Company with the SEC on October 31, 2014.

Investors must pay:

\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)

A fee equivalent to the fee that would be payable if securities distributed to the investor had been shares and the shares had been deposited for issuance of ADSs
Registration or transfer fees

For:

Issuance of ADRs, including issuances resulting from a distribution of shares or rights or other property, stocks splits or mergers

Cancellation of ADRs for the purpose of withdrawal, including if the deposit agreement terminates

Distribution of securities distributed to holders of deposited securities that are distributed by the depositary to ADS registered holders

Transfer and registration of shares on the Company's share register to or from the name of the depositary or its agent when the investor deposits or withdraws shares

Expenses of the depositary

Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement)

Taxes and other governmental charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes

Converting foreign currency to U.S. dollars
As necessary

Any charges incurred by the depositary or its agents for servicing the deposited securities

As necessary

The depositary has agreed to provide the Company with payments concerning, among other things, expenses incurred by the Company for the establishment and maintenance of the ADR program that include, but are not limited to, exchange listing fees, annual meeting expenses, standard out-of-pocket maintenance costs for the ADRs (*e.g.*, the expenses of postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend checks, electronic filing of U.S. Federal tax information, mailing required tax forms, stationery, postage, facsimile, and telephone calls), shareholder identification, investor relations activities or programs in North America, accounting fees (such as external audit fees incurred in connection with the Sarbanes-Oxley Act, the preparation of the Company's Form 20-F and paid to the FASB and the PCAOB), legal fees and other expenses incurred in connection with the preparation of regulatory filings and other documentation related to ongoing SEC, NYSE and U.S. securities law compliance. In certain instances, the depositary has agreed to make additional payments to the Company based on certain applicable performance indicators related to the ADR facility.

During the calendar year preceding March 1, 2017, the Company received net payments of approximately \$6.6 million from the depositary.

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

1. Disclosure controls and procedures

An evaluation was carried out under the supervision and with the participation of the Group's management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness, as of the end of the period covered by this report, of the design and operation of

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the Group's disclosure controls and procedures, which are defined as those controls and procedures designed to ensure that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended, is recorded, summarized and reported within specified time periods. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports that the Company files under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

2. Management's annual report on internal control over financial reporting

The Group's management is responsible for establishing and maintaining adequate internal control over financial reporting. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements and even when determined to be effective, can only provide reasonable assurance with respect to financial statement preparation and presentation. Also, the effectiveness of an internal control system may change over time.

The Group's management, including the Chief Executive Officer and the Chief Financial Officer, conducted an evaluation of the effectiveness of internal control over financial reporting using the criteria set forth in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the results of this evaluation, the Group's management concluded that its internal control over financial reporting was effective as of December 31, 2016.

The effectiveness of internal control over financial reporting as of December 31, 2016, was audited by ERNST & YOUNG Audit and KPMG Audit, a division of KPMG S.A., independent registered public accounting firms, as stated in their report included in Item 18 of this Annual Report.

3. Changes in internal control over financial reporting

There were no changes in the Group's internal control over financial reporting that occurred during the period covered by this report that have materially affected, or that were reasonably likely to materially affect, the Group's internal control over financial reporting.

4. Internal control and risk management procedures (Article L. 225-37 of the French Commercial Code)

For additional information, refer to point 4 (Internal control and risk management procedures) of chapter 4 of the 2016 Registration Document (starting on page 76), which is incorporated herein by reference.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Ms. Marie-Christine Coisne-Roquette is the Audit Committee financial expert. She is an independent member of the Board of Directors in accordance with the NYSE listing standards applicable to TOTAL.

ITEM 16B. CODE OF ETHICS

At its meeting on October 27, 2016, the Board of Directors adopted a revised code of ethics that applies to its Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer and the financial and accounting officers for its principal activities. A copy of this code of ethics is included as an exhibit to this Annual Report.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES**1. Fees for accountants services**

During the fiscal years ended December 31, 2016 and 2015, fees for services provided by ERNST & YOUNG Audit and KPMG Audit were as follows:

(M\$)	ERNST & YOUNG Audit		KPMG Audit	
	fiscal year 2016	fiscal year 2015	fiscal year 2016	fiscal year 2015
Audit Fees	20.2	22.0	16.5	16.0
Audit-Related Fees ^(a)	5.0	1.1	4.5	4.8
Legal, Tax, Labor Law Fees ^(b)	6.1	3.3	2.4	3.0
All Other Fees ^(c)	0.5	0.5	0.1	0.3
Total	31.8	26.9	23.5	24.1

^(a) *Audit-related fees are generally fees billed for services that are closely related to the performance of the audit or review of financial statements. These include due diligence services related to business combinations, attestation services not required by statute or regulation, agreed upon or expanded auditing procedures related to accounting or billing records required to respond to or comply with financial, accounting or regulatory reporting matters, consultations concerning financial accounting and reporting standards, information system reviews, internal control reviews and assistance with internal control reporting requirements.*

- (b) *Tax fees are fees for services related to international and domestic tax compliance, including the preparation of tax returns and claims for refund, tax planning and tax advice, including assistance with tax audits and tax appeals, and tax services regarding statutory, regulatory or administrative developments and expatriate tax assistance and compliance.*
- (c) *All other fees are principally for risk management advisory services.*

2. Audit Committee Pre-Approval Policy

The Audit Committee has adopted an Audit and Non-Audit Services Pre-Approval Policy that sets forth the procedures and the conditions pursuant to which services proposed to be performed by the statutory auditors may be pre-approved and that are not prohibited by regulatory or other professional requirements. This policy provides for both pre-approval of certain types of services through the use of an annual budget approved by the Audit Committee for these types of services and special pre-approval of services by the Audit Committee on a case-by-case basis. The Audit Committee reviews on an annual basis the services provided by the statutory auditors. During 2016, no audit-related fees, tax fees or other non-audit fees were approved by the Audit Committee pursuant to the de minimis exception to the pre-approval requirement provided by paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

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French law provides that the statutory and alternate auditors are appointed for renewable 6 fiscal-year terms. The terms of office of the current statutory auditors and the alternate auditors will expire at the end of the Annual Shareholders Meeting called in 2022 to approve the financial statements for fiscal year 2021.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

None.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Period	Total Number Of Shares (Or Units) Purchased	Average Price Paid Per Share (Or Units) (€)	Total Number Of Shares (Or Units) Purchased, As Part Of Publicly Announced Plans Or Programs ^(a)	Maximum Number Of Shares (Or Units) That May Yet Be Purchased Under The Plans Or Programs ^(b)
January 2016				131,432,881
February 2016				131,433,756
March 2016				131,436,470
April 2016				133,915,736
May 2016				133,917,941
June 2016				136,360,049
July 2016				139,415,875
August 2016				139,422,212
September 2016				139,482,313
October 2016				142,037,884
November 2016				142,059,395
December 2016	100,331,268 ^(c)	47.495 ^(d)	100,331,268	232,448,764
January 2017				234,779,415
February 2017				234,792,947

^(a) The Annual Shareholders Meeting of May 24, 2016, canceled and replaced the previous resolution from the Annual Shareholders Meeting of May 29, 2015, authorizing the Board of Directors to trade in the Company s own shares on the market for a period of eighteen months within the framework of the stock purchase program. The maximum number of shares that may be purchased by virtue of this authorization or under the previous

authorization may not exceed 10% of the total number of shares constituting the share capital, this amount being periodically adjusted to take into account operations modifying the share capital after each shareholders meeting. Under no circumstances may the total number of shares the Company holds, either directly or indirectly through its subsidiaries, exceed 10% of the share capital. This authorization will be renewed subject to the approval of the Annual Shareholders Meeting of May 26, 2017 through the 5th resolution.

- (b) Based on 10% of the Company's share capital, and after deducting the shares held by the Company for cancellation and the shares held by the Company to cover the share purchase option plans for Company employees and restricted share grants for Company employees, as well as after deducting the shares held by the subsidiaries.
- (c) Under the authorization granted by the Annual Shareholders Meeting of May 24, 2016, 100,331,268 TOTAL treasury shares owned by Group affiliates were bought back by TOTAL S.A. in order to be immediately canceled. For additional information, refer to point 3 (Share buybacks) of chapter 8 of the 2016 Registration Document (starting on page 183), which is incorporated herein by reference.
- (d) Price equal to the closing price of TOTAL ordinary share on Euronext Paris on the day of the buyback, which was completed off-market on December 15, 2016, i.e. €47.495 per share.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

This section presents a summary of significant differences between French corporate governance practices and the NYSE's corporate governance standards, as required by section 303A.11 of the NYSE Listed Company Manual.

Overview

The following paragraphs provide a brief, general summary of significant ways in which our corporate governance practices differ from those required by the listing standards of the New York Stock Exchange (NYSE) for U.S. companies that have common stock listed on the NYSE. While our management believes that our corporate governance practices are similar in many respects to those of U.S. domestic NYSE listed companies and provide investors with protections that are comparable in many respects to those established by the NYSE Listed Company Manual, certain significant differences are described below.

The principal sources of corporate governance standards in France are the French Commercial Code (*Code de commerce*), the French Financial and Monetary Code (*Code monétaire et financier*) and the regulations and recommendations provided by the French Financial Markets Authority (*Autorité des marchés financiers*, AMF), as well as a number of general recommendations and guidelines on corporate governance, most notably the Corporate Governance Code of Listed Corporations (the AFEP-MEDEF Code) published by the two main French business confederations, the *Association Française des Entreprises Privées* (AFEP) and the *Mouvement des Entreprises de France* (MEDEF) , the latest version of which was published in November 2016.

The AFEP-MEDEF Code includes, among other things, recommendations relating to the role and operation of the board of directors (creation, composition and evaluation of the board of directors and the audit, compensation and nominating committees) and the independence criteria for board members. Articles L. 820-1 *et seq.* of the French Commercial Code prohibits statutory auditors from providing certain non-audit services and defines certain criteria for the independence of statutory auditors. In France, the independence of statutory auditors is also monitored by an independent body, the High Council for Statutory Auditors (*Haut Conseil du Commissariat aux Comptes*).

For an overview of certain of our corporate governance policies, see points 1.1 to 1.3 of chapter 5 of the 2016 Registration Document (starting on page 87), which are incorporated herein by reference.

Table of Contents***Composition of Board of Directors; Independence***

The NYSE listing standards provide that the board of directors of a U.S.-listed company must include a majority of independent directors and that the audit committee, the nominating/corporate governance committee and the compensation committee must be composed entirely of independent directors. A director qualifies as independent only if the board affirmatively determines that the director has no material relationship with the company, either directly or as a partner, shareholder or officer of an organization that has a relationship with the company. Furthermore, as discussed below, the listing standards require additional procedures in regards to the independence of directors who sit on the compensation committee. In addition, the listing standards enumerate a number of relationships that preclude independence.

French law does not contain any independence requirement for the members of the board of directors of a French company, except for the audit committee, as described below. The AFEP-MEDEF Code recommends, however, that (i) at least half of the members of the board of directors be independent in companies that have a dispersed ownership structure and no controlling shareholder, and (ii) at least a third of the members of the board of directors be independent in companies that have a controlling shareholder. Members of the board representing employees and employee shareholders are not taken into account in calculating these percentages. The AFEP-MEDEF Code states that a director is independent when he or she has no relationship of any kind whatsoever with the corporation, its group or the management that may interfere with his or her freedom of judgment. The AFEP-MEDEF Code also enumerates specific criteria for determining independence, which are on the whole consistent with the goals of the NYSE listing standards, as recently amended, although the specific tests under the two standards may vary on some points.

For an overview of the Company's Board of Directors' assessment of the independence of the Company's Directors, including a description of the Board's independence criteria, refer to point 1.1.3 of chapter 5 of the 2016 Registration Document (on [page 96](#)), which is incorporated herein by reference.

Representation of women on corporate boards

The French Commercial Code provides for legally binding quotas to balance gender representation on boards of directors of French listed companies, requiring that each gender represent at least 40% following the first ordinary shareholders' meeting held after January 1, 2017. Members of the board representing the employees are not taken into account in calculating these percentages. Effective January 1, 2017, when the board of directors consists of a maximum of eight members, the difference between the number of directors of each gender should not be higher than two. Any appointment of a director made in violation of these rules will be declared null and void and payment of the directors' compensation will be suspended until the board composition is compliant with the required quota (the suspension of the directors' compensation will also be disclosed in the management report). However, if a director whose appointment is null and void takes part in decisions of the board of directors, such decisions are not declared automatically null and void by virtue thereof. As of February 8, 2017, the Company's Board had six male and six female members. Therefore, excluding the director representing employees in accordance with French law⁽¹⁾, the proportion of women on the Board was 54.5%.

Board committees**Overview**

The NYSE listing standards require that a U.S.-listed company have an audit committee, a nominating/corporate governance committee and a compensation committee. Each of these committees must consist solely of independent directors and must have a written charter that addresses certain matters specified in the listing standards. Furthermore, the listing standards require that, in addition to the independence criteria referenced above under *Composition of Board of Directors; Independence*, certain enumerated factors be taken into consideration when making a determination on the independence of directors on the compensation committee or when engaging advisors to the compensation committee.

With the exception of an audit committee, as described below, French law currently requires neither the establishment of board committees nor the adoption of written charters.

The AFEP-MEDEF Code recommends, however, that the board of directors sets up, in addition to the audit committee required by law, a nominations committee and a compensation committee, indicating that the nominations and compensation committees may or may not be separate. The AFEP-MEDEF Code also recommends that at least two-thirds of the audit committee members and a majority of the members of each of the compensation committee and the nominations committee be independent directors, provided that the chairman of the compensation committee should be independent, and that none of those three committees should include any executive director.

TOTAL has established an Audit Committee, a Governance and Ethics Committee, a Compensation Committee and a Strategic Committee. As of February 8, 2017, the composition of these committees was as follows:

the Audit Committee had three members, all members of this committee have been deemed independent by the Board of Directors;

the Governance and Ethics Committee had three members, all members of this committee have been deemed independent by the Board of Directors;

the Compensation Committee had three members, all of whom have been deemed independent by the Board of Directors; and

the Strategic Committee had five members. With the exception of Mr. Pouyanné, who chairs the committee and the director representing the employees (Mr. Blanc), all members of this committee have been deemed independent by the Board of Directors.

For a description of the scope of each committee's activity and the independence assessment of each member, see points 1.2.4-1.2.7 of chapter 5 of the 2016 Registration Document (starting on [page 105](#)), which are incorporated herein by reference.

The NYSE listing standards also require that the audit, nominating/corporate governance and compensation committees of a U.S.-listed company be vested with decision-making powers on certain matters. Under French law, however, those committees are advisory in nature and have no decision-making authority. Board committees are responsible for examining matters within the scope of their charter and making recommendations thereon to the board of directors. Under French law, the board of directors has the final decision-making authority.

Audit committee

The NYSE listing standards contain detailed requirements for the audit committees of U.S.-listed companies. Some, but not all, of these requirements also apply to non-U.S.-listed companies, such as TOTAL. French law and the AFEP-MEDEF Code share the NYSE listing standards' goal of establishing a system for overseeing the company's accounting process that is independent from management and that ensures auditor independence. As a result, they address similar topics, with some overlap.

Article L. 823-19 of the French Commercial Code requires the board of directors of companies listed in France to establish an audit committee, at least one member of which must be an independent director and must be competent in finance, accounting or statutory audit

⁽¹⁾ *As per French law, the director representing employees shall be excluded for the computation of the gender percentage. As of February 8, 2017, the gender percentage is 54.5%, because six Board seats were held by women out of a total of eleven seats (excluding the director representing the employees of TOTAL's Board of Directors).*

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procedures. The AFEP-MEDEF Code provides that at least two-thirds of the directors on the audit committee be independent and that the audit committee should not include any executive director. Under NYSE rules, in the absence of an applicable exemption, audit committees are required to satisfy the independence requirements under Rule 10A-3 of the Exchange Act. TOTAL's Audit Committee consists of three directors, all of whom meet the independence requirements under Rule 10A-3.

The duties of the Company's Audit Committee, in line with French law and the AFEP-MEDEF Code, are described in point 1.2.4 of chapter 5 of the 2016 Registration Document (starting on [page 105](#)), which is incorporated herein by reference. The Audit Committee regularly reports to the Board of Directors on the fulfillment of its tasks, the results of the financial statements certification process and the contribution of such process to guaranteeing the financial information's integrity.

One structural difference between the legal status of the audit committee of a U.S.-listed company and that of a French-listed company concerns the degree of the committee's involvement in managing the relationship between the company and the auditors. French law requires French companies that publish consolidated financial statements, such as TOTAL S.A., to have two co-auditors. While the NYSE listing standards require that the audit committee of a U.S.-listed company have direct responsibility for the appointment, compensation, retention and oversight of the work of the auditor, French law provides that the election of the co-auditors is the sole responsibility of the shareholders duly convened at a shareholders' meeting. In making their decision, the shareholders may rely on proposals submitted to them by the board of directors based on recommendations from the audit committee. The shareholders elect the auditors for an audit period of six financial years. The auditors may only be revoked by a court order and only on grounds of professional negligence or incapacity to perform their mission.

Meetings of non-management directors

The NYSE listing standards require that the non-management directors of a U.S.-listed company meet at regularly scheduled executive sessions without management. French law does not contain such a requirement. The AFEP-MEDEF Code recommends, however, that non-executive directors meet at least once a year without executive officers.

Since December 16, 2015, the rules of procedure of the Board of Directors provide that, with the agreement of the Governance and Ethics Committee, the Lead Independent Director may hold meetings of the directors who do not hold executive or salaried positions on the Board of Directors. He or she reports to the Board of Directors on the conclusions of such meetings.

In December 2016, the Lead Independent Director held a meeting of the non-executive and non-salaried directors. She subsequently presented a summary of this meeting to the Board of Directors.

Thus, the Board of Directors' practice is in line with the recommendation made in the AFEP-MEDEF Code.

Disclosure

The NYSE listing standards require U.S.-listed companies to adopt, and post on their websites, a set of corporate governance guidelines. The guidelines must address, among other things: director qualification standards, director responsibilities, director access to management and independent advisers, director compensation, director orientation and continuing education, management succession and an annual performance evaluation of the board. In addition, the

chief executive officer of a U.S.-listed company must certify to the NYSE annually that he or she is not aware of any violations by the company of the NYSE's corporate governance listing standards.

French law requires neither the adoption of such guidelines nor the provision of such certification. The AFEP-MEDEF Code recommends, however, that the Board of Directors of a French-listed company review its operation annually and perform a formal evaluation at least once every three years, under the leadership of the appointments or nominations committee or an independent director, with help from an external consultant. TOTAL's Board of Directors' most recent formal evaluation took place in early 2016. The AFEP-MEDEF Code also recommends that shareholders be informed of these evaluations each year in the annual report. In addition, Article L. 225-37 of the French Commercial Code requires the chairman of the Board of Directors to submit an annual report to the shareholders describing the composition of the board and the balanced representation of men and women on the board, the preparation and organization of the board's work, as well as the internal control and risk management procedures implemented by the company. The AFEP-MEDEF Code also includes ethical rules concerning which directors are expected to comply.

Code of business conduct and ethics

The NYSE listing standards require each U.S.-listed company to adopt, and post on its website, a code of business conduct and ethics for its directors, officers and employees. There were no similar requirements applicable under French law in 2016. Article 17 of Law n° 2016/1691 (Sapin II) of December 9, 2016, requires the top management (such as the President or Chief Executive Officer) of large French companies to adopt by June 1, 2017, a code of conduct proscribing the different types of behavior being likely to characterize acts of corruption, bribery or influence peddling, which code shall be included in the rules of procedure of the company and be submitted to employee representatives. Under the SEC's rules and regulations, all companies required to submit periodic reports to the SEC, including TOTAL, must disclose in their annual reports whether they have adopted a code of ethics for their principal executive officer and senior financial officers. In addition, they must file a copy of the code with the SEC, post the text of the code on their website or undertake to provide a copy upon request to any person without charge. There is significant, though not complete, overlap between the code of ethics required by the NYSE listing standards and the code of ethics for senior financial officers required by the SEC's rules. For a description of the code of ethics adopted by TOTAL, refer to point 4 of chapter 4 of the 2016 Registration Document (starting on [page 76](#)), which is incorporated herein by reference, and [Item 16B. Code of Ethics](#) .

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 17. FINANCIAL STATEMENTS

Not applicable.

ITEM 18. FINANCIAL STATEMENTS

The Consolidated Financial Statements and Notes thereto included in the 2016 Registration Document (starting on [page 205](#)) are incorporated herein by reference.

The reports of the statutory auditors, ERNST & YOUNG Audit and KPMG Audit, a division of KPMG S.A., are included in the following pages:

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KPMG Audit, a division of KPMG S.A.	ERNST & YOUNG Audit
Tour EQHO	1/2, place des Saisons
2 Avenue Gambetta	92400 Courbevoie Paris La Défense 1
CS 60055	France
92066 Paris la Défense Cedex	

France

TOTAL S.A.

Registered office: 2, place Jean Millier La Défense 6 92400 Courbevoie France

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRMS ON THE CONSOLIDATED FINANCIAL STATEMENTS

Year ended December 31, 2016

The Board of Directors and Shareholders,

We have audited the accompanying consolidated balance sheets of TOTAL S.A. and subsidiaries (the Company) as of December 31, 2016, 2015 and 2014, and the related consolidated statements of income, comprehensive income, cash flows and changes in shareholders' equity for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company's management. 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. 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 consolidated financial position of the Company as of December 31, 2016, 2015 and 2014, and the consolidated results of its operations and its consolidated cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with International Financial Reporting Standards as adopted by the European Union and in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 15, 2017 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Paris La Défense, March 15, 2017

KPMG Audit

A division of KPMG S.A.

/s/ MICHEL PIETTE
Michel Piette
Partner

/s/ VALÉRIE BESSON
Valérie Besson
Partner

ERNST & YOUNG Audit

/s/ YVON SALAÜN
Yvon Salaün
Partner

/s/ LAURENT MIANNAY
Laurent Miannay
Partner

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KPMG Audit, a division of KPMG S.A.	ERNST & YOUNG Audit
Tour EQHO	1/2, place des Saisons
2 Avenue Gambetta	92400 Courbevoie Paris La Défense 1
CS 60055	France
92066 Paris la Défense Cedex	
France	
TOTAL S.A.	

Registered office: 2, place Jean Millier La Défense 6 92400 Courbevoie France

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRMS ON THE
INTERNAL CONTROL OVER FINANCIAL REPORTING**

Year ended December 31, 2016

The Board of Directors and Shareholders,

We have audited TOTAL S.A. and subsidiaries (the Company) internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our 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 effective internal control over financial reporting was maintained in all material respects. Our audit 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 opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2016, 2015 and 2014, and the related consolidated statements of income, comprehensive income, cash flows and changes in shareholders' equity for each of the years in the three-year period ended December 31, 2016, and our report dated March 15, 2017 expressed an unqualified opinion on those consolidated financial statements.

Paris La Défense, March 15, 2017

KPMG Audit

A division of KPMG S.A.

/s/ MICHEL PIETTE /s/ VALÉRIE BESSON
Michel Piette Valérie Besson
Partner *Partner*

ERNST & YOUNG Audit

/s/ YVON SALAÜN /s/ LAURENT MIANNAY
Yvon Salaün Laurent Miannay
Partner *Partner*

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ITEM 19. EXHIBITS

The following documents are filed as part of this annual report:

- 1 Bylaws (Statuts) of TOTAL S.A. (as amended through January 12, 2017).
- 2 The total amount of long-term debt securities authorized under any instrument does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis. We hereby agree to furnish to the SEC, upon its request, a copy of any instrument defining the rights of holders of long-term debt of the Company or of its subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.
- 7.1 Ratio of earnings to fixed charges.
- 7.2 Computation of earnings to fixed charges.
- 8 List of Subsidiaries (see Note 18 to the Consolidated Financial Statements included in the 2016 Registration Document (starting on page 290), which is incorporated herein by reference).
- 11 Code of Ethics.
- 12.1 Certification of Chief Executive Officer.
- 12.2 Certification of Chief Financial Officer.
- 13.1 Certification of Chief Executive Officer.
- 13.2 Certification of Chief Financial Officer.
- 15.1 Excerpt of the pages and sections of the 2016 Registration Document incorporated herein by reference.
- 15.2 Consent of ERNST & YOUNG Audit and of KPMG Audit, a division of KPMG S.A.
- 15.3 Third party report of DeGolyer and MacNaughton.
- 15.4 Consent of DeGolyer and MacNaughton.

SIGNATURE

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.

TOTAL S.A.

By: /s/ PATRICK POUYANNÉ
Name: Patrick Pouyanné
Title: Chairman and Chief Executive Officer

Date: March 17, 2017