## 20-F 1 d20f.htm FORM 20-F

## **Table of Contents**

### 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, 2009

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. 2, place Jean Millier La Défense 6 92400 Courbevoie France Tel: +33 (0)1 47 44 45 46 Fax: +33 (0)1 47 44 49 44 (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	Name of each exchange on which registered
Shares	New York Stock Exchange*
American Depositary Shares	New York Stock Exchange

\* Not for trading, but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act.

#### None

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

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. 2,348,422,884 Shares, par value €2.50 each, as of December 31, 2009

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 D 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  $\boxtimes$ 

Non-accelerated filer

Indicate by check mark which basis of acco	ounting the registrant has used to prepare the financial statements included in this filing:	
U.S. GAAP	International Financial Reporting Standards as issued by the International Accounting Standards Board 🗵	Other D
If "Other" has been checked in response to Item 18	o the previous question, indicate by check mark which financial statement item the registrant has o	elected to follow. Item 17
If this is an annual report, indicate by check	k mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).	Yes 🗆 No 🗵

Accelerated filer  $\ \square$ 

## TABLE OF CONTENTS

		Page
CERTAIN TER	IMS .	iii
ABBREVIATIC	INS CONTRACTOR OF	iv
CONVERSION	ITABLE	v
Item 1.	Identity of Directors, Senior Management and Advisers	1
Item 2.	Offer Statistics and Expected Timetable	1
Item 3.	Key Information	1
	Selected Financial Data	1
	Exchange Rate Information	3
	Risk Factors	4
Item 4.	Information on the Company	8
	History and Development	8
	Business Overview	9
	Other Matters	50
Item 4A.	Unresolved Staff Comments	61
Item 5.	Operating and Financial Review and Prospects	62
Item 6.	Directors, Senior Management and Employees	76
	Directors and Senior Management	76
	Compensation	84
	Corporate Governance	104
	Employees and Share Ownership	109
Item 7.	Major Shareholders and Related Party Transactions	112
Item 8.	Financial Information	114
Item 9.	The Offer and Listing	119
Item 10.	Additional Information	121
Item 11.	Quantitative and Qualitative Disclosures About Market Risk	130
Item 12.	Description of Securities Other than Equity Securities	131
Item 13.	Defaults, Dividend Arrearages and Delinquencies	132
Item 14.	Material Modifications to the Rights of Security Holders and Use of Proceeds	132
Item 15.	Controls and Procedures	132
Item 16A.	Audit Committee Financial Expert	133
Item 16B.	Code of Ethics	133
Item 16C.	Principal Accountant Fees and Services	133
Item 16D.	Exemptions from the Listing Standards for Audit Committees	133
Item 16E.	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	134
Item 16F.	Change in Registrant's Certifying Accountant	134
Item 16G.	Corporate Governance	135
Item 17.	Financial Statements	137
Item 18.	Financial Statements	137
Item 19.	Exhibits	138

## **Basis of Presentation**

Financial information included in this Annual Report is presented according to 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, 2009.

## **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 and operations and financial information relating to the fiscal year ended December 31, 2009. For more recent updates regarding TOTAL, you may read and copy 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 Web site at http://www.sec.gov and from certain commercial document retrieval services. See also "Item 10. Additional Information — Documents on Display".

ii

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

"acreage"	The total area, expressed in acres, over which TOTAL has interests in exploration or production.
"ADRs"	American Depositary Receipts evidencing ADSs.
"ADSs"	American Depositary Shares representing the shares of TOTAL S.A.
"barrels"	Barrels of crude oil, natural gas liquids (NGL) or bitumen.
"Company"	TOTAL S.A.
"condensates"	Condensates are a mixture of hydrocarbons that exist in a gaseous phase at original reservoir temperature and pressure, but that, when produced, exist in a liquid phase at surface temperature and pressure. Condensates are sometimes referred to as C5+.
"crude oil"	Crude oil is a mixture of compounds (mainly pentanes and heavier hydrocarbons) that exists in a liquid phase at original reservoir temperature and pressure and remains liquid at atmospheric pressure and ambient temperature. "Crude oil" or "oil" are sometimes used as generic terms to designate crude oil plus natural gas liquids (NGL).
"Depositary"	The Bank of New York Mellon.
"Depositary Agreement"	The depositary agreement pursuant to which ADSs are issued, a copy of which is attached as Exhibit 1 to the registration statement on Form F-6 (Reg. No. 333-149331) filed with the SEC on February 21, 2008.
"Group"	TOTAL S.A. and its subsidiaries and affiliates. The terms TOTAL and Group are used interchangeably.
"hydrocracker"	A refinery unit which uses a catalyst and extraordinarily high pressure, in the presence of surplus hydrogen, to shorten molecules.
"liquids"	Liquids consist of crude oil, bitumen and natural gas liquids (NGL).
"LNG"	Liquefied natural gas.
"LPG"	Liquefied petroleum gas is a mixture of hydrocarbons, the principal components of which are propane and butane, in a gaseous state at atmospheric pressure, but which is liquefied under moderate pressure and ambient temperature
"NGL"	Natural gas liquids consist of condensates and liquefied petroleum gas (LPG).
"oil and gas"	Generic term which includes all hydrocarbons ( <i>e.g.</i> , crude oil, natural gas liquids (NGL), bitumen and natural gas).
"proved reserves"	Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations, prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The full definition of

**CERTAIN TERMS** 

iii

		elsewhere in reports we Securities Act of 1933, a	e are required to follow in presenting such information in our financial results and file with the SEC is found in Rule 4-10 of Regulation S-X under the U.S. s amended (including as amended by the SEC "Modernization of Oil and Gas 33-8995 of December 31, 2008).
"proved deve	loped reserves"	<ul> <li>(i) through existing wells required equipment is re extraction equipment an by means not involving a presenting such informa in Rule 4-10 of Regulation</li> </ul>	d gas reserves are proved reserves that can be expected to be recovered with existing equipment and operating methods or in which the cost of the latively minor compared to the cost of a new well; and (ii) through installed d infrastructure operational at the time of the reserves estimate if the extraction is well. The full definition of "developed reserves" that we are required to follow in ion in our financial results and elsewhere in reports we file with the SEC is found on S-X under the U.S. Securities Act of 1933, as amended (including as amended on of Oil and Gas Reporting" Release No. 33-8995 of December 31, 2008).
"proved unde	eveloped reserves"	new wells on undrilled a recompletion. The full de such information in our f 10 of Regulation S-X un	and gas reserves are proved reserves that are expected to be recovered from preage, or from existing wells where a relatively major expenditure is required for finition of "undeveloped reserves" that we are required to follow in presenting nancial results and elsewhere in reports we file with the SEC is found in Rule 4- der the U.S. Securities Act of 1933, as amended (including as amended by the bil and Gas Reporting" Release No. 33-8995 of December 31, 2008).
"steam crack	er"	A petrochemical plant th chemical raw materials.	at turns naphtha and light hydrocarbons into ethylene, propylene, and other
"TOTAL"			idiaries and affiliates. We use such term interchangeably with the term Group. rent holding company alone, we use the term TOTAL S.A. or the Company.
"trains"		Facilities for converting,	liquefying, storing and off-loading natural gas.
"ERMI"		complex refinery located	nded to represent the refining margin after variable costs for a theoretical around Rotterdam in Northern Europe that processes a mix of crude oil and upplied to this region to produce and market the main refined products at agion.
"turnarounds	<sup>39</sup>	Temporary shutdowns o	facilities for maintenance, overhaul and upgrading.
		ABBREVIA	TIONS
b cf boe t m <sup>3</sup> /d /y	barrel cubic feet barrel of oil equivalent metric ton cubic meter per day per year	k M W GWh TWh WP	thousand million billion watt gigawatt-hour terawatt-hour watt peak

barrel cubic feet barrel of oil e metric ton cubic meter per day per year	equivalent	k M W GWh TWh Btu	thousand million billion watt gigawatt-hour terawatt-hour watt peak British thermal unit
		Btu	British thermal unit

iv

1 acre	= 0.405 hectares	
1 b	= 42 U.S. gallons	
1 boe	= 1 b of crude oil	= 5,490 cf of gas in 2009 <sup>(a)</sup>
		= 5,505 cf of gas in 2008
		= 5,508 cf of gas in 2007
1 b/d of crude oil	= approximately 50 t/y of crude oil	
1 Bm <sup>3</sup> /y	= approximately 0.1 Bcf/d	
1 m <sup>3</sup>	= 35.3147 cf	
1 kilometer	= approximately 0.62 miles	
1 ton	= 1 t	= 1,000 kilograms (approximately 2,205 pounds)
1 ton of oil	= 1 t of oil	= approximately 7.5 b of oil (assuming a specific gravity of 37° API)
1 t of LNG	= approximately 48 kcf of gas	
1 Mt/y LNG	= approximately 131 Mcf/d	

(a) Natural gas is converted to barrels of oil equivalent using a ratio of cubic feet of natural gas per one barrel. This ratio is based on the actual average equivalent energy content of TOTAL's natural gas reserves during the applicable periods, and is subject to change. The tabular conversion rate is applicable to TOTAL's natural gas reserves on a group-wide basis.

v

## **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.

You should understand that 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 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 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; 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, you should read the information set forth under "Item 3. Risk Factors", "Item 4. Information on the Company - Other Matters", "Item 5. Operating and Financial Review and Prospects" and "Item 11. Quantitative and Qualitative Disclosures About Market Risk".

vi

## ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

## ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

**ITEM 3. KEY INFORMATION** 

# SELECTED FINANCIAL DATA

The following table presents selected consolidated financial data for TOTAL on the basis of International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and IFRS as adopted by the European Union for the years ended December 31, 2009, 2008, 2007, 2006 and 2005. The historical consolidated financial statements of

TOTAL for these periods, from which the financial data presented below for such periods are derived, have been audited by Ernst & Young Audit and KPMG S.A., independent registered public accounting firms, and the Company's auditors. All such data should be read in conjunction with the Consolidated Financial Statements and the Notes thereto included elsewhere herein.

## SELECTED CONSOLIDATED FINANCIAL DATA

(M€, except per share data)	2009	2008	2007	2006	2005
NCOME STATEMENT DATA					
Revenues from sales	112,153	160,331	136,824	132,689	117,057
Net income, Group share	8,447	10,590	13,181	11,768	12,273
Earnings per share <sup>(a)</sup>	3.79	4.74	5.84	5.13	5.23
Fully diluted earnings per share <sup>(a)</sup>	3.78	4.71	5.80	5.09	5.20
CASH FLOW STATEMENT DATA(b)(c)					
Cash flow from operating activities	12,360	18,669	17,686	16,061	14,669
Total expenditures	13,349	13,640	11,722	11,852	11,195
BALANCE SHEET DATA <sup>(C)</sup>					
Total assets	127,753	118,310	113,541	105,223	106,144
Non-current financial debt	19,437	16,191	14,876	14,174	13,793
Minority interests	987	958	842	827	838
Shareholders' equity — Group share	52,552	48,992	44,858	40,321	40,645
Common shares	5,871	5,930	5,989	6,064	6,151
DIVIDENDS					
Dividend per share (euros) <sup>(a)</sup>	€2.28 <sup>(d)</sup>	€2.28	€2.07	€1.87	€1.62
Dividend per share (dollars) <sup>(a)</sup>	\$3.29 <sup>(d)(e)</sup>	\$2.91	\$3.14	\$2.46	\$1.99
COMMON SHARES <sup>(f)</sup>					
Average number outstanding of common shares €2.50 par value					
(shares undiluted) <sup>(g)</sup>	2,230,559,211	2,234,856,551	2,255,294,231	2,293,063,190	2,347,222,792
Average number outstanding of common shares €2.50 par value					
(shares diluted) <sup>(g)</sup>	2,237,292,199	2,246,658,542	2,274,384,984	2,312,304,652	2,362,028,860

(a) Historical figures regarding per share information for 2005 have been recalculated to reflect the four-for-one stock split on May 18, 2006.

(b) See Consolidated Statement of Cash Flows included in the Consolidated Financial Statements.

(c) Comparative balance sheets and cash flow information for 2005 and (in the case of cash flow information) 2006 include Arkema, which was spun off on May 12, 2006. (d) Subject to approval by the shareholders' meeting on May 21, 2010.

(e) Estimated dividend in dollars includes the interim dividend of \$1.695 paid in November 2009 and the proposed final dividend of €1.14, converted at a rate of \$1.40/€.

(g) Historical figures regarding average number outstanding of common shares for 2005 have been recalculated to reflect the four-for-one stock split on May 18, 2006.

## 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 euros ("euros" or "€") or in U.S. dollars ("dollars" or "\$"). For the convenience of the reader, this Annual Report on Form 20-F presents certain translations into dollars of certain euro amounts. Unless otherwise stated, the translation of euros to dollars has been made at the noon buying rate in New York City for cable transfers in euros as certified for customs purposes by The Federal Reserve Bank of New York (the "Noon Buying Rate") for December 31, 2009, of \$1.43 per €1.00.

The following tables set out the average dollar/euro exchange rate for the years indicated, based on the Noon Buying Rate expressed in dollars per €1.00. Such rates are not used by TOTAL in preparation of 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**

Year	Average Rate <sup>(a)</sup>
2005	1.24
2006	1.26
2007	1.37
2008	1.47
2009	1.40

(a) The average of the Noon Buying Rate expressed in dollars/euro on the last business day of each month during the relevant year. The table below shows the high and low dollar/euro exchange rates for the three months ended December 31, 2009, and for the first three months of 2010, based on the Noon Buying Rate expressed in dollars per euro.

## **DOLLAR/EURO EXCHANGE RATES**

Period	High	Low
October 2009	1.50	1.45
November 2009	1.51	1.47
December 2009	1.51	1.42
January 2010	1.45	1.39
February 2010	1.40	1.35
March 2010 <sup>(a)</sup>	1.38	1.33

(a) Through March 26.

The Noon Buying Rate on March 26, 2010, for the dollar against the euro was  $1.34/{\in}$ 

## **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. These conditions, along with TOTAL's approaches to managing certain of these risks, are described below and discussed in greater detail elsewhere in this Annual Report, particularly under the headings "Item 4. Information on the Company — Other Matters", "Item 5. Operating and Financial Review and Prospects" and "Item 11. Quantitative and Qualitative Disclosures About Market Risk".

### A substantial or extended decline in oil or natural gas prices would have a material adverse effect on our results of operations.

Prices for oil and natural gas historically have fluctuated widely due to many factors over which we have no control. These factors include:

- global and regional economic and political developments in resourceproducing regions, particularly in the Middle East, Africa and South America:
- global and regional supply and demand;
- the ability of the Organization of Petroleum Exporting Countries (OPEC) and other producing nations to influence global production levels and prices;
- prices of alternative fuels which affect our realized prices under our longterm gas sales contracts;
- governmental regulations and actions;
- global economic and financial market conditions;
- war or other international conflicts;
- cost and availability of new technology;
- changes in demographics, including population growth rates and consumer preferences; and
- adverse weather conditions (such as hurricanes) that can disrupt supplies or interrupt operations of our facilities.

Substantial or extended declines in oil and natural gas prices would adversely affect our results of operations by reducing our profits. For the year 2010, we estimate that a decrease of \$1.00 per barrel in the average annual price of Brent crude would have the effect of reducing our annual adjusted net operating income from the Upstream segment by approximately €0.11 billion (calculated with a base case exchange rate of \$1.40 per €1.00). In addition to the adverse effect on revenues, margins and profitability from any fall in oil and natural gas prices, a prolonged period of low prices or other indicators could lead to reviews for impairment of the Group's oil and natural gas properties.

would reflect management's view of long-term oil and natural gas prices and could result in a charge for impairment that could have a significant effect on our results of operations in the period in which it occurs. Lower oil and natural gas prices over prolonged periods may also reduce the economic viability of projects planned or in development, causing us to cancel or postpone capital expansion projects, and may reduce liquidity, thereby potentially decreasing our ability to finance capital expenditures. If we are unable to follow through with capital expansion projects, our opportunities for future revenue and profitability growth would be reduced, which could materially impact our financial condition.

## We face foreign exchange risks that could adversely affect our results of operations.

Our business faces foreign exchange risks because a large percentage of our revenues and cash receipts are denominated in dollars, the international currency of petroleum sales, while a significant portion of our operating expenses and income taxes accrue in euros and other currencies. Movements between the dollar and euro or other currencies may adversely affect our business by negatively impacting our booked revenues and income.

### Our long-term profitability depends on cost effective discovery and development of new reserves; if we are unsuccessful, our results of operations and financial condition would be materially and adversely affected.

A significant portion of our revenues and the majority of our operating income are derived from the sale of crude oil and natural gas which we extract from underground reserves discovered and developed as part of our Upstream business. In order for this business to continue to be profitable, we need to replace depleted reserves with new proved reserves. Furthermore, we need to accomplish such replacement in a manner that allows subsequent production to be economically viable. However, our ability to discover or acquire and develop new reserves successfully is uncertain and can be negatively affected by a number of factors, including:

- unexpected drilling conditions, including pressure or irregularities in geological formations;
- equipment failures or accidents;
- our inability to develop new technologies that permit access to previously inaccessible fields;
- adverse weather conditions;
- compliance with unanticipated governmental requirements;

- shortages or delays in the availability or delivery of appropriate equipment;
- industrial action; and
- problems with legal title.

Any of these factors could lead to cost overruns and impair our ability to make discoveries or complete a development project, or to make production economical. If we fail to discover and develop new reserves cost-effectively on an ongoing basis, our results of operations, including profits, and our financial condition, would be materially and adversely affected.

### Our crude oil and natural gas reserve data are only estimates, and subsequent downward adjustments are possible. If actual production from such reserves is lower than current estimates indicate, our results of operations and financial condition would be negatively impacted.

Our proved reserves figures are estimates reflecting applicable reporting regulations as they may evolve. Proved reserves are estimated by analysis of geoscience

and engineering data with reasonable certainty to be economically producible — from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations — prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. This process involves making subjective judgments. Consequently, estimates of reserves are not exact measurements and are subject to revision. They may be negatively impacted by a variety of factors which could cause such estimates to be adjusted downward in the future, or cause our actual production to be lower than our currently reported proved reserves indicate. The main factors which may cause our proved reserves estimates to be adjusted downward, or actual production to be lower than the amounts implied by our currently reported proved reserves, include:

- a decline in the price of oil or gas, making reserves no longer economically viable to exploit and therefore not classifiable as proved;
- an increase in the price of oil or gas, which may reduce the reserves that we are entitled to under production sharing and buyback contracts;
- changes in tax rules and other government regulations that make reserves no longer economically viable to exploit;
   the guality and guantity of our geological technical and compariso
- the quality and quantity of our geological, technical and economic data, which may prove to be inaccurate;
- the actual production performance of our reservoirs; and
- engineering judgments.

Many of the factors, assumptions and variables involved in estimating reserves are beyond our control and may prove to be incorrect over time. Results of drilling, testing and production after the date of the estimates may require substantial downward revisions in our reserve data. Any downward adjustment would indicate lower future production amounts and may adversely affect our results of operations, including profits as well as our financial condition.

## We have significant production and reserves located in politically, economically and socially unstable areas, where the likelihood of material disruption of our operations is relatively high.

A significant portion of our oil and gas production occurs in unstable regions around the world, most significantly Africa, but also the Middle East, Asia-Pacific and South America. Approximately 33%, 19%, 11% and 8%, respectively, of our 2009 production came from these four regions. In recent years, a number of the countries in these regions have experienced varying degrees of one or more of the following: economic instability, political volatility, civil war, violent conflict and social unrest. In Africa, certain of the countries in which we have production have recently suffered from some of these conditions. The Middle East in general has recently suffered increased political volatility in connection with violent conflict and social unrest. A number of countries in South America where we have production and other facilities, including Argentina, Bolivia and Venezuela, have suffered from political or economic instability and social unrest and related problems. In Asia-Pacific, Indonesia has suffered some of these conditions. Any of these conditions alone or in combination could disrupt our operations in any of these regions, causing substantial declines in production. Furthermore, in addition to current production, we are also exploring for and developing new reserves in other regions of the world that are historically characterized by political, social and economic instability, such as the Caspian Sea region where we have a number of large projects currently underway. The occurrence and magnitude of incidents related to economic, social and political instability are unpredictable. It is possible that they could have a material adverse impact on our production and operations in the future.

### We are subject to stringent environmental, health and safety laws in numerous jurisdictions around the world and may incur material costs to comply with these laws and regulations.

We are exposed to risks regarding safety and security of our operations. Our workforce and the public are exposed to risks inherent to our operations that

potentially could lead to injuries or loss of life and could result in regulatory action, legal liability and damage to our reputation. In addition, growing public concerns in the EU and globally that rising greenhouse gas emissions and climate change may significantly affect the environment and society could adversely affect our businesses, including by the addition of stricter regulations that increase our operating costs, affect product sales and reduce profitability.

We incur, and expect to continue to incur, substantial capital and operating expenditures to comply with increasingly complex laws and regulations covering the protection of the natural environment and the promotion of worker health and safety, including:

- costs to prevent, control, eliminate or reduce certain types of air and water emissions, including those costs incurred in connection with government action to address concerns of climate change;
- remedial measures related to environmental contamination or accidents at various sites, including those owned by third parties;
- compensation of persons claiming damages caused by our activities or accidents; and
- costs in connection with the decommissioning of drilling platforms and other facilities.

If our established financial reserves prove not to be adequate, environmental costs could have a material effect on our results of operations and our financial position. Furthermore, in the countries where we operate or expect to operate in the near future, new laws and regulations, the imposition of tougher license requirements, increasingly strict enforcement or new interpretations of existing laws and regulations or the discovery of previously unknown contamination may also cause us to incur material costs resulting from actions taken to comply with such laws and regulations, including:

- modifying operations;
- installing pollution control equipment;
- implementing additional safety measures; and
- performing site clean-ups.

As a further result of any new laws and regulations or other factors, we may also have to curtail or cease certain operations or implement temporary shutdowns of facilities, which could diminish our productivity and materially and adversely impact our results of operations, including profits.

Security threats require continuous oversight and control. Acts of terrorism against our plants and offices, pipelines, transportation or computer systems could severely disrupt businesses and operations and could cause harm to people.

#### Our operations throughout the developing world are subject to intervention by various governments, which could have an adverse effect on our results of operations.

We have significant exploration and production, and in some cases refining, marketing or chemicals operations, in developing countries whose governmental and regulatory framework is subject to unexpected change and where the enforcement of contractual rights is uncertain. In addition, our exploration and production activity in such countries is often done in conjunction with state-owned entities, for example as part of a joint venture, where the state has a significant degree of control. In recent years, in various regions globally, we have seen governments and state-owned enterprises exercising greater authority and imposing more stringent conditions on companies pursuing exploration and production activities in their respective countries, increasing the costs and uncertainties of our business operations, which is a trend we expect to continue. Potential increasing intervention by governments in such countries can take a wide variety of forms, including:

- the award or denial of exploration and production interests;
- the imposition of specific drilling obligations;
- price and/or production guota controls;
- nationalization or expropriation of our assets;
- unilateral cancellation or modification of our license or contract rights;
- increases in taxes and royalties, including retroactive claims;
- the establishment of production and export limits;
- the establishment of production and export if
   the renegotiation of contracts;
- payment delays; and
- currency exchange restrictions or currency devaluation.

Imposition of any of these factors by a host government in a developing country where we have substantial operations, including exploration, could cause us to incur material costs or cause our production to decrease, potentially having a material adverse effect on our results of operations, including profits.

#### We have activities in certain countries which are subject to U.S. sanctions and our activities in Iran could lead to sanctions under relevant U.S. legislation.

We currently have investments in Iran and, to a lesser extent, Syria, Myanmar, Sudan and Cuba. U.S. legislation and regulations currently impose economic sanctions on these countries.

In 1996, the United States adopted legislation implementing sanctions against non-U.S. companies doing business in Iran and Libya (the Iran and Libya Sanction Act, referred to as "ILSA"), which in 2006 was amended to concern only business in Iran (then renamed the Iran Sanctions Act, referred to as "ISA"). The ISA is set to expire in December 2011. Pursuant to this statute, the President of the United States is authorized to initiate an investigation into the activities of non-U.S. companies in Iran and the possible imposition of sanctions (from a list that includes denial of financing by the U.S. Export-Import Bank, limitations on the amount of loans or credits available from U.S. financial institutions and prohibition of U.S. federal procurements from sanctioned persons) against persons found, in particular, to have knowingly made investments of \$20 million or more in any 12-month period in the petroleum sector in Iran. In May 1998, the U.S. government waived the application of sanctions for TOTAL's investment in the South Pars gas field. This waiver, which has not been modified since it was granted, does not address TOTAL's other activities in Iran, although TOTAL has not been notified of any related sanctions

In November 1996, the Council of the European Union adopted regulations which prohibit TOTAL from complying with any requirement or prohibition based on or resulting directly or indirectly from certain enumerated legislation, including the ILSA (now ISA). It also prohibits TOTAL from having its waiver for South Pars extended to other activities.

In each of the years since the passage of the ILSA and until 2007, TOTAL made investments in Iran in excess of \$20 million (excluding the investments made as part of the development of South Pars). Since 2008, TOTAL's position has consisted essentially in being reimbursed for its past investments as part of buyback contracts signed between 1995 and 1999 with respect to permits on which the Group is no longer the operator. In 2009, TOTAL's production in Iran represented approximately 0.4% of the Group's worldwide production. TOTAL does not believe that its operations in Iran have a material impact on the Group's results.

In the future, TOTAL may decide to invest amounts in excess of \$20 million per year in Iran. To our knowledge, sanctions under the ISA have not been imposed on any non-U.S. oil and gas company which has investments in Iran. However, TOTAL cannot predict whether the U.S. government will take any action under the ISA with respect to its previous or possible future activities in Iran. It is possible, however, that the United States may determine that these or other activities constitute activity prohibited by the ISA and will subject TOTAL to sanctions. TOTAL does not believe that enforcement of the ISA against TOTAL, including the imposition of the maximum sanctions under the current version of the ISA, would have a material adverse effect on its results

of operations or financial condition, although it could result in reputational harm.

However, the U.S. House of Representatives and the Senate have recently passed bills which, if adopted, would expand the scope of the ISA and could restrict the President's ability to grant waivers. The proposed legislation would, among other things, require imposition of specific sanctions against companies that supply refined petroleum products to Iran, contribute to Iran's ability to maintain or expand domestic production or engage in certain related conduct. The sanctions to be imposed against violating firms would generally prohibit transactions in foreign exchange by the sanctioned company, prohibit any transfers of credit or payments between, by, through or to any financial institution to the extent that such transfers or payments involve any interest of the sanctioned company, and require blocking of any property of the sanctioned company that is subject to the jurisdiction of the United States. The bills would also generally forbid federal procurements from and assistance to non-U.S. companies that engage in sanctions-triggering actions.

TOTAL is closely monitoring legislative and other developments in the United States in order to determine whether its limited activities in Iran could subject it to application of either current or any future ISA sanctions. In the event the proposed legislation were adopted in its current form, such new legislation could potentially have a material adverse effect on TOTAL.

France and the European Union have adopted measures, based on United Nations Security Council resolutions, which restrict the movement of certain individuals and goods to or from Iran as well as certain financial transactions with Iran, in each case when such individuals, goods or transactions are related to nuclear proliferation and weapons activities or likely to contribute to their development. As currently applicable, the Group believes that these measures are not applicable to its activities and projects in this country.

The United States also imposes sanctions based on the United Nations Security Council resolutions described above, as well as broad and comprehensive economic sanctions, which are administrated by the U.S. Treasury Department's Office of Foreign Assets Control (referred to as "OFAC"). These OFAC sanctions generally apply to U.S. persons and activities taking place in the United States or that are otherwise subject to U.S. jurisdiction. Sanctions administered by OFAC target Cuba, Iran, Myanmar (Burma), Sudan and Syria. TOTAL does not believe that these sanctions are applicable to any of its activities in these countries.

In addition, many U.S. states have adopted legislation requiring state pension funds to divest themselves of investments in any company with active business

operations in Iran or Sudan. Recently, there have been similar initiatives by state insurance regulators relating to investments by insurance companies in companies doing business with the Iranian oil and gas, nuclear and defense sectors. TOTAL has no business operations in Sudan and, to date, has not made any significant investments or industrial investments there. The Genocide Intervention Network (formerly known as Sudan Divestment Task Force) report states that TOTAL should be regarded as "inactive" in Sudan by the U.S. states that have adopted such divestment legislation. On December 31, 2007, the U.S. Congress adopted the Sudan Accountability and Divestment Act, which supports these state legislative initiatives. Similar

legislation is pending in the U.S. Congress that supports state legislative initiatives regarding Iran. If TOTAL's operations in Iran or Sudan were determined to fall within the prohibited scope of these laws, and TOTAL were to not qualify for any available exemptions, certain U.S. state pension funds holding interests in TOTAL may be required to sell their interests. If significant, sales resulting from such laws and/or regulatory initiatives could have an adverse effect on TOTAL's share price.

For more information on TOTAL's presence in Cuba, Iran, Sudan and Syria, see "Item 4. Other Matters — Business Activities in Cuba, Iran, Sudan and Syria".

## **ITEM 4. INFORMATION ON THE COMPANY**

## HISTORY AND DEVELOPMENT

TOTAL S.A., a French *société anonyme* (limited company) incorporated in France on March 28, 1924, together with its subsidiaries and affiliates, is the fifth largest publicly-traded integrated international oil and gas company in the world.<sup>(1)</sup>

With operations in more than 130 countries, TOTAL engages in all aspects of the petroleum industry, including Upstream operations (oil and gas exploration, development and production, LNG) and Downstream operations (refining, marketing and the trading and shipping of crude oil and petroleum products).

TOTAL also produces base chemicals (petrochemicals and fertilizers) and specialty chemicals for the industrial and consumer markets. In addition, TOTAL has interests in the coal mining and power generation sectors, as well as a financial interest in Sanofi-Aventis.

TOTAL began its Upstream operations in the Middle East in 1924. Since that time, the Company has grown

and expanded its operations worldwide. In early 1999, the Company acquired control of PetroFina S.A. and, in early 2000, the Company acquired control of Elf Aquitaine S.A. (hereafter referred to as "Elf Aquitaine" or "Elf").

The Company's principal office is 2, place Jean Millier, La Défense 6, 92400 Courbevoie, France. Its telephone number is +33 (0)1 47 44 45 46.

The length of the life of the Company is 99 years from March 22, 2000, unless it is dissolved or extended prior to such date.

TOTAL S.A. is registered in France with the Nanterre Trade Register under the registration number 542 051 180.

<sup>1.</sup> Based on market capitalization (in dollars) as of December 31, 2009.

## **BUSINESS OVERVIEW**

TOTAL's worldwide operations are conducted through three business segments: Upstream, Downstream, and Chemicals. The table below gives information on the

geographic breakdown of TOTAL's activities and is taken from Note 5 to the Consolidated Financial Statements included elsewhere herein.

		Rest of	North			
(M€)	France	Europe	America	Africa	Rest of world	Total
2009						
Non-Group sales <sup>(a)</sup>	32,437	60,140	9,515	9,808	19,427	131,327
Property, plant and equipment, intangible assets, net	6,973	15,218	8,112	17,312	11,489	59,104
Capital expenditures	1,189	2,502	1,739	4,651	3,268	13,349
2008						
Non-Group sales <sup>(a)</sup>	43,616	82,761	14,002	12,482	27,115	179,976
Property, plant and equipment, intangible assets, net	7,260	13,485	5,182	15,460	10,096	51,483
Capital expenditures	1,997	2,962	1,255	4,500	2,926	13,640
2007						
Non-Group sales <sup>(a)</sup>	37,949	73,757	12,404	10,401	24,241	158,752
Property, plant and equipment, intangible assets, net	6,437	14,554	4,444	11,872	8,810	46,117
Capital expenditures	1,627	2,538	740	3,745	3,072	11,722

(a) Non-Group sales from continuing operations.

## UPSTREAM

TOTAL's Upstream segment includes the Exploration & Production and Gas & Power divisions. The Group has exploration and production activities in more than forty countries and produces oil or gas in thirty countries. The Group's Gas & Power division conducts activities

## **Exploration & Production**

### **Exploration and development**

TOTAL's Upstream segment aims at continuing to combine long-term growth and profitability at the levels of the best in the industry.

TOTAL evaluates exploration opportunities based on a variety of geological, technical, political and economic factors (including taxes and license terms), and on projected oil and gas prices. Discoveries and extensions of existing fields accounted for approximately 42% of the 2,419 Mboe added to the Upstream segment's proved reserves during the three-year period ended December 31, 2009 (before deducting production and sales of reserves in place and adding any acquisitions of reserves in place during this period). The remaining 58% comes from revisions of previous estimates.

downstream from production related to natural gas, liquefied natural gas (LNG) and liquefied petroleum gas (LPG), as well as power generation and trading, and other activities.

In 2009, the exploration investments of consolidated subsidiaries amounted to  ${\color{black} {1,486}}$  million (including unproved property acquisition costs). The main exploration investments were made in the United States, Angola, the United Kingdom, Norway, Libya, Nigeria and the Republic of the Congo. In 2008, exploration investments of consolidated subsidiaries amounted to  ${\color{black} {\in} 1,243}$  million (including unproved property acquisition costs) notably in Angola, Nigeria, Norway, the United Kingdom, Australia, the United States, Libya, Brunei, Gabon, Cameroon, Indonesia, China, the Republic of the Congo and Canada. In 2007, exploration investments of consolidated subsidiaries amounted to  ${\color{black} {\in} 1,233}$  million (including unproved property acquisition costs), notably in Nigeria, Angola, the United Kingdom, Norway, Libya, the Republic of the Congo, Australia, Venezuela, China, Indonesia, Canada, Brunei, Algeria, the United States, Mauritania, Yemen, Kazakhstan, Brazil, Azerbaijan and Thailand.

The Group's consolidated Exploration & Production subsidiaries' development expenditures amounted to nearly ⊕ billion in 2009, primarily in Angola, Nigeria, Norway, Kazakhstan, Indonesia, the Republic of the Congo, the United Kingdom, the United States, Gabon, Canada, Thailand, Russia and Qatar. In 2008, development expenditures amounted to €7 billion, predominantly in Angola, Nigeria, Norway, Kazakhstan, Indonesia, the Republic of the Congo, the United Kingdom, Gabon, Canada, the United States, and Qatar. Development expenditures for 2007 amounted to €7 billion and were carried out principally in Angola, Norway, Nigeria, Kazakhstan, the Republic of the Congo, the United Kingdom, Indonesia, Gabon, Canada, Qatar, Venezuela and the United States.

#### Reserves

The definitions used for proved, proved developed and proved undeveloped oil and gas reserves are in accordance with the United States Securities & Exchange Commission (SEC) Rule 4-10 of Regulation S-X as amended by the SEC "Modernization of Oil and Gas Reporting" release issued on December 31, 2008. Proved reserves are estimated using geological and engineering data to determine with reasonable certainty whether the crude oil or natural gas in known reservoirs is recoverable under existing regulatory, economic and operating conditions.

TOTAL's oil and gas reserves are consolidated annually, taking into account, among other factors, levels of production, field reassessment, additional reserves from discoveries and acquisitions, disposal of reserves and other economic factors. Unless otherwise indicated, any reference to TOTAL's proved reserves, proved developed reserves, proved undeveloped reserves and production reflects the Group's entire share of such reserves or such production. TOTAL's worldwide proved reserves include the proved reserves of its consolidated subsidiaries as well as its proportionate share of the proved reserves of equity affiliates and of two companies accounted for under the cost method. For further information concerning changes in TOTAL's proved reserves for the years ended December 31, 2009, 2008 and 2007, see "Supplemental Oil and Gas Information (Unaudited)".

The reserves estimation process involves making subjective judgments. Consequently, estimates of reserves are not exact measurements and are subject to revision under well-established control procedures. The reserves estimation process requires among others internal peer reviews of technical evaluations to ensure that the SEC definitions and guidance are followed; and that management make significant funding commitments towards the development of the reserves prior to booking (see "Supplemental Oil and Gas Information (Unaudited)" for more details on the preparation of reserves estimates).

### **Proved reserves**

In accordance with the amended Rule 4-10 of Regulation S-X, proved reserves for the year ended December 31, 2009, are calculated using a 12-month average price determined as the unweighted arithmetic average of the first-dayof-the-month price for each month of the relevant year unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. The reference price for 2009 was \$59.91/b for Brent crude. The proved reserves for the years ended December 31, 2008 and 2007 were calculated using December 31 prices.

As of December 31, 2009, TOTAL's combined proved reserves of oil and gas were 10,483 Mboe (56% of which were proved developed reserves). Liquids (crude oil, natural gas liquids and bitumen) represented approximately 54% of these reserves and natural gas the remaining 46%. These reserves were located in Europe (mainly in Norway and the United Kingdom), in Africa (mainly in Angola, Gabon, Libya, Nigeria and the Republic of the Congo), in the Americas (mainly in Canada, the United States, Argentina, and Venezuela), in the Middle East (mainly in Oman, Qatar, the United Arab Emirates, and Yemen), and in Asia (mainly in Indonesia and Kazakhstan).

As of December 31, 2008, TOTAL's combined proved reserves of oil and gas were 10,458 Mboe (50% of which were proved developed reserves). Liquids represented approximately 54% of these reserves and natural gas the remaining 46%. These reserves were located in Europe (mainly in Norway and the United Kingdom), in Africa (mainly in Algeria, Angola, Gabon, Libya, Nigeria and the Republic of the Congo), in the Americas (mainly in Canada, Bolivia, Argentina, and Venezuela), in the Middle East (mainly in Oman, Qatar, the United Arab Emirates, and Yemen), and in Asia (mainly in Indonesia and Kazakhstan).

As of December 31, 2007, TOTAL's combined proved reserves of oil and gas were 10,449 Mboe (52% of which were proved developed reserves). Liquids represented approximately 55% of these reserves and natural gas the remaining 45%. These reserves were located in Europe (mainly in Norway and the United Kingdom), in Africa (mainly in Angola, Gabon, Libya, Nigeria and the Republic of the Congo), in the Americas (mainly in Canada, Argentina, and Venezuela), in the Middle East (mainly in Oman, Qatar, the United Arab Emirates, and Yemen), and in Asia (mainly in Indonesia and Kazakhstan).

## Sensitivity to oil and gas prices

Changes in the price used as a reference for the proved reserves estimation result in non-proportionate inverse changes in proved reserves associated with production sharing and buyback agreements (which represent approximately 32% of TOTAL's reserves as of December 31, 2009). Under such contracts, TOTAL is entitled to a portion of the production, the sale of which is meant to cover expenses incurred by the Group. As oil prices increase, fewer barrels are necessary to cover the same amount of expenses. Moreover, the number of barrels retrievable under these contracts may vary according to criteria such as cumulative expenses ratio. This decrease is partly offset by an extension of the duration over which fields can be produced economically. However, the increase in reserves due to extended field life resulting from higher prices is generally less than the decrease in reserves under production sharing or buyback agreements due to such higher prices. As a result, higher prices lead to a decrease in TOTAL's reserves.

### Production

For the full year 2009, average daily oil and gas production was 2,281 kboe/d compared to 2,341kboe/d in 2008.

Liquids accounted for approximately 61% and natural gas accounted for approximately 39% of TOTAL's combined liquids and natural gas production in 2009.

The table on the next page sets forth by geographic area TOTAL's average daily production of oil and gas for each of the last three years.

Consistent with industry practice, TOTAL often holds a percentage interest in its fields rather than a 100% interest, with the balance being held by joint venture partners (which may include other international oil companies, stateowned oil companies or government entities). TOTAL frequently acts as operator (the party responsible for technical production) on acreage in which it holds an interest. See the table "Presentation of production activities by geographic area" on the following pages for a description of TOTAL's producing assets.

As in 2008 and 2007, substantially all of the liquids production from TOTAL's Upstream segment in 2009 was marketed by the Trading & Shipping division of TOTAL's Downstream segment. See "– Business Overview – Trading & Shipping – Supply and sales of crude oil".

The majority of TOTAL's natural gas production is sold under long-term contracts. However, its North American production, and to some extent its production from the United Kingdom, Norway and Argentina, is sold on the spot market. The long-term contracts under which TOTAL sells its natural gas usually provide for a price related to, among other factors, average crude oil and other petroleum product prices, as well as, in some cases, a cost-of-living index. Though the price of natural gas tends to fluctuate in line with crude oil prices, a slight delay may occur before changes in crude oil prices are reflected in long-term natural gas prices. Due to the interaction between the contract price of natural gas and crude oil prices, contract prices are not usually affected by short-term market fluctuations in the spot price of natural gas. The Group expects to satisfy most of these obligations through the production of its proved developed reserves. In addition, the Group may purchase quantities on the spot market or use its undeveloped reserves to fulfill such commitments. See "Supplemental Oil and Gas Information (Unaudited)".

## **PRODUCTION BY GEOGRAPHIC AREA**

		2009			2008			2007	
		Natural			Natural			Natural	
• • • • • • • • • •	Liquids	Gas	Total	Liquids	Gas	Total	Liquids	Gas	Total
Consolidated subsidiaries	(kb/d)	(Mcf/d) 596	(kboe/d)	(kb/d)	(Mcf/d)	(kboe/d)			(kboe/d)
Africa	612		728	635	655	763	658	636	783
Algeria	27 186	140 33	53 191	32 200	141 33	59 205	32 198	136	58 203
Angola		33 2	191		33 2			29 2	
Cameroon Gabon	12 67	20	71	13 73	20	14 76	13 78	29	14 83
	67 60		60	73		76 74	78 87		83 87
Libya Nigeria	159	374	235	158	436	246	176	423	261
Republic of the Congo	101	27	106	85	430	240 89	74	423	201
North America	20	22	24	11	15	14	14	34	20
Canada <sup>(a)</sup>	8		<b>24</b> 8	8		8	2		20
United States	12	22	16	3	15	6	12	34	18
South America	30	558	131	32	573	136	118	618	230
Argentina	<b>30</b> 15	364	80	14	365	81	14	365	<b>230</b> 80
Bolivia	3	91	20	3	105	22	3	131	28
Colombia	7	45	17	9	45	18	10	46	19
Trinidad & Tobago	5	-3	5	6	-0	6	9	2	9
Venezuela		56	9	_	56	9	82	74	94
Asia-Pacific	33	1,228	251	29	1,236	246	28	1,287	252
Brunei	2	49	12	2	60	14	2	60	14
Indonesia	25	898	190	21	857	177	20	882	180
Myanmar		103	13		117	14		136	17
Thailand	6	178	36	6	202	41	6	209	41
Commonwealth of Independent States	14	52	24	12	75	26	10	46	19
Azerbaijan	3	50	12	4	73	18	3	44	11
Russia	11	2	12	8	2	8	7	2	8
Europe	295	1,734	613	302	1,704	616	335	1,846	674
France	5	100	24	6	103	25	6	115	27
The Netherlands	1	254	45	1	244	44	1	252	45
Norway	199	691	327	204	706	334	211	685	338
United Kingdom	90	689	217	91	651	213	117	794	264
Middle East	91	338	151	88	281	137	83	91	99
U.A.E.	10	10	12	10	10	12	11	10	13
Iran	8	—	8	9	_	9	15	—	15
Qatar	47	294	99	44	269	91	33	79	47
Syria	14	34	20	15	2	15	15	2	15
Yemen	12	—	12	10	—	10	9	—	9
Total consolidated production	1,095	4,528	1,922	1,109	4,539	1,938	1,246	4,558	2,077
Equity and non-consolidated affiliates									
Africa <sup>(b)</sup>	20	3	21	19	4	20	23	4	23
Middle East	216	386	287	241	288	295	240	277	291
Rest of world <sup>(c)</sup>	50	6	51	87	6	88	_		
Total equity and non-consolidated affiliates	286	395	359	347	298	403	263	281	314
Worldwide production	1,381	4,923	2,281	1,456	4,837	2,341	1,509	4,839	2,391

(a) The Group's production in Canada consists of bitumen only. All of the Group's bitumen production is in Canada.
 (b) Primarily attributable to TOTAL's share of CEPSA's production in Algeria.
 (c) Essentially TOTAL's share of PetroCedeño's production in Venezuela.

## PRESENTATION OF PRODUCTION ACTIVITIES BY GEOGRAPHIC AREA

The table below sets forth, by country, TOTAL's producing assets, the year in which TOTAL's activities commenced, the Group's interest in each asset and whether TOTAL is operator of the asset.

TOTAL's producing assets	as of December 31.	2009 <sup>(a)</sup>	
	Year of entry into the country	Group-operated producing assets (Group share)	Non-Group-operated producing assets (Group share)
<b>Africa</b> Algeria	1952		Ourhoud (19.41%) <sup>(b)</sup> RKF (48.83%) <sup>(b)</sup> Tin Fouye Tabankort (35.00%)
Angola	1953	Blocks 3-85, 3-91 (50.00%) Girassol, Jasmim, Rosa, Dalia (Block 17) (40.00%)	
			Cabinda (Block 0) (10.00%) Kuito, BBLT, Tombua-Landana (Block 14) (20.00%)
Cameroon	1951	Bakingili (25.50%) Bavo-Asoma (25.50%) Boa Bakassi (25.50%) Ekundu Marine (25.50%) Kita Edem (25.50%) Kole Marine (25.50%)	
			Mokoko - Abana (10.00%) Mondoni (25.00%)
The Congo, Republic of	1928	Kombi-Likalala (65.00%) Nkossa (53.50%) Nsoko (53.50%) Moho Bilondo (53.50%) Sendji (55.25%) Tchendo (65.00%) Tchibeli-Litanzi-Loussima (65.00%) Tchibouela (65.00%) Yanga (55.25%)	
			Loango (50.00%) Zatchi (35.00%)
Gabon	1928	Anguille (100.00%) Anguille Nord Est (100.00%) Anguille Sud-Est (100.00%) Atora (40.00%) Avocette (57.50%) Ayol Marine (100.00%) Baliste (50.00%) Baudroie Morine (50.00%) Baudroie Morine (50.00%) Coucal (57.50%) Girelle (100.00%) Grand Anguille Marine (100.00%) Grondin (100.00 %) Hylia Marine (75.00%) Mandaros (100.00%)	Zatin (33.0076)
		13	

	Year of entry into the country	Group-operated producing assets (Group share)	Non-Group-operated producing assets (Group share)
Africa			
		M'Boumba (100.00%)	
		Mérou Sardine Sud (50.00%)	
		Pageau (100.00%) Port Gentil Océan (100.00%)	
		Port Gentil Ocean (100.00%) Port Gentil Sud Marine (100.00%)	
		Tchengue (100.00%)	
		Torpille (100.00%)	
		Torpille Nord Est (100.00%)	
			Rabi Kounga (47.50%)
Libya	1959	C 17 (Mabruk) (15.00%) <sup>(l)</sup> C 137 (Al Jurf) (20.25%) <sup>(l)</sup>	
		C 137 (Al Juli) (20.25%)(*)	NC 115 (El Sharara) (3.90%)
			NC 186 (2.88%)
Nigeria	1962	OML 58 (40.00%)	
		OML 99 Amenam-Kpono (30.40%) OML 100 (40.00%)	
		OML 102 (40.00%)	OML102 - Ekanga (40.00%)
		OML 130 (24.00%)	Shell Betraleum Development Company (SDDC 10.00%)
			Shell Petroleum Development Company (SPDC 10.00%) Bonga (12.50%)
North America			
Canada	1999		Surmont (50.00%)
United States	1957	Matterhorn (100.00%) Virgo (64.00%)	
		viigo (04.0078)	Several assets in the Barnett Shale area (25.00%)
			Tahiti (17.00%)
South America			
Argentina	1978	Aguada Pichana (27.27%)	
		Aries (37.50%)	
		Cañadon Alfa Complex (37.50%)	
		Carina (37.50%) Hidra (37.50%)	
		San Roque (24.71%)	
			Sierra Chata (2.51%)
Bolivia	1995		San Alberto (15.00%)
			San Antonio (15.00%)
Colombia	1973		Caracara (34.18%) <sup>(k)</sup>
			Cupiagua (19.00%)
			Cusiana (19.00%)
			Espinal (7.32%) <sup>(k)</sup> San Jacinto/Rio Paez (8.14%) <sup>(k)</sup>
Trinidad & Tobago	1996		Angostura (30.00%)
Venezuela	1996		PetroCedeño (30.323%)
	1900		Yucal Placer (69.50%)
Asia-Pacific			
Brunei	1986	Maharaja Lela	
		Jamalulalam (37.50%)	

	Year of entry into the country	Group-operated producing assets (Group share)	Non-Group-operated producing assets (Group share)
Asia-Pacific			
Indonesia	1968	Bekapai (50.00%) Handil (50.00%) Peciko (50.00%)	
		Sisi-Nubi (47.90%) Tambora-Tunu (50.00%)	
			Badak (1.05%) Nilam - gas and condensates (9.29%) Nilam - oil (10.58%)
Myanmar	1992	Yadana (31.24%)	
Thailand	1990		Bongkot (33.33%)
	Independant States		
Azerbaijan	1996		Shah Deniz (10.00%)
Russia	1989	Kharyaga (50.00%)	
Europe			
France	1939	Lacq (100.00%) Meillon (100.00%)	
		Pecorade (100.00%)	
		Vic-Bilh (73.00%)	
		Lagrave (100.00%)	
		Lanot (100.00%)	Dommartin-Lettrée (56.99%)
		Itteville (78.73%)	Dominarun-Lettree (30.99%)
		La Croix-Blanche (100.00%)	
		Rousse (100.00%)	
		Vert-le-Grand (90.05%)	
		Vert-le-Petit (100.00%)	
Norway	1965	Skirne (40.00%)	
			Åsgard (7.68%)
			Ekofisk (39.90%)
			Eldfisk (39.90%)
			Embla (39.90%) Gimle (4.90%)
			Glitne (21.80%)
			Gungne (10.00%)
			Heimdal (16.76%)
			Hod (25.00%)
			Huldra (24.33%)
			Kristin (6.00%)
			Kvitebjørn (5.00%)
			Mikkel (7.65%)
			Oseberg (10.00%)
			Oseberg East (10.00%)
			Oseberg South (10.00%) Sleipner East (10.00%)
			Sleipher West (9.41%)
			Snøhvit (18.40%)
			Snorre (6.18%)
			Statfjord East (2.80%)
			Sygna (2.52%)
		15	

	Year of entry into the country	Group-operated producing assets (Group share)	Non-Group-operated producing assets (Group share)
Europe			Tor (48.20%) Tordis (5.60%) Troll I (3.69%) Tune (10.00%) Tyrihans (23.18%) Vale (24.24%) Valhall (15.72%) Vigdis (5.60%) Vilje (24.24%) Visund (7.70%) Yttergryta (24.50%)
The Netherlands	1964	F6a gaz (55.66%) F6a huile (65.68%) F15a Jurassic (38.20%) F15a Triassic (32.47%) J3a (30.00%) K1a (40.10%) K3b (56.16%) K4a (50.00%) K4b/K5a (36.31%) K5b (45.27%) K5F (40.39%) K6/L7 (56.16%) L1a/L1d (60.00%) L1e/L1f (55.66%) L4a (55.66%)	
			E16a (16.92%) E17a/E17b (14.10%) J3b/J6 (25.00%) Q16a (6.49%)
United Kingdom	1962	Alwyn North, Dunbar, Ellon, Grant Nuggets (100.00%) Elgin-Franklin (EFOG 46.17%) <sup>(c)</sup> Forvie Nord (100.00%) Glenelg (49.47%) Jura (100.00%) Otter (81.00%) West Franklin (EFOG 46.17%) <sup>(c)</sup>	Alba (12.65%) Armada (12.53%) Bruce (43.25%) Markham unitized fields (7.35%) ETAP (Mungo. Monan) (12.43%) Everest (0.87%) Keith (25.00%) Maria (28.96%) Nelson (11.53%)

	Year of entry into the country	Group-operated producing assets (Group share)	Non-Group-operated producing assets (Group share)
Middle East			
U.A.E.	1939	Abu Dhabi - Abu Al Bu Khoosh (75.00%)	
			Abu Dhabi offshore (13.33%) <sup>(d)</sup>
			Abu Dhabi onshore (9.50%) <sup>(e)</sup>
			GASCO (15.00%)
			ADGAS (5.00%)
Iran	1954		Dorood (55.00%) <sup>(f)</sup>
			South Pars 2 & 3 (40.00%) <sup>(g)</sup>
Oman	1937		Various fields onshore (Block 6) (4.00%) <sup>(h)</sup>
			Mukhaizna field (Block 53) (2.00%) <sup>(i)</sup>
Qatar	1936	Al Khalij (100.00%)	
			Dolphin (24.50%)
			North Field - NFB (20.00%)
			North Field -Qatargas 2 Train 5 (16.70%)
Syria	1988	Deir Ez Zor (Al Mazraa, Atalla North, Jafra, Marad, Qahar,	
,		Tabiyeh) (100.00%) <sup>(j)</sup>	
Yemen	1987	Kharir/Atuf (bloc 10) (28.57%)	
			Al Nasr (Block 5) (15.00%)

(a) The Group's interest in the local entity is approximately 100% in all cases except for Total Gabon (57.96%), Total E&P Cameroon (75.80%) and certain entities in the United Kingdom, Algeria, Abu Dhabi and Oman (see notes b through I below).

TOTAL has an indirect 19.41% interest in the Ourhoud field and a 48.83% indirect interest in the RKF field through its interest in CEPSA (equity affiliate).

TOTAL has a 35.8% indirect interest in Elgin Franklin through its interest in EFOG. (C)

(c) TOTAL has a 35.5% indirect interest in Eigin Frankin through its interest in Er OG.
 (d) Through ADMA (equity affiliate), TOTAL has a 13.3% interest and participates in the operating company, Abu Dhabi Marine Operating Company.
 (e) Through ADPC (equity affiliate), TOTAL has a 9.50% interest and participates in the operating company, Abu Dhabi Company for Onshore Oil Operation.
 (f) TOTAL has transferred operatorship of Dorood to the National Iranian Oil Company (NIOC). The Group has a 55% interest in the foreign consortium.

(g) TOTAL has transferred operatorship to the National Iranian Oil Company (NIOC) for phases 2 and 3 of the South Pars field. The Group has a 40.00% interest in the foreian consortium.

(h) TOTAL has a direct interest of 4.00% in Petroleum Development Oman LLC, operator of Block 6, in which TOTAL has an indirect interest of 4.00% via Pohol (equity affiliate). TOTAL also has a 5.54% interest in the Oman LNG facility (trains 1 and 2), and an indirect participation of 2.04% through OLNG in Qalhat LNG (train 3). TOTAL has a direct interest of 2.00% in Block 53.

Operated by DEZPC which is 50.00% owned by TOTAL and 50.00% owned by SPC.

TOTAL has an indirect 34.18% interest in the Caracara Block, 8.14% in the San Jacinto/Rio Paez Block and 7.32% in the Espinal Block through its interest in CEPSA (equity affiliate).

(1) Implementation of new contractual terms following the ratification of contracts in early 2010.

#### Africa

In 2009, TOTAL's production in Africa (including production from equity affiliates and non-consolidated subsidiaries) was 749 kboe/d, representing 33% of the Group's overall production, compared to 783 kboe/d in 2008 and 806 kboe/d in 2007.

In Algeria, TOTAL's production was 74 kboe/d in 2009, down from 79 kboe/d in 2008 and 2007, notably due to the termination of the Hamra contract in October 2009. In addition to Hamra, the Group's 2009 production came from its direct interests in the TFT field (Tin Fouyé Tabenkort, 35%) and from its 48.83% interest in CEPSA, a partner of Sonatrach (the Algerian national oil and gas company) on the Ourhoud and Rhourde El Krouf fields. TOTAL also holds a 37.75% direct interest in the Timimoun gas project, alongside Sonatrach (51%) and CEPSA (11.25%). In December 2009, TOTAL won the call for tenders related to the acquisition of a 47% interest in the Ahnet license. The agreement provides for a development plan that is expected to be submitted to the authorities before mid-2011, with start-up of

production scheduled for 2015 and an expected plateau production of at least 400 Mcf/d (4 Bm<sup>3</sup>/v).

- On the TFT field, the completion of the compression project is expected to maintain plateau production at nearly 180 kboe/d.
- The approval of the Timimoun project by the ALNAFT National Agency allowed TOTAL and its partners to launch the basic engineering studies phase in early 2010 for a start-up of production expected in late 2013. Commercial production for the natural gas from Timimoun is expected to reach nearly 160 Mcf/d (1.6 Bm<sup>3</sup>/y) at plateau.

In Angola, TOTAL produced 191 kboe/d in 2009, compared to 205 kboe/d in 2008 and 2007. Production comes mainly from Blocks 17, 0 and 14. From 2007 to 2009, several discoveries were made, notably on Blocks 14, 31, 32, 15/06 and 17/06.

Deep-offshore Block 17 (40%, operator) is TOTAL's principal asset in Angola. It is composed of four

major poles: Girassol, Dalia, Pazflor and CLOV (based on the Cravo, Lirio, Orquidea and Violeta discoveries).

On the Girassol pole, production from the Girassol, Jasmim and Rosa fields averaged more than 220 kb/d (in 100%) in 2009. The Rosa field, which began production in June 2007, makes a substantial contribution to the Girassol FPSO (Floating Production, Storage and Offloading facility).

On the second pole, the Dalia field, which began production in December 2006, reached its plateau production of 240 kb/d during the second quarter of 2007. This development, launched in 2003, is based on a system of sub-sea wells connected to an FPSO.

Production from the third pole, Pazflor, comprised of the Perpetua, Zinia, Hortensia and Acacia fields, is scheduled to begin in 2011. This development, under construction since its approval in late 2007, calls for the installation of an FPSO with a production capacity of up to 220 kb/d.

On CLOV, the fourth pole, basic engineering studies were launched in 2008 for the development of the Cravo, Lirio, Orquidea and Violeta fields. This development is expected to lead to the installation of a fourth FPSO with a production capacity of 160 kb/d. The final investment decision is expected in 2010.

- On Block 14 (20%), production on the Tombua-Landana field started in August 2009 and adds to production from the Benguela-Belize-Lobito-Tomboco (BBLT) and Kuito fields.
- On the ultra-deep offshore Block 32 (30%, operator), the twelve discoveries made between 2003 and 2007 confirmed the oil potential of the block. Appraisal is continuing and pre-development studies for a first production zone in the central/southeastern portion of the block are underway.

In 2008, leasehold rights for the Calulu zone on Block 33 were extended for five years. TOTAL became the operator of this block in 2008 with a 55% interest. In 2007, TOTAL acquired interests on Blocks 17/06 (30%, operator) and 15/06 (15%).

In addition, construction is underway for the Angola LNG project (13.6%), which involves a liquefaction plant near Soyo designed to bring the country's natural gas reserves to market, in particular the associated gas from the fields on Blocks 0, 14, 15, 17 and 18. This project was approved by the government of Angola and the project's partners in December 2007 and production is expected to begin in 2012.

In *Cameroon*, TOTAL has been producing since 1977 and it operated production in 2009 of approximately 50 kboe/d, representing nearly 65% of the country's overall production<sup>(1)</sup>. The Group's share of production in 2009 amounted to 12 kboe/d, compared to 14 kboe/d in 2008 and 2007.

The exclusive authorization to operate the Dissoni field (37.5%, operator) was granted by the Cameroonian authorities in November 2008, with production scheduled to start in 2012. Plateau production for this field is expected to reach nearly 15 kb/d (in 100%). On this permit, the discovery made in 2008 in the deltaic horizons during the drilling of the Njonji exploration well is expected to be assessed with an appraisal well in 2010.

In addition, TOTAL was awarded in July 2009 a new exploration block, Lungahe (100%), located near its operated concessions and permits.

In *Egypt*, TOTAL was awarded in May 2009 a 90% interest in Block 4 (El Burullus offshore East) on which TOTAL is expected to be the operator pursuant to the approval by the relevant authorities. This permit, located in the Nile Basin where a number of natural gas discoveries have already been made, covers an initial 4-year exploration period and provides for the commitment to conduct 3D seismic work and to drill exploration wells.

In *Gabon*, the Group's share of production was 71 kboe/d in 2009, compared to 76 kboe/d in 2008 and 83 kboe/d in 2007, due to the natural decline of mature fields. Total Gabon<sup>(2)</sup> is one of the Group's oldest subsidiaries in sub-Saharan Africa. In 2007, the *Convention d'Etablissement* between Total Gabon and the government of Gabon was renewed for a 25-year period. This contractual scheme promotes exploration and development projects.

- On the Anguille field, the reservoir studies begun in 2009 based on the results of the first thirteen Phase 1 wells indicate that the original production estimates will have to be revised downward. The project was first revised in early 2009 to capitalize on lower oil service costs. It now calls for a more sequential approach over a longer period. The development plan and sizing of the new facilities have been reviewed accordingly.
- On the deep-offshore Diaba permit (Total Gabon 63.75%, operator), following the 2D seismic acquisition campaign that was shot in 2008 and 2009, 3D seismic acquisition work started in December 2009.

<sup>1.</sup> Source: TEP Cameroun and Société Nationale des Hydrocarbures du Cameroun.

<sup>2.</sup> Total Gabon is a Gabonese company whose shares are listed on Euronext Paris. TOTAL holds 58%, the Republic of Gabon 25% and the public float is 17%.

In *Libya*, the Group's share of production amounted to 60 kb/d in 2009, down from 74 kb/d in 2008 and 87 kb/d in 2007. This decline is primarily due to the implementation of OPEC quotas and new contractual provisions for Blocks NC 115  $(30\%)^{(1)}$  and NC 186  $(24\%)^{(1)}$ , on which TOTAL is a partner.

- On the Mabruk field (Block C 17, 75%<sup>(1)</sup>, operator), plateau production of 19 kb/d was maintained in 2009. In addition, the development plan for the Dahra and Garian structures was approved by the National Oil Corporation (NOC) in mid-2009.
- On Block C 137 (75%<sup>(1)</sup>, operator), production on the Al Jurf field resumed in late December 2008, following the temporary shutdown of production due to difficulties encountered in April 2008 during drilling operations. Production was 31 kboe/d in 2009. In addition, a project to reinject associated gas was launched in May 2009.
- TOTAL and NOC signed a Memorandum of Understanding in February 2009 to convert the existing contracts for Blocks C 137 and C 17 into exploration and production sharing agreements (EPSA IV) and extend them until 2032. Commitments to drill additional exploration wells were made within this framework. The EPSA IV contracts, signed in May 2009, were ratified by the Libyan government in early 2010.
- On Blocks NC 115 and NC 186, a nearly 5,000 km<sup>2</sup> seismic campaign started in December 2009.
- On the Murzuk Basin, a development plan was submitted to the authorities in 2009 following a successful appraisal well drilled on the discovery made in 2006 on a portion of Block NC 191 (100%<sup>(1)</sup>, operator).
- On the Cyrenaic Basin, drilling of an exploration well started in February 2010 on Block 42 2/4 (60%<sup>(1)</sup>, operator).

In *Madagascar*, TOTAL acquired a 60% interest in, and the operatorship of, the Bemolanga permit in September 2008. Bemolanga contains oil sands accumulations. A first appraisal phase was launched to confirm the bitumen resources needed for a mining development. Drilling operations started in July 2009 and are expected to take place in 2010 during the dry season (April to November).

In *Mauritania*, TOTAL is active in exploration on the Ta7 and Ta8 permits (60%, operator), located in the Taoudenni Basin, alongside Sonatrach (20%) and Qatar

Petroleum International (20%), Qatar's state-owned company. Drilling of an exploration well on the Ta8 permit started in October 2009.

In *Nigeria*, the Group's production amounted to 235 kboe/d in 2009, compared to 246 kboe/d in 2008 and 261 kboe/d in 2007. TOTAL has been present in Nigeria since 1962. It operates seven production permits (OML) out of the forty-seven in which it holds an interest, and two exploration permits (OPL) out of the eight in which it holds an interest. The Group is also active in LNG through Nigeria LNG and the Brass LNG project.

 TOTAL holds a 15% interest in the Nigeria LNG Ltd gas liquefaction plant located in Bonny Island. The plant's overall capacity has increased to 22 Mt/y of LNG since the commissioning of the sixth liquefaction train in late 2007. In 2009, security issues in the Niger Delta impacted certain suppliers' gas production, restricting the plant's supply and reducing LNG production.

In addition, preliminary work continued in 2009 prior to launching the Brass LNG project (17%), which calls for the construction of two 5 Mt/y trains. The first phase of site preparation work was completed in 2009.

- TOTAL strengthened its ability to supply gas to the LNG projects in which it has interests and to meet the growing domestic demand in gas:
  - On the OML 136 permit (40%), following the appraisal work conducted in 2008 on the Amatu field, the Group successfully appraised the Temi Agge field in 2009, confirming the possibility of a future development pole on this permit.
  - As part of its joint venture with the Nigerian National Petroleum Corporation (NNPC), TOTAL launched a project to eventually increase the production capacity of the OML 58 permit (40%, operator) to 550 Mcf/d of gas. A second phase of this project, currently being assessed, is expected to allow the development of other reserves through these facilities.
  - On the OML 112/117 permits (40%), TOTAL continued in 2009 development studies for the Ima gas field.
- On the OML 102 permit (40%, operator), TOTAL continued in 2009 to develop the Ofon II project. The final investment decision in expected in 2010.

<sup>1.</sup> Participation in the foreign consortium.

The Group is also planning the appraisal of the Etisong pole in 2010, located 15 km from the Ofon field, which is currently in production.

- On the OML 130 permit (24%, operator), production started in March 2009 on the Akpo field, whose plateau production is 225 kboe/d. The Group is actively developing the Egina field, for which a development plan was approved by the Nigerian authorities. In 2009, TOTAL conducted in Nigeria basic engineering studies on this field.
- On the OML 138 permit (20%, operator), TOTAL continued to develop the Usan project (180 kb/d in 100%) in 2009, in particular with the start-up of drilling operations for production wells and the launch of the new FPSO hull in November 2009. First production is expected in 2012.

TOTAL also strengthened its position in the deep offshore by launching in 2009 the development of the Bonga Northwest project on OML 118 (12.5%). In 2009, the Group actively pursued its exploration program with the discovery made on the Owowo South prospect on OPL 223 (18%, operator).

Security issues in the Niger Delta region continued to impact the production of the Shell Petroleum Development Company (SPDC) joint venture, in which TOTAL owns 10%. Repair work on facilities in the western zone of the Niger Delta region continued in 2009, allowing production to partially resume, in particular on the EA offshore field (10%), where production resumed in the second half of 2009. In addition, SPDC's 2009 gas and condensates production was affected notably by the shutdown of the Soku treatment plant, which had to be repaired after vandalism on the export pipelines in late 2008.

In the *Republic of the Congo*, the Group's share of production was 106 kboe/d in 2009, compared to 89 kboe/d in 2008 and 77 kboe/d in 2007.

Production began on the Moho Bilondo field (53.5%, operator) in April 2008, where the drilling of development wells is continuing. Current production (in 100%) of approximately 80 kboe/d is expected to reach 90 kboe/d at plateau during 2010. The Moho North Marine 3 appraisal well, drilled in late 2008 after two discoveries made in 2007 (Moho North Marine 1 and 2), confirmed the potential of this permit. In the same area, the Moho North Marine 4 well discovered resources in the Albian zones in 2009.

 Development of Libondo (65%, operator), approved in October 2008, is continuing. Commissioning is expected in 2011. This field is located on the Kombi-Likalala-Libondo operating field, 50 km off the coast in water depths of 114 meters. Anticipated plateau production is 8 kb/d (in 100%). A substantial portion of the equipment is produced locally in Pointe-Noire through the redevelopment of a construction site that had been idle for several years.

In *Sudan*, the Group holds interests in an exploration permit in the southern part of the country, although no activity is currently underway in this country. For additional information on TOTAL's operations in Sudan, see "— Other Matters — Business Activities In Cuba, Iran, Sudan and Syria".

#### **North America**

In 2009, TOTAL's production in North America was 24 kboe/d, representing 1% of the Group's overall production, compared to 14 kboe/d in 2008 and 20 kboe/d in 2007.

In *Canada*, the Group is involved in oil sands projects in Athabasca, Alberta, through its interests in the Surmont (50%), Joslyn (75%, operator) and Northern Lights (50%, operator) permits. Since the end of 2004, the Group has also acquired 100% of several permits (Oil Sands Leases) through several auction sales, notably the Griffon permit, where interpretation of the 2008/2009 winter appraisal campaign is underway. The Group's 2009 production amounted to 8 kb/d, stable compared to 2008.

 On the Surmont permit, construction of the first phase of industrial development (Surmont Phase 1A) ended in June 2007 with the gradual start-up of the steam injection for the first eighteen well pairs. The first well pairs tested SAGD (Steam Assisted Gravity Drainage) production in October 2007, and commercial production started in November 2007.

Construction work for Phases 1B and 1C was conducted to add the sixteen well pairs needed to reach a production level estimated at 22 kb/d. The well pairs of Phase 1B gradually started production in 2009.

In early 2010, the partners of the project decided to launch the construction of the second phase of industrial development. Start-up of production from Surmont Phase 2 is scheduled in 2015 and overall production capacity from Surmont (Phases 1 and 2) is expected to increase to 110 kb/d (in 100%).

The Joslyn permit, located approximately 140 km north of Surmont, is expected to be developed through mining techniques in two development phases of 100 kb/d of bitumen each.

In 2009, the pre-project for the first development phase (Joslyn North Mine) was completely reviewed, notably to meet the requirements of the February 2009 new regulation related to tailings management. The review was completed in February 2010, concurrent with the filing of an updated administrative file with the authorities. Continuation of preparation for the first phase was approved in early March 2010, together with the launch of basic engineering studies. Development of the project is expected to be approved in the following years for a start-up in 2017. However, this schedule is subject to the ERCB (Energy Resources Conservation Board) administrative approval process.

In addition, a small SAGD production unit that started production in 2006, but did not reach the expected 10 kb/d plateau production because of constraints on the steam injection pressure, has been suspended since March 2009. The future of the facility (mothballing or complete removal) has been subject to the request for authorization filed with ERCB in early 2010. The corresponding reserves were debooked as of December 31, 2008.

- In 2006, TOTAL conducted studies leading to the decision to locate a delayed coker technology upgrader with a capacity of approximately 230 kb/d in Edmonton (Alberta). This upgrader is expected to be built in two phases to match the anticipated increase in bitumen production on the Joslyn permit. Pursuant to a public announcement in May 2007 and the ERCB filing in December 2007, the project is now subject to a public hearing expected in late May 2010. Basic engineering studies, launched in May 2008, ended in late 2009. This was the last step before construction work is launched. However, the final decision to launch the project can only be made after the approval by the administrative authorities and start-up should coincide with start-up of Joslyn North Mine.
- In August 2008, the Group closed the acquisition of Synenco, whose two principal assets are a 60% interest in the Northern Lights project and 100% of the adjacent McClelland permit. In early 2009, the Group sold a 10% share in the Northern Lights project and a 50% share in the McClelland permit to Sinopec, the other partner in the project, reducing its interest in each of the assets to 50%. The Northern Lights project, located approximately 50 km north of Joslyn, is expected to be developed through mining techniques.

In the *United States*, the Group's 2009 production amounted to 16 kboe/d, compared to 6 kboe/d in 2008 and 18 kboe/d in 2007.

- In the Gulf of Mexico:
  - The deep-offshore Tahiti oil field (17%) started producing in May 2009 and rapidly reached plateau production of 135 kb/d.
  - In September 2007, the Group committed to developing the first phase of the deep-offshore Chinook project (33.33%), with a production test scheduled in 2010.
  - TOTAL acquired six exploration blocks in March 2009.
  - In April 2009, TOTAL and Cobalt signed an agreement to merge both companies' deep-offshore acreage, with Cobalt holding a 60% interest and TOTAL the remaining 40%. As part of this agreement, Cobalt is operating the exploration part and TOTAL is providing the drilling rig for the first five exploration wells. In addition, engineers from TOTAL are assigned to the exploration team set up by Cobalt in Houston.
  - TOTAL operates production on the Matterhorn and Virgo fields.
- In Alaska, TOTAL acquired a 30% interest in several onshore exploration blocks, referred to as White Hills, in 2008. Most of these blocks were relinquished in mid-2009 following disappointing results. In 2007, the Group also acquired thirty-two offshore exploration blocks in the Beaufort Sea.
- In late 2009, TOTAL signed a joint venture agreement with Chesapeake, effective retrospectively since October 1, 2009. As part of this joint venture, TOTAL holds 25% of Chesapeake's non-conventional gas portfolio in the Barnett Shale area in Texas, which produce approximately 700 Mcf/d.
- In January 2009, the Group finalized the acquisition of a 50% interest in American Shale Oil LLC in order to study the technology to develop oil shales in Colorado.

In *Mexico*, TOTAL is conducting various studies in cooperation with stateowned PEMEX under a technical cooperation agreement signed in 2003 and renewed in early 2010.

## **South America**

In 2009, TOTAL's production in South America (including production of equity affiliates and non-consolidated subsidiaries) was 182 kboe/d, representing 8% of the Group's overall production, compared to 224 kboe/d in 2008 and 230 kboe/d in 2007.

In *Argentina*, TOTAL has been present since 1978 and operates 27% of the country's gas production<sup>(1)</sup>. The Group's production was 80 kboe/d in 2009, compared to 81 kboe/d in 2008 and 80 kboe/d in 2007.

 In the Neuquen Basin, the connection of satellite discoveries and an increase in compression capacity allowed the extension of the San Roque (24.7%, operator) and Aguada Pichana (27.3%, operator) fields' plateau production.

The low-pressure compression project on the Aguada Pichana field was brought on-line in August 2007. Development of the Aguada Pichana North discovery is underway. The second development phase was brought on-line between September and November 2009 with five producing wells. It supplements the first phase that started in December 2007. Twenty-two wells were drilled in 2009 on the principal portion of the field.

In February 2009, TOTAL and the Argentinean authorities signed an agreement extending the Aguada Pichana and San Roque concessions for ten years (from 2017 to 2027). As part of this agreement, a 3D seismic survey was shot in late 2009 in the Las Carceles canyons area to allow exploration to continue on Aguada Pichana, on the western portion of the area that is already developed.

In Tierra del Fuego, the Group operates notably the offshore Carina and Aries fields (37.5%), which started up in 2005 and 2006, respectively. A fourth medium-pressure compressor was installed in July 2007 to debottleneck the facilities and increase the gas production capacity from approximately 424 Mcf/d to 530 Mcf/d (12 Mm<sup>3</sup>/d to 15 Mm<sup>3</sup>/d) on this zone. The Tierra del Fuego gas export pipeline does not currently have the capacity to transport all of the gas that could be produced with this development. Work to increase the capacity of the pipeline has been ongoing since 2008.

In late 2009, a decision was made to launch the development of the offshore Vega Pleyade field and to extend low-pressure compression with an objective to start up production in late 2014.

In *Bolivia*, the Group's production, primarily gas, amounted to 20 kboe/d in 2009, compared to 22 kboe/d in 2008 and 28 kboe/d in 2007. TOTAL holds interests in six permits: two producing permits, San Alberto and San Antonio (15%); and four permits in the exploration or appraisal phase, Blocks XX West (75%, operator), Aquio and Ipati (80%, operator) and Rio Hondo (50%). The decline in 2009 production is primarily due to decreasing gas demand from Brazil, which is San Alberto's and San Antonio's major export market.

- Regarding the Itau discovery, located on Block XX West, TOTAL filed in August 2009 a declaration of commerciality with the Bolivian authorities. Development of this field is proceeding and start-up is expected in the second half of 2010. Production from Itau will be routed to the existing facilities of the neighboring San Alberto field.
- In 2004, TOTAL discovered the Incahuasi gas field on the Ipati Block. Following the interpretation of the 3D seismic acquisition conducted in 2008, an appraisal well is ongoing on the adjacent Aquio Block to confirm the extension of the discovery to the north.

In September 2008, TOTAL entered into a cooperation agreement with Gazprom and Yacimientos Petrolíferos Fiscales Bolivianos to explore the Azero Block within the framework of a joint venture company. TOTAL and Gazprom will be partners with equal interests in this joint venture company.

In *Brazil*, TOTAL holds interests in Block BC-2 (41.2%) and Block BM-C-14 (50%) located in the Campos Basin.

- The partners on Block BC-2 drilled an appraisal well early in 2007 and filed a Declaration of Commercial Discovery with the Agência National do Petroléo (ANP/National Oil Agency) in late August 2007. Following seismic reprocessing, a pre-salt prospect was found under the Xerelete (formerly Curió) discovery made in 2001 in water depths of 2,400 m. An appraisal well is expected to be drilled in 2011.
- The southern extremity of Xerelete is located on the adjacent BM-C-14 Block. In 2009, partners on both blocks finalized a unitization agreement for the field that has been submitted to ANP for approval.

In *Colombia*, TOTAL has been present since 1973 with production of 23 kboe/d in 2009, similar to 2008, compared to 19 kboe/d in 2007. TOTAL holds a 19% interest in the onshore Cupiaga and Cusiana fields, located at the base of the Andes, and a 50% interest in

<sup>1.</sup> Source: Argentinean Ministry of Federal Planning, Public Investment and Services – Energy Secretary.

the Niscota exploration permit located 300 km northeast of Bogota. TOTAL is also active through its interest in CEPSA, which has operated the Caracara Block since 2008.

- On Cusiaga, as part of two expansion projects, construction of the facilities started in July 2009 to increase gas production capacity from 180 Mcf/d currently to 250 Mcf/d and begin recovering 6 kb/d of LPG. First production of additional gas and LPG is expected in the second half of 2010 and in 2011, respectively.
- On Niscota, drilling of the Huron-1 well led to the discovery in 2009 of a gas and condensate field. Appraisal of the Huron-1 structure is ongoing with the launch of a 3D seismic campaign to define the size of the discovery and to plan for future appraisal wells.

In *French Guiana*, TOTAL acquired a 25% interest in the Guyane Maritime permit in December 2009. The acquisition is subject to approval by the French authorities. The permit, located about 150 km off the coast, covers an area of approximately 32,000 km<sup>2</sup> in water depths ranging from 2,000 to 3,000 meters. A 3D seismic acquisition program is already underway on this permit.

In *Trinidad & Tobago*, TOTAL has been present since 1996 with production of 5 kb/d in 2009, compared to 6 kb/d in 2008 and 9 kb/d in 2007. TOTAL holds a 30% interest in the offshore Angostura field located on Block 2C. A second phase intended to develop gas reserves is underway, with first production expected in 2011.

In *Venezuela*, TOTAL has been present since 1980 and is one of the main partners of state-owned PDVSA (Petróleos de Venezuela S.A.). The Group's 2009 production amounted to 54 kboe/d, compared to 92 kboe/d in 2008 and 94 kboe/d in 2007. TOTAL holds interests in PetroCedeño (30.323%), Yucal Placer (69.5%) and in the offshore exploration Block 4, located in the Plataforma Deltana (49%).

Pursuant to the decision by the Venezuelan authorities to terminate all
operating contracts signed in the 1990s, TOTAL signed heads of
agreement in June 2007 with PDVSA, with the approval of the Ministry of
Energy and Oil, providing for the transformation of the Sincor association
into a mixed public/private company, PetroCedeño, and the transfer of
operations to this mixed company. Under this agreement, TOTAL's
interest in the project decreased from 47% to 30.323% and PDVSA's
interest increased to 60%. Conditions for this transformation were
approved by the Venezuelan National Assembly in October 2007 and the
transformation was finalized in February 2008.

PDVSA agreed to compensate TOTAL for the reduction of its interest in Sincor by assuming \$326 million of debt and by paying, mostly in crude oil, \$834 million. The compensation process was completed in 2009.

- On Block 4, the exploration campaign, which involved three wells, was completed in October 2007. In October 2008, the Ministry of Energy and Oil agreed to let the joint venture retain the Cocuina discovery zone (lots B and F) and relinquish the rest of the block.
- In early 2008, TOTAL signed two agreements for joint studies with PDVSA on the Junin 10 Block, in the Orinoco Belt.

### Asia-Pacific

In 2009, TOTAL's production in the Asia-Pacific region was 251 kboe/d, representing 11% of the Group's overall production, compared to 246 kboe/d in 2008 and 252 kboe/d in 2007.

In *Australia*, where TOTAL has held leasehold rights since 2005, the Group owns twelve offshore permits, including four that it operates, off the northwest coast in the Browse, Vulcan, Bonaparte and Carnavon Basins.

 In the Browse Basin, preparation of the Ichthys gas and condensates field development, located on the WA-285P permit (24%), is ongoing. FEED (Front End Engineering and Design) studies were launched in 2009 for a floating platform designed for gas production, treatment and export, an FPSO to stabilize and export condensates, a nearly 900 km gas pipeline and a liquefaction plant located in Darwin.

Production capacity is expected to be 8.4 Mt/y of LNG, 1.6 Mt/y of LPG and 100 kb/d of condensates. The field is expected to come onstream in the second half of the decade.

- Major seismic acquisition activity occurred in 2008 on the four permits operated by TOTAL, followed by the interpretation of data in 2009. A drilling campaign is expected to be carried out in 2010 and 2011.
- In 2009, TOTAL disposed of a 20% interest in the WA-269P permit (Carnavon Basin) and relinquished the adjacent WA-370P permit.

In *Bangladesh*, TOTAL operated two exploration blocks, Blocks 17 and 18, acquired in 2007. In 2008, a 3D seismic campaign was conducted on these blocks located off the southeastern coast. Following the

seismic interpretation, the decision to relinquish the blocks was made in February 2009. The branch was closed in October 2009.

In *Brunei*, where TOTAL has been present since 1986, the Group operates the offshore Maharaja Lela Jamalulalam field located on Block B (37.5%). The Group's production was 12 kboe/d in 2009, compared to 14 kboe/d in 2008 and 2007. The gas produced at this field is delivered to the Brunei LNG liquefaction plant.

On Block B, a new drilling campaign started in July 2009. Exploration operations on deep-offshore Block J (60%, operator) have been suspended since May 2003 due to a border dispute between Brunei and Malaysia.

In *China*, the Group is present on the South Sulige block, located in the Ordos Basin, in the Inner Mongolia province. Appraisal work was conducted on this block between 2006 and 2008, in particular seismic acquisition, the drilling of four new wells and tests on existing wells. Development studies were carried out in 2008 and were continued in 2009 in order to define a development plan with the China National Petroleum Corporation (CNPC). The joint development plan was submitted to the CNPC in January 2010.

In *Indonesia*, TOTAL has been present since 1968 with production of 190 kboe/d in 2009, compared to 177 kboe/d in 2008 and 180 kboe/d in 2007.

TOTAL's operations are primarily concentrated on the Mahakam permit (50%, operator), which covers several fields, including Peciko and Tunu, the largest gas fields in the East Kalimantan area. TOTAL also holds an interest in the Sisi-Nubi field (47.9%, operator). TOTAL delivers most of its natural gas production to the Bontang LNG plant operated by the Indonesian company PT Badak. The overall capacity of the eight liquefaction trains at Bontang LNG is 22 Mt/y.

In 2009, gas production operated by TOTAL amounted to 2,561 Mcf/d. The gas operated and delivered by TOTAL to Bontang LNG accounted for 80% of its supply. In addition to gas production, operated condensates and oil production from the Handil and Bekapai fields amounted to 53 kb/d and 26 kb/d, respectively.

- On the Mahakam permit:
  - Drilling of additional wells on the Tunu field continued in 2009 as part of the twelfth and thirteenth development phases. A new seismic campaign to improve imaging on the shallow reservoirs and to identify the optimal location for additional wells was ongoing at yearend 2009. Gas production on Tunu was 1,269 Mcf/d in 2009. The eleventh development

phase, launched in 2005, was completed in late 2009 with the commissioning of onshore low-pressure compression units.

- On Peciko, following the start-up of a new platform (Phase 5) in late 2008, a new phase of drilling operations (Phase 7) started in 2009 and is expected to continue in 2010. New low-pressure compression capacities (Phase 6) are expected to be commissioned in 2010. Gas production on Peciko was 737 Mcf/d in 2009.
- On the East Bekapai exploration well, the oil discovery made in 2008 led to the launch of a development study, which is currently underway.
- The development of South Mahakam with the Stupa, West Stupa and East Mandu discoveries was launched in early 2008, with production scheduled to begin in 2012.
- In 2008, a seismic campaign was conducted on the Southeast Mahakam exploration block (50%, operator), located in the Mahakam Delta. Drilling of a first exploration well is expected in 2010. TOTAL was awarded this block in early 2007.
- On the Sisi-Nubi field, which began production in November 2007, drilling operations continue and gas production reached 396 Mcf/d in 2009. The gas from Sisi-Nubi is produced through Tunu's processing facilities.

In February 2009, the Group signed, alongside its partner Inpex and the stateowned company Pertamina, heads of agreement with a consortium of LNG buyers in Japan, setting out the principal terms for an extension of the 1973 and 1981 LNG sales contracts. As part of this agreement, a total of 25 Mt of LNG is expected to be delivered to Japan between 2011 and 2020 from the Bontang LNG Plant. The gas supplied will come from the Mahakam permit.

In *Malaysia*, TOTAL signed a production sharing contract in May 2008 with state-owned Petronas for the offshore exploration Blocks PM303 and PM324 (70%, operator). An operating structure was created in 2008 in Kuala Lumpur.

In 2009, a 3D seismic acquisition covering 1,650 km<sup>2</sup> was shot on Block PM303. Processing agreements for this seismic acquisition and reprocessing agreements for other seismic data available on Block PM324 were signed in July 2009, totaling an area of 2,600 km<sup>2</sup> for both blocks. Drilling in high pressure/high temperature conditions is expected to be carried out in 2011.

The offshore SKF Block (42.5%) was relinquished in 2009.

In *Myanmar*, TOTAL operates the Yadana field (31.2%). Located on offshore Blocks M5 and M6, this field produces gas that is delivered mainly to PTT (the Thai state-owned company) to be used in Thai power plants. In 2009, the Group's production was 13 kboe/d, compared to 14 kboe/d in 2008 and 17 kboe/d in 2007.

In *Thailand*, the Group's production was 36 kboe/d in 2009, compared to 41 kboe/d in 2008 and 2007. The Group's main asset is the Bongkot gas and condensates field (33.3%). In late 2007, the Thai authorities agreed to extend the end of the concession period of the field by ten years, from 2013 to 2023. PTT purchases all of the natural gas and condensates production. Gas demand, which decreased at the beginning of 2009, recovered by year-end to the 2008 level.

- The northern portion of the Bongkot field is being developed in several phases:
  - Production from the 3F development phase (three production platforms) started in July 2008.
  - Production from the 3G development phase (two platforms), launched following gas discoveries made in 2007, started in August 2009.
  - The 3H development phase (three platforms) was launched in July 2008 following gas discoveries made in the first half of 2008. Commissioning is expected in 2010.

Additional compression facilities were installed on four platforms to increase gas production.

 The southern portion of this field (Great Bongkot South) is also being developed in several phases. This development is designed to include a processing platform, a residential platform and thirteen production platforms. In September 2009, the partners formalized a gas sales contract with PTT. Construction of the facilities started in 2009 and first production is expected in 2012.

To prepare for the next development phases of this large field, three exploration wells were drilled in 2009 in the northern portion and another well in the southern portion. Interpretation of the results is underway.

In *Vietnam*, TOTAL holds a 35% interest in the production sharing contract for the offshore 15-1/05 exploration block following an agreement signed in October 2007 with PetroVietnam. A 3D seismic acquisition covering 1,600 km<sup>2</sup> was shot in the summer of 2008 on this block. A first oil discovery was made in November 2009 on the southern portion of the Block.

In March 2009, TOTAL and PetroVietnam signed a production sharing contract for Blocks DBSCL-02 and DBSCL-03. Located in the Mekong Delta region, these onshore blocks are held by TOTAL (75%, operator) and PetroVietnam (25%). A first 2D seismic acquisition campaign was shot in November 2009.

## **Commonwealth of Independent States (CIS)**

# In 2009, TOTAL's production in CIS was 24 kboe/d, representing 1% of the Group's overall production, compared to 26 kboe/d in 2008 and 19 kboe/d in 2007.

In Azerbaijan, TOTAL has been present since 1996 with production in 2009 of 12 kboe/d, compared to 18 kboe/d in 2008 and 11 kboe/d in 2007. The Group's production is focused on the Shah Deniz field (10%). TOTAL holds a 10% interest in South Caucasus Pipeline Company, owner of the SCP (South Caucasus Pipeline) gas pipeline that transports the gas produced in Shah Deniz to the Turkish and Georgian markets. TOTAL also holds a 5% interest in the BTC (Bakou-Tbilissi-Ceyhan) oil pipeline, owned by BTC Co., which connects Baku and the Mediterranean Sea.

 Gas deliveries to Turkey and Georgia from the Shah Deniz field continued throughout 2009, at a lower pace for Turkey due to weaker demand. Also, during the spring and summer of 2009, SOCAR, the Azerbaijan stateowned company, did not take the gas quantities set in the agreement, but SOCAR made the payments provided for by the take-or-pay agreement.

Development studies and business negotiations for the sale of additional gas needed to launch a second development phase in Shah Deniz continued in 2009.

 On the BTC oil pipeline, notably used to transport the condensates produced at Shah Deniz, equipment was installed in 2009 to inject chemicals to reduce head losses. They are expected to increase the oil pipeline capacity from 1Mb/d to 1.2 Mb/d.

In 2009, TOTAL and SOCAR signed an exploration, development and production sharing contract for a permit located on the offshore Absheron block. TOTAL (40%) will be the operator during the exploration phase and a joint operating company will conduct operation during the development phase. Drilling of an exploration well is expected to start in 2010.

In *Kazakhstan*, TOTAL has been present since 1992 through the interest it holds in the North Caspian Sea permit, which includes notably the Kashagan field. The size of this field may eventually allow production to

reach nearly 1,500 kb/d (in 100%). This project is expected to be developed in several phases.

On Kashagan, the development plan for the first phase (300 kb/d) was approved in February 2004 by the Kazakh authorities, allowing work to begin on the field. Drilling of development wells, which began in 2004, continued in 2009 and production is expected to begin in late 2012.

The agreements signed in October 2008 by members of the North Caspian Sea Production Sharing Agreement (NCSPSA) consortium and the Kazakh authorities ended the disagreement that began in August 2007. The implementation of these agreements led to a reduction of TOTAL's share in NCSPSA from 18.52% to 16.81%. The operating structure was reconfigured and the North Caspian Operating Company (NCOC), a joint operating company, was entrusted with the operatorship. NCOC started operating the field in January 2009. NCOC supervises and coordinates NCSPSA's operations and is directly responsible for the schedule, reservoir modeling, conceptual development studies and relations with the Kazakh authorities. NCOC uses TOTAL's management system and the company's chief executive officer is also an executive from TOTAL.

In *Russia*, where TOTAL has been present since 1989, production from the Kharyaga field (40%, operator) rose to 12 kboe/d in 2009 from 8 kboe/d in 2008 and 2007. TOTAL strengthened its positions in the country through its partnerships with Gazprom and Novatek.

- In July 2007, TOTAL and Gazprom signed an agreement for the first phase of development on the giant Shtokman gas and condensates field, located in the Barents Sea. Shtokman Development AG (TOTAL, 25%) was created in February 2008 to design, build, finance and operate the first development phase with an expected overall production capacity of 23.7 Bm<sup>3</sup>/y. Engineering studies are underway with an investment decision expected in March 2011 for the part of the project that will allow the export of 23.7 Bm<sup>3</sup>/y of gas by pipeline to the Gazprom network (offshore development, gas pipeline and onshore gas and condensates processing facilities – Teriberka site). The investment decision is expected before the end of 2011 for the LNG part of the project that will allow the export of 7.5 Mt/y of LNG from a new harbor located in Teriberka, representing approximately half of the gas produced by the first development phase.
- In December 2009, TOTAL finalized the acquisition from Novatek of a 49% interest in Terneftegas, which holds a development and production license on the onshore Termokarstovoye field. Appraisal work is expected to be carried out in 2010 and 2011 on this gas and condensates field located in the Yamalo-Nenets region.

- On the Kharyaga field, work related to the development plan of Phase 3, approved in December 2007, is ongoing. This development plan is intended to maintain plateau production at the 30 kboe/d (in 100%) level reached in late 2009. In December 2009, TOTAL signed an agreement to sell a 10% interest in Kharyaga to state-owned Zarubezhneft. Following this divestment, effective as of January 1, 2010, TOTAL holds a 40% interest in this field.
- In October 2009, TOTAL signed an agreement establishing the principles of a partnership with KazMunaiGas (KMG) for the development of the Khvalynskoye gas and condensates field, located offshore in the Caspian Sea (under Russian jurisdiction) on the border between Kazakhstan and Russia. Gas production is expected to be transported to Russia. Pursuant to this agreement, TOTAL is planning to acquire a 17% interest on KMG's share.

### Europe

# In 2009, TOTAL's production in Europe was 613 kboe/d, representing 27% of the Group's overall production, compared to 616 kboe/d in 2008 and 674 kboe/d in 2007.

In *France*, the Group's production was 24 kboe/d in 2009, down from 25 kboe/d in 2008 and 27 kboe/d in 2007. The Group has operated fields in this country since 1939, notably the Lacq (100%) and Meillon (100%) gas fields, located in the southwest of the country.

On the Lacq field, operated since 1957, a carbon capture and storage pilot was commissioned in January 2010. In connection with this project, a boiler has been modified to operate in an oxy-fuel combustion environment and the carbon dioxide emitted is captured and re-injected in the depleted Rousse field. As part of TOTAL's sustainable development policy, this project will allow the Group to assess one of the technological possibilities for reducing carbon dioxide emissions.

In *Italy*, the Tempa Rossa field (50%, operator), discovered in 1989 and located on the unitized Gorgoglione concession (Basilicate region), is one of TOTAL's principal assets in the country.

Site preparation work started in August 2008, but the proceedings initiated by the Prosecutor of the Potenza Court against Total Italia led to a freeze in the preparation work. New calls for tenders have been launched related to certain contracts that had been cancelled. Preparation work related to the drilling of an appraisal well started in December 2009. The partners on Tempa Rossa are expected to make the final investment decision for the project in 2011.

In addition, the extension plan for the Tarente refinery export system, needed for the development of the Tempa Rossa field, is expected to be submitted to the Italian authorities in 2010 for an approval expected in 2011. Start-up of production is currently expected in 2014 with a plateau production of 50 kb/d.

In *Norway*, where the Group has been present since the late 1960s, TOTAL holds interests in seventy-seven production permits on the Norwegian continental shelf, including fourteen that it operates. Norway is the largest single-country contributor to the Group's production, with volumes of 327 kboe/d in 2009, compared to 334 kboe/d in 2008 and 338 kboe/d in 2007.

- In the Norwegian North Sea, production was 256 kboe/d in 2009. The most substantial contribution to production, for the most part nonoperated, comes from the Ekofisk Area located in the southern region. This region also includes the Greater Hild area (Hild East, Central and West) located in the north.
  - In the Ekofisk area, a major work program continued in 2009 on the Ekofisk (39.9%) and Eldfisk (39.9%) fields to increase production, oil recovery and the life span of existing facilities. A system of permanent seismic pick-ups will be set up in order to optimize future wells.
  - On Hild East, located in the PL 040 / 043 (49%, operator) permits, drilling of an appraisal/pre-development well started in September 2009. Results are expected to define the basis of the development plan. Six exploration and appraisal wells had already confirmed the potential of the Greater Hild area.
  - On Frigg, dismantling of the offshore facilities was completed in 2009, on schedule.
- In the Norwegian Sea, the Haltenbanken area includes the Tyrihans (23.2%), Mikkel (7.7%) and Kristin (6%) fields as well as the Åsgard (7.7%) field and its satellites Yttergryta (24.5%) and Morvin (6%). In 2009, the Group's production in the Haltenbanken area was 56 kboe/d.
  - Tyrihans came onstream in July 2009, as planned, and Yttergryta started in January 2009. Morvin is expected to start up production in 2010.
  - On the undeveloped Victoria discovery (PL211), operated by TOTAL (40%), the 6506/9-1 appraisal well confirmed the presence of gas, but revealed a structure more complex than expected.

 In the Barents Sea, LNG production on Snøhvit (18.4%) started up in 2007. This project includes both the development of the natural gas field and the construction of the associated liquefaction facilities. Due to design problem, the plant experienced performance and reliability concerns during the start-up phase. A number of turnarounds were scheduled to fix the issue. Excluding turnarounds, production levels close to the plant's production capacity (4.2 Mt/y for LNG production) were achieved in 2009.

Between 2007 and 2009, exploration and appraisal work occurred on various permits, including the drilling of a successful appraisal well on the Onyx SW discovery (PL 255, 20%), in the Haltenbanken area. In the Norwegian North Sea, the oil discovery on Dagny (PL 048, 21.8%) and the Pan/Pandora (PL 120, 11%) discovery, made in 2008, substantially increased the potential of the Sleipner and Visund areas, respectively. A number of discoveries were also made in 2009, in particular on Beta Vest (PL 046, 10%) near Sleipner, Katla (PL 104, 10%), located south of Oseberg, and Vigdis North East (PL 089, 5.6%), located south of Snorre. In the Barents Sea, during the twentieth licensing round, TOTAL was awarded a new exploration permit: PL 535 (40%). On this permit, a 3D seismic acquisition was completed in 2009 and drilling is expected to begin in 2011.

In the *Netherlands*, TOTAL has been active in natural gas exploration and production since 1964 and currently holds twenty-four offshore production permits, including twenty that it operates, and an offshore exploration permit, E17c (16.92%), awarded in February 2008. The Group's 2009 production amounted to 45 kboe/d, compared to 44 kboe/d in 2008 and 45 kboe/d in 2007. The acquisition of Goal Petroleum (Netherlands) B.V. in August 2008 is expected to increase the Group's production by 8 kboe/d by 2011.

- On the K5F field (40.39%, operator), production began in September 2008. This project is comprised of two sub-sea wells connected to the existing production and transport facilities. K5F is the first project in the world to use only electrically driven sub-sea wellheads and systems. This advance in sub-sea technologies is expected to increase the reliability of systems and improve environmental performance.
- The development of the K5CU project (49%, operator) was launched in 2009 and production is expected to start in 2011. This development includes four wells supported by a new platform connected to the K5A platform by a 15 km gas pipeline.

In the *United Kingdom*, TOTAL has been present since 1962 with production in 2009 of 217 kboe/d, compared to 213 kboe/d in 2008 and 264 kboe/d in 2007. The

United Kingdom accounts for nearly 10% of the Group's overall production. 85% of this production comes from operated fields located in two major zones: the Alwyn zone in the northern North Sea, and the Elgin/Franklin zone in the Central Graben.

 On the Alwyn zone, wells drilled on the Alwyn North field (100%) discovered new reserves that came onstream in 2007 and 2009. In addition, the start-up of production from satellites or new reservoir compartments allowed the potential for production to remain at a level near the processing and compressing capacities of the Alwyn platform (530 Mcf/d of gas increased to 575 Mcf/d since the summer 2008 planned shutdown for maintenance).

The Jura field (100%), discovered in late 2006, started production in May 2008 through two sub-sea wells connected to the pipeline linking Forvie North and Alwyn. The production capacity of this field is 50 kboe/d (gas and condensates).

Development studies are nearing completion for Islay (100%), a second gas and condensates discovery made in 2008 and located in a faulted panel immediately east of Jura.

In late 2008, TOTAL increased its interest in the Otter field from 54.3% to 81%.

The development of the Elgin (35.8%) and Franklin fields (35.8%), in production since 2001, made a substantial contribution to the Group's operations in the United Kingdom. This project constituted a technical milestone, combining the development of one of the deepest reservoirs in the North Sea (5,500 m) with temperature and pressure conditions among the highest in the world (190°C and 1,100 bars).

On the Elgin field, the infill well drilled between November 2008 and September 2009 started production in October 2009 at a rate of 18 kboe/d. Drilling of a second infill well is ongoing. A similar well was completed on the Franklin field in 2007. Drilling of such a well in a high pressure/high temperature depleted field is a major technical milestone.

Glenelg (49.5%) and West Franklin (35.8%), operated satellites of the Elgin and Franklin fields, respectively, started production in March 2006 and September 2007, respectively. Studies are underway for an additional development of West Franklin from a new platform. Anticipated production for this field over its life is estimated to total approximately 200 Mboe (in 100%).

As part of an agreement signed in 2005, TOTAL acquired a 25% interest in two blocks located near

Elgin and Franklin by drilling a successful appraisal well on the Kessog structure. This interest was increased to 50% in 2009 following the completion of a long-duration test whose results are under study.

 In the West of Shetland area, TOTAL increased its interest to 80% in the Tormore and Laggan fields in early 2010. In late 2009, TOTAL acquired a 43.75% interest (and operatorship) in the P967 permit located north of Laggan-Tormore. This permit includes the Tobermory gas discovery.

A successful exploration well was drilled in 2007 on the Tormore prospect, located 15 km southwest of the Laggan field. Development studies allowed the Group and its partners to select a joint development plan for both fields using sub-sea production facilities and off-gas treatment (gas and condensates) at a plant located near the Sullom Voe terminal in the Shetland Islands. The gas would be exported to the Saint-Fergus terminal through a new pipeline connected to the Frigg pipeline (FUKA). The final investment decision for the project has been made in March 2010 and production is scheduled to start in 2014 with an expected capacity of 90 kboe/d.

TOTAL holds interests in ten assets operated by third parties, the most important in terms of reserves being the Bruce (43.25%) and Alba (12.65%) fields.

#### **Middle East**

In 2009, TOTAL's production in the Middle East (including production of equity affiliates and non-consolidated subsidiaries) was 438 kboe/d, representing 19% of the Group's overall production, compared to 432 kboe/d in 2008 and 390 kboe/d in 2007.

In the *United Arab Emirates*, where TOTAL has been present since 1939, the Group's production in 2009 was 214 kboe/d, compared to 243 kboe/d in 2008 and 242 kboe/d in 2007. The decline in 2009 is primarily due to the implementation of OPEC quotas.

In Abu Dhabi, TOTAL holds interests in the Abu Al Bu Khoosh field (75%, operator), in the Abu Dhabi Company for Onshore Oil Operations (ADCO, 9.5%), which operates the five major onshore fields in Abu Dhabi, and in Abu Dhabi Marine (ADMA, 13.3%), which operates two offshore fields. TOTAL also has interests in Abu Dhabi Gas Industries (GASCO, 15%), which produces LPG and condensates from the associated gas produced by ADCO, and in Abu Dhabi Gas Liquefaction Company (ADGAS, 5%), which produces LNG, LPG and condensates.

In early 2009, TOTAL signed agreements for a 20-year extension of its participation in the GASCO joint venture starting on October 1, 2008.

The Group also holds a 33.3% interest in Ruwais Fertilizer Industries (FERTIL), which produces urea. In 2005, FERTIL's corporate life was extended for an additional 25-year period. FERTIL 2, a new project, was launched in 2009 to build a new granulated urea unit with a capacity of 3,500 t/d (1.2 Mt/y). This project will allow FERTIL to more than double production and reach nearly 2 Mt/y.

In *Iraq*, TOTAL participated in 2009 in both calls for tenders launched by the Iraqi Ministry of Oil. The CNPC-led consortium that includes TOTAL (25%) was awarded the development and production contract for the Halfaya field during the second call for tenders that was held in December 2009. This field is located in the province of Missan, north of Basra. In addition, the Group continued its major training program for Iraqi engineers. As a result, a training framework agreement was signed in December 2009 by TOTAL and the Iraqi Ministry of Oil.

In *Iran*, the Group's production, in the form of buy-back agreements, amounted to 8 kb/d in 2009, compared to 9 kb/d in 2008 and 15 kb/d in 2007. For additional information on TOTAL's operations in Iran, see "— Other Matters — Business Activities In Cuba, Iran, Sudan and Syria".

In *Oman*, the Group's production in 2009 was 34 kboe/d, stable compared to 2008 and 2007. The Group produces oil mainly on Blocks 6 and 53 as well as liquefied natural gas through its interests in the Oman LNG (5.54%)/Qalhat LNG (2.04%)<sup>(1)</sup> liquefaction plant, which has a capacity of 10.5 Mt/y.

In **Qatar**, TOTAL has been present since 1936 and holds interests in the Al Khalij field (100%), the NFB Block (20%) in the North Field, the Qatargas 1 liquefaction plant (10%), the Dolphin project (24.5%) and train 5 of Qatargas 2 (16.7%). The Group's production was 141 kboe/d in 2009, compared to 121 kboe/d in 2008 and 74 kboe/d in 2007. Production substantially increased with the start-ups of Qatargas 2 and Dolphin.

- Production from Dolphin started during the summer of 2007 and reached its full capacity in the first quarter of 2008. The contract, signed in December 2001 with state-owned Qatar Petroleum, provides for the sale of 2,000 Mcf/d of gas from the North Field for a 25-year period. The gas is processed in the Dolphin plant in Ras Lafan and exported to the United Arab Emirates through a 360 km gas pipeline.
- Production from train 5 of Qatargas 2, which started in September 2009, reached its full capacity (7.8 Mt/y) in late 2009. TOTAL has owned an interest in this train since December 2006. In addition, TOTAL began to off-take part of the LNG

produced in compliance with the contracts signed in July 2006, which provide for the purchase of 5.2 Mt/y of LNG from Qatargas 2 by the Group.

The Group also holds a 10% interest in Laffan Refinery, a 146 kb/d condensate splitter that started up in September 2009.

In *Syria*, TOTAL is present on the Deir Ez Zor permit (100%, operated by DEZPC of which 50% is owned by TOTAL) and through the Tabiyeh contract that became effective in October 2009. For both assets, the Group's production was nearly 20 kboe/d in 2009, compared to 15 kboe/d in 2008 and 2007.

Three new agreements were approved:

- in November 2008, the 10-year extension of the Deir Ez Zor permit to 2021;
- in October 2009, the Tabiyeh agreement, which primarily provides for an increase in the production from the gas and condensates Tabiyeh field; and
- in July 2009, the Cooperation Framework Agreement, which provides for the development of oil projects in partnership with the Syrian company General Petroleum Corporation.

For additional information on TOTAL's operations in Syria, see "— Other Matters — Business Activities In Cuba, Iran, Sudan and Syria".

In Yemen, TOTAL has been present since 1987 with production in 2009 of 21 kboe/d, compared to 10 kboe/d in 2008 and 9 kboe/d in 2007. TOTAL has interests in the country's two oil basins, as the operator on Block 10 (Masila Basin, East Shabwa permit, 28.57%) and as a partner on Block 5 (Marib Basin, Jannah permit, 15%). TOTAL also has an interest in the Yemen LNG project (39.62%).

The Yemen LNG liquefaction plant started up in October 2009. As part of this project, the liquefaction plant built in Balhaf on the southern coast of Yemen is supplied with gas produced on Block 18, located near Marib in the center of the country, through a 320 km pipeline. Production from the plant started with the commissioning of the first liquefaction train. Construction of the second train is nearing completion for a start-up by the summer of 2010. Overall production capacity from both trains is expected to reach 6.7 Mt/y of LNG.

In 2008, TOTAL strengthened its position in onshore exploration through the acquisition of a 30.9% interest in Block 70 following the purchase of a 40% share in Blocks 69 and 71 in 2007. Appraisal of a gas discovery on Block 71 is underway. The first well drilled on Block 70 discovered positive oil shows. The potential of this discovery has yet to be assessed.

<sup>1.</sup> Indirect interest through the 36.8% share of Qalhat LNG owned by Oman LNG.

# **OIL AND GAS ACREAGE**

		200	9	200	8	2007		
(in thousands of acres at year-end)		Undeveloped acreage <sup>(1)</sup>	Developed acreage	Undeveloped acreage <sup>(1)</sup>	Developed acreage	Undeveloped acreage <sup>(1)</sup>	Developed acreage	
Europe	Gross	5,964	667	5,880	647	5,762	656	
	Net	2,203	182	2,191	181	2,065	173	
Africa	Gross	85,317	1,137	85,883	1,112	93,469	1,165	
	Net	45,819	308	41,608	292	50,564	281	
Americas	Gross	9,834	776	8,749	484	8,018	495	
	Net	4,149	259	4,133	186	3,844	185	
Middle East	Gross	33,223	204	33,223	199	84,569	185	
	Net	2,415	97	2,415	69	17,816	62	
Asia	Gross	29,609	397	25,778	387	30,391	388	
	Net	16,846	169	12,529	131	13,417	109	
Total	Gross	163,947	3,181	159,513	2,829	222,209	2,889	
	Net <sup>(2)</sup>	71,432	1,015	62,876	859	87,706	810	

(1) Undeveloped acreage includes leases and concessions.
(2) Net acreage equals the sum of the Group's fractional interests in gross acreage.

# **PRODUCTIVE WELLS**

		20	09	20	2008		07
(wells at year-end)		Gross productive wells	Net productive wells <sup>(1)</sup>	Gross productive wells	Net productive wells <sup>(1)</sup>	Gross productive wells	Net productive wells <sup>(1)</sup>
Europe	Liquids	705	166	700	166	718	181
	Gas	328	125	328	127	305	115
Africa	Liquids	2,371	669	2,465	692	2,448	684
	Gas	190	50	112	34	108	31
Americas	Liquids	821	241	621	176	619	224
	Gas	1,905	424	254	79	276	102
Middle East	Liquids	3,766	307	3,762	264	473	75
	Gas	136	32	83	15	70	13
Asia	Liquids	157	75	184	68	315	96
	Gas	1,156	379	1,049	271	975	195
Total	Liquids	7,820	1,458	7,732	1,366	4,573	1,260
	Gas	3,715	1,010	1,826	526	1,734	456

(1) Net wells equal the sum of the Group's fractional interests in gross wells.

# NET PRODUCTIVE AND DRY WELLS DRILLED

			2009			2008			2007	
		Net productive wells drilled <sup>(1)</sup>	Net dry wells drilled (1)	Net total wells drilled (1)	Net productive wells drilled <sup>(1)</sup>	Net dry wells drilled (1)	Net total wells drilled (1)	Net productive wells drilled <sup>(1)</sup>	Net dry wells drilled (1)	Net total wells drilled (1)
Exploratory	Europe	_	1.3	1.3	1.3	2.0	3.3	2.1	1.0	3.1
	Africa	4.8	3.9	8.7	4.7	3.2	7.9	8.1	8.7	16.8
_	Americas	_	2.0	2.0	_	2.6	2.6	0.7	1.3	2.0
	Middle East	_	_	_	0.4	_	0.4	_	0.6	0.6
	Asia	0.5	1.3	1.8	4.1	2.2	6.3	5.5	0.1	5.6
	Total	5.3	8.5	13.8	10.5	10.0	20.5	16.4	11.7	28.1
Development	Europe	5.0	_	5.0	6.2	_	6.2	13.5	0.1	13.6
	Africa	27.5	0.2	27.7	38.3	6.4	44.7	51.6	_	51.6
	Americas	31.2	104.3	135.5	41.5	270.9	312.4	94.8	105.6	200.4
	Middle East	45.6	3.4	49.0	61.2	7.6	68.8	82.6	5.1	87.7
	Asia	63.5	0.3	63.8	58.7	_	58.7	58.0	_	58.0
	Total	172.8	108.2	281.0	205.9	284.9	490.8	300.5	110.8	411.3
Total		178.1	116.7	294.8	216.4	294.9	511.3	316.9	122.5	439.4

(1) Net wells equal the sum of the Group's fractional interests in gross wells.

# EXPLORATORY AND DEVELOPMENT WELLS IN THE PROCESS OF BEING DRILLED

		20	09	20	08	20	07
(wells at year-end)		Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>	Gross	Net <sup>(1)</sup>
Exploratory	Europe	1	0.5	2	1.1	1	0.4
	Africa	4	1.3	7	2.5	3	0.6
	Americas	2	0.6	1	0.5	_	
	Middle East	1	0.4	1	0.3	_	
	Asia	_	_	1	0.1	4	1.8
	Total	8	2.8	12	4.5	8	2.8
Development	Europe	5	2.2	7	3.7	22	4.7
	Africa	31	8.5	19	4.3	41	10.5
	Americas	60	17.8	9	3.2	6	2.4
	Middle East	40	4.8	5	2.2	14	6.1
	Asia	12	5.5	23	7.8	29	10.8
	Total	148	38.8	63	21.2	112	34.5
Total		156	41.6	75	25.7	120	37.3

(1) Net wells equal the sum of the Group's fractional interests in gross wells.

# **INTERESTS IN PIPELINES**

The table below sets forth TOTAL's interests in oil and gas pipelines.

As of December 31, 2009 Pipeline(s)	Origin	Destination	% interest	Operator	Liquids	Ga
EUROPE						
France						
ΓIGF	Network South West		100.00	Х		
Norway						
Frostpipe (inhibited)	Lille-Frigg, Froy	Oseberg	36.25		Х	
Gassled <sup>(a)</sup>			7.78			
Heimdal to Brae Condensate Line	Heimdal	Brae	16.76		Х	
(vitebjørn pipeline	Kvitebjørn	Mongstad	5.00		Х	
Norpipe Oil	Ekofisk Treatment center	Teeside (UK)	34.93 8.65		<u>x</u>	
Oseberg Transport System Sleipner East Condensate Pipe	Oseberg, Brage and Veslefrikk Sleipner East	Sture Karsto	10.00		X	
Troll Oil Pipeline I and II	Troll B and C	Vestprosess (Mongstad refinery)	3.71		x x	
		vestprosess (mongstad rennery)	5.71		~	
The Netherlands						
Nogat pipeline	F3-FB	Den Helder	23.19			
WGT K13-Den Helder	K13A-K4/K5	Den Helder	4.66			
WGT K13-Extension	Markham	K13-K4/K5	23.00			
United Kingdom						
Alwyn Liquid Export Line	Alwyn North	Cormorant	100.00	х	Х	
Bruce Liquid Export Line	Bruce	Forties (Unity)	43.25		Х	
Central Area Transmission	Cats Riser Platform	Teeside	0.57			
System (CATS)						
Central Graben	Elgin-Franklin	ETAP	15.89		х	
Liquid Export Line (LEP)	Aluma Nanth David and others		100.00			
Frigg System: UK line	Alwyn North, Bruce and others	St.Fergus (Scotland)	100.00	Х		
Ninian Pipeline System	Ninian	Sullom Voe Bacton	16.00		х	
Shearwater Elgin Area Line (SEAL) SEAL to Interconnector Link (SILK)	Elgin-Franklin, Shearwater Bacton		25.73 54.66	~		
	Bacton	Interconnector	54.00	Х		
Algeria						
Medgas	Algeria	Spain	9.77 <sup>(b)</sup>			
Gabon	Algona	opani	0.11			
Mandji Pipe	Mandji fields	Cap Lopez Terminal	100.00 <sup>(c)</sup>	х	х	
Rabi Pipe	Rabi fields	Cap Lopez Terminal	100.00 <sup>(c)</sup>	x	X	
· · ·						
AMERICAS Argentina						
Gas Andes	Neuquen Basin (Argentina)	Santiago (Chile)	56.50	х		
TGN	Network (Northern Argentina)	Santiago (Crine)	15.40	X		
TGM	TGN	Uruguyana (Brazil)	32.68	X		
Bolivia			02.00	X		
Transierra	Yacuiba (Bolivia)	Rio Grande (Bolivia)	11.00			
Brazil						
TBG	Bolivia-Brazil border	Porto Alegre via São Paulo	9.67			
TSB (project)	TGM (Argentina)	TBG (Porto Alegre)	25.00			
Colombia						
Ocensa	Cusiana, Cupiagua	Covenas Terminal	15.20		Х	
Oleoducto de Alta Magdalena	Tenay	Vasconia	0.93		Х	
Oleoducto de Colombia	Vasconia	Covenas	9.55		Х	
ASIA						
Yadana	Yadana (Myanmar)	Ban-I Tong (Thai border)	31.24	Х		
REST OF WORLD						
BTC	Baku (Azerbaijan)	Ceyhan (Turkey, Mediterranean)	5.00		х	
SCP	Baku (Azerbaijan)	Georgia/Turkey Border	10.00			
Dolphin (International transport and network)	Ras Laffan (Qatar)	U.A.E.	24.50			

(a) Gassled: unitization of Norwegian gas pipelines through a new joint venture in which TOTAL has an interest of 7.783%. In addition to its direct interest in Gassled, TOTAL holds a 14.4% interest in a joint venture with Norsea Gas AS, which holds 2.726% in Gassled.
(b) Through the Group's interest in CEPSA (48.83%).
(c) Interest of Total Gabon. The Group has a financial interest of 57.96% in Total Gabon.

# Gas & Power

The Gas & Power division is mainly focused on the optimization of the Group's gas resources through marketing, trading, transport of natural gas and liquefied natural gas (LNG), LNG re-gasification and natural gas storage.

The division also contributes to the development of Group's operations in the areas of liquefied petroleum gas (LPG) shipping and trading; power generation from gas-fired power plants or renewable energies; solar power systems and technology (notably through its subsidiaries Tenesol and Photovoltech); coal production, trading and marketing.

The Gas & Power division also conducts research and development related to new energies that will be increasingly necessary to complement hydrocarbons, in particular solar and biomass.

Finally, this division prepares and implements the Group's strategy in the nuclear energy sector.

#### **Natural Gas**

In 2009, TOTAL continued to pursue its strategy of developing its operations downstream from natural gas production in order to optimize access for the Group's current and future gas production and reserves to traditional markets (with long-term contracts between producers and integrated gas companies) and to markets open to international competition (including short-term contracts and spot sales).

The long-term contracts under which TOTAL sells its natural gas production usually provide for a price related to, among other factors, average crude oil and other petroleum product prices, as well as, in some cases, a cost-of-living index. In most cases, price formulas entail a time lag or an adjustment over time that reflects changes in oil price indexes.

In the context of deregulated natural gas markets, which allow customers to more freely access suppliers, in turn leading to new marketing schemes that are more flexible than traditional long-term contracts, TOTAL is developing trading, marketing and logistics businesses to offer its natural gas production directly to customers, primarily in the industrial and commercial markets.

#### Europe

TOTAL has been active in the downstream sector of the gas value chain in Europe for more than sixty years to maximize the value of its gas reserves.

In *France*, the Group's **transport and storage businesses** located in the southwest of the country are grouped under TIGF, a wholly-owned subsidiary of the Group. This subsidiary operates a regulated transport network of 5,000 km of gas pipelines and, under a negotiated scheme, two storage units with 87 Bcf (2.5 Bm<sup>3</sup>) of usable capacity, representing approximately 20% of the natural gas storage capacity in France<sup>(1)</sup>.

Highlights of 2009 included:

- The inauguration in October of the Artère de Guyenne gas pipeline. This
  pipeline (70 km long and 900 mm in diameter) connects Captieux and
  Mouliets-et-Villemartin to facilitate the transport of gas, notably from the
  Fos Cavaou LNG terminal, to northern France.
- The launch of an open season, involving four French and Spanish transportation operators, including TIGF, to develop Franco-Spanish interconnections. This open season allowed the long-term allocation of 80% of gas transport capacities between France and Spain in both directions. These allocations are scheduled to be in effect by 2013 with the development of two new projects: the Artère du Béarn and phase B of the Artère de Guyenne gas pipelines.
- The increase by 3.5 Bcf (100 Mm<sup>3</sup>) of the storage capacity at Lussagnet in April, in compliance with the authorization provided by the decree published on April 9, 2008.
- The acquisition of a 26.2% interest (through its interest in Géosud) in Géométhane, an Economic Interest Grouping that owns natural gas storage in a salt cavern with a capacity of 10.5 Bcf (0.3 Bm<sup>3</sup>), located in Manosque, in the southeast of France. A project to increase the storage capacity by 7 Bcf (0.2 Bm<sup>3</sup>) is under study for a commissioning scheduled in 2016.

In addition, the European Union adopted, on July 13, 2009, the Third Energy Package, which includes two directives and three regulations related to the natural gas and electricity markets. TOTAL will assess the potential impact on its gas and electricity transport, storage and supply operations as soon as the legislation is transposed into French law.

Regarding its  $\ensuremath{\textit{marketing business}}$  , TOTAL is mainly developing on three major European markets.

In France, TOTAL operates through its marketing subsidiary Total Énergie Gaz (TEGAZ) which sold

<sup>1.</sup> GIE data (Gaz Infrastructures Europe), June 2009.

208 Bcf of natural gas (5.9 Bm<sup>3</sup>) in 2009, compared to 229 Bcf (6.5 Bm<sup>3</sup>) in 2008 and 245 Bcf (7 Bm<sup>3</sup>) in 2007. Despite a sharp decline in demand due to the economic crisis, TEGAZ posted a strong increase in sales to industrial and commercial customers, which are the subsidiary's main market segments.

In *Spain*, Cepsa Gas Comercializadora markets gas in the industrial and commercial sectors. This company is held by TOTAL (35%), CEPSA (35%) and the Algerian national oil company, Sonatrach (30%). In 2009, Cepsa Gas Comercializadora sold approximately 70 Bcf (2 Bm<sup>3</sup>) of natural gas to industrial and commercial customers, similar to 2008, compared to 59 Bcf (1.7 Bm<sup>3</sup>) in 2007.

In the *United Kingdom*, TOTAL's subsidiary Total Gas & Power Ltd markets gas and power to the industrial and commercial markets. The subsidiary is also active in gas, electricity and LNG trading worldwide. In 2009, 130 Bcf (3.7 Bm<sup>3</sup>) of natural gas was sold to industrial and commercial customers, compared to 134 Bcf (3.8 Bm<sup>3</sup>) in 2008 and 124 Bcf (3.5 Bm<sup>3</sup>) in 2007. Electricity sales amounted to 4.1 TWh in 2009, compared to 4.6 TWh in 2008 and 3.6 TWh in 2007. In 2007, TOTAL disposed of its 10% interest in Interconnector UK Ltd, a gas pipeline connecting Bacton in the United Kingdom to Zeebrugge in Belgium. This disposal did not affect TOTAL's rights to transport gas through the pipeline.

## The Americas

In the *United States*, the Group's subsidiary Total Gas & Power North America Inc. marketed 1,586 Bcf (45 Bm<sup>3</sup>) of natural gas in 2009, compared to approximately 1,652 Bcf (46.9 Bm<sup>3</sup>) in 2008 and 1,606 Bcf (45.5 Bm<sup>3</sup>) in 2007, supplied by its own production and external sources.

In *Mexico*, Gas del Litoral, a company in which TOTAL holds a 25% interest, sold approximately 173 Bcf  $(4.9 \text{ Bm}^3)$  of natural gas in 2009, its third full year of activity, similar to 2008, compared to 95 Bcf  $(2.7 \text{ Bm}^3)$  in 2007.

In *South America*, TOTAL owns interests in several natural gas transport companies in Argentina, Chile and Brazil, including the following:

- a 15.4% interest in Transportadora de Gas del Norte (TGN), which operates a gas transport network covering the northern half of Argentina;
- a 56.5% interest in the companies that own the GasAndes pipeline, which connects the TGN network to the Santiago del Chile region; and
- a 9.7% interest in Transportadora Gasoducto Bolivia-Brasil (TBG), whose gas pipeline supplies southern Brazil from the Bolivian border.

These assets represent a total integrated network of approximately 9,500 km of pipelines serving the Argentine, Chilean and Brazilian markets from gasproducing basins in Bolivia and Argentina, where the Group has natural gas reserves.

The actions taken by the Argentine government after the 2001 economic crisis and the subsequent energy crisis, marked in 2007 by a severe gas shortage during the southern winter, put TOTAL's Argentine subsidiaries in difficult financial and operational situations, even after taking into account the restructuring of TGN's debt, which was completed in 2006. The sale of the Group's Argentine power generation assets was completed in 2007 and procedures to protect TOTAL's investments, initiated in 2002 with the International Center for Settlement of Investment Disputes (ISCID), are ongoing.

During 2008 and 2009, gas production in Argentina decreased substantially, reducing the export of gas to Chile and prompting commercial discussions between GasAndes and its shippers about transportation contracts and their commitments.

Due to the deterioration of TGN's financial situation as a result of the freeze of domestic tariffs and the restrictions on exports, TGN applied for a suspension of payments in December 2008, and launched a new process to restructure its debt. These decisions led the Argentinean authorities to set up a formal monitoring of TGN's management.

#### Asia

TOTAL markets natural gas transported through pipelines in Indonesia, Thailand and Myanmar, and, in the form of LNG, to Japan, South Korea, China, Taiwan and India. The Group is also developing its re-gasified LNG marketing business in new emerging markets.

In *India*, Hazira LNG Private Limited, a company in which TOTAL holds a 26% interest, sold approximately 74 Bcf (2.1 Bm<sup>3</sup>) of natural gas in 2009, its fourth full year in operation, compared to 87 Bcf (2.5 Bm<sup>3</sup>) in 2008 and 76 Bcf (2.2 Bm<sup>3</sup>) in 2007.

# **Liquified Natural Gas**

In the LNG chain, the Gas & Power division is responsible for operations downstream from liquefaction plants<sup>(1)</sup>, including purchase, shipping, regasification, storage and marketing.

Through its subsidiaries Total Gas & Power Ltd and Total Gas & Power North America Inc., TOTAL has entered into agreements to obtain long-term access to

1. The Exploration & Production division is in charge of the Group's natural gas liquefaction operations.

LNG re-gasification capacity on the three continents that are the largest consumers of natural gas: North America (the United States and Mexico), Europe (France and the United Kingdom) and Asia (India). This diversified market presence allows the Group to access new liquefaction projects by becoming a long-term buyer of a portion of the LNG produced at the plants, thereby consolidating its LNG supply portfolio.

# Europe

In *France*, TOTAL acquired in June 2006 an interest in Société du Terminal Méthanier de Fos Cavaou (STMFC). This terminal is expected to have a regasification capacity of 291 Bcf/y (8.25 Bm<sup>3</sup>/y), of which 79 Bcf/y (2.25 Bm<sup>3</sup>/y) has been reserved by TOTAL. The Group's interest in STMFC's share capital decreased to 28.8% from 30.3% in late 2009 pursuant to the provisions of the shareholders' agreement, without impacting the re-gasification volumes reserved by TOTAL. In October 2009, the terminal was authorized by the prefectorial authorities to conduct commissioning tests and operate at reduced capacity. Commercial start-up is expected in the second quarter of 2010.

In addition, TOTAL and EDF signed in March 2010 a letter of intent whereby TOTAL will reserve re-gasification capacity in the planned Dunkirk LNG terminal being developed by Dunkerque LNG, a wholly-owned EDF subsidiary, and will also acquire an interest in this company.

In the *United Kingdom*, TOTAL acquired in December 2006 an 8.35% interest in the South Hook LNG re-gasification terminal project in connection with its entry in the Qatargas 2 project. Phase 1 (371 Bcf/y representing 10.5 Bm<sup>3</sup>/y) of the terminal was commissioned in October 2009 and Phase 2, expected to come onstream in the first half of 2010, is expected to increase the overall capacity of the terminal to 742 Bcf/y (21 Bm<sup>3</sup>/y).

In *Norway*, as part of the Snøhvit project, in which TOTAL holds an 18.4% interest and where the first deliveries started in October 2007, the Group signed in November 2004 a purchase agreement for 35 Bcf/y (1 Bm<sup>3</sup>/y) of natural gas primarily intended for North America and Europe. To transport this LNG, TOTAL also charters the Arctic Lady, a 145,000 m<sup>3</sup> LNG tanker that was delivered in April 2006.

In *Croatia*, TOTAL owns an interest in Adria LNG, a company in charge of studying the construction of an LNG re-gasification terminal on Krk island, on the northern Adriatic coast. In December 2009, TOTAL's interest increased from 25.58% to 27.36% pursuant to the withdrawal of a partner from the project. This terminal is expected to have an initial re-gasification

capacity of 353 Bcf/y (10  $\rm Bm^3/y),$  which could be subsequently increased to 494 Bcf/y (14  $\rm Bm^3/y).$ 

In addition, TOTAL holds a 30% interest in Gaztransport & Technigaz (GTT), which focuses mainly on the design and engineering of membrane cryogenic tanks for LNG tankers. At year-end 2009, 225 active LNG tankers were equipped with membrane tanks built under GTT licenses out of a world tonnage estimated at 344 LNG tankers.<sup>(1)</sup>

# North America

In *Mexico*, the Altamira re-gasification terminal, in which TOTAL holds a 25% interest, has been operating since the summer of 2006. This terminal, located on the east coast of Mexico, has a re-gasification capacity of 236 Bcf/y (6.7 Bm<sup>3</sup>/y). This capacity has been entirely reserved by Gas del Litoral, in which TOTAL has a 25% interest. The terminal received forty cargos in 2009, compared to forty-two in 2008 and thirty-three in 2007. In November 2009, Altamira received its first Q-Flex vessel from Qatar.

In the *United States*, the Sabine Pass terminal in Louisiana was inaugurated in April 2008. TOTAL has reserved re-gasification capacity of approximately 10 Bm<sup>3</sup>/y (1 Bcf/d) at this terminal for a renewable 20-year period starting in April 2009, concurrent with the delivery of the Group's first LNG cargo. As part of this agreement, TOTAL plans to supply the Sabine Pass terminal though its LNG purchase contracts associated with its various production projects, notably in the Middle East, Norway and Western Africa.

#### Asia

In *India*, the Hazira re-gasification terminal (TOTAL 26%), located on the west coast in the Gujarat state, was inaugurated in April 2005 with an initial re-gasification capacity of approximately 120 Bcf/y (3.4 Bm<sup>3</sup>/y). Its capacity reached 177 Bcf/y (5 Bm<sup>3</sup>/y) after de-bottlenecking operations conducted in 2008. Hazira is a merchant terminal with operations that include LNG re-gasification and natural gas marketing. TOTAL has agreed to provide up to 26% of the LNG for the Hazira terminal. Due to market conditions in 2009, Hazira was operated on the basis of short-term contracts, both for the sale of gas on the Indian market and the purchase of LNG from international markets. Twenty-seven cargos were delivered in 2009, compared to thirty in 2008 and twenty-eight in 2007.

In *China*, TOTAL signed in December 2008 an LNG sale agreement with CNOOC (China National Offshore Oil Company). As part of this agreement, TOTAL is expected to supply CNOOC with up to 1 Mt/y of LNG starting in 2010. The gas supplied will come from the Group's global LNG resources.

<sup>1.</sup> Gaztransport & Technigaz data.

# **Middle East**

In **Qatar**, TOTAL signed purchase agreements in July 2006 for up to 5.2 Mt/y of LNG from the second train of Qatargas 2 over a 25-year period. This LNG is expected to be marketed principally in France, the United Kingdom and North America. The Group's acquisition of a 16.7% interest in the second train of Qatargas 2 was concluded in December 2006. LNG production from this train started in September 2009.

In **Yemen**, TOTAL signed in July 2005 an agreement with Yemen LNG Ltd (TOTAL, 39.62%) to purchase 2 Mt/y of LNG over a 20-year period, beginning in 2009, to be delivered to the United States. LNG production from the first train of Yemen LNG started in October 2009. Construction of the second train is nearing completion for a start-up by the summer of 2010.

#### Africa

In *Angola*, TOTAL is involved in the construction of the Angola LNG plant (13.6%), comprised of a 5.2 Mt/y train, which is expected to start up in 2012. As part of this project, TOTAL signed a re-gasified natural gas purchase agreement in December 2007 for 13.6% of the quantities to be delivered to the Gulf LNG Clean Energy terminal in Mississippi in the United States.

In *Nigeria*, as part of the expansions of the Nigeria LNG (NLNG) plant, in which the Group holds a 15% interest, TOTAL signed an LNG purchase agreement for an initial 0.23 Mt/y over a 20-year period, to which an additional 0.9 Mt/y was added when the sixth train came onstream.

As part of the project to build an additional LNG train (train 7) with a capacity of approximately 8.5 Mt/y, TOTAL signed a purchase agreement in February 2007 for 1.375 Mt/y of LNG over a 20-year period. This agreement is subject to NLNG's final investment decision for this new train.

TOTAL also acquired a 17% interest in the Brass LNG project in July 2006. This liquefaction project calls for the construction of two liquefaction trains, each with a capacity of 5 Mt/y. In conjunction with this acquisition, TOTAL signed a preliminary agreement with Brass LNG Ltd setting forth the principal terms of an agreement to purchase approximately one-sixth of the plant's capacity over a 20-year period. This LNG would be delivered primarily to North America and Western Europe. The purchase agreement is subject to final investment decision for the Brass LNG project.

# Trading

TOTAL, through its subsidiary Total Gas & Power Ltd, has conducted trading activities primarily for spot LNG between 2001 and 2006. In 2007, this subsidiary began

receiving cargos under its long-term supply contracts with Nigeria and Norway. Since 2009, the new purchase agreements for LNG from Qatargas 2 and Yemen LNG have allowed a substantial development of the Group's operations in LNG marketing. This mix of spot and long term LNG purchases allows TOTAL to supply its main customers around the world with gas, while retaining a certain degree of flexibility to react to market opportunities or unexpected fluctuations in supply and demand.

In 2009, Total Gas & Power Ltd purchased twenty-three contractual cargos and twelve spot cargos from Norway, Nigeria, Equatorial Guinea, Indonesia, Trinidad & Tobago, Qatar and Yemen.

#### **Liquified Petroleum Gas**

In 2009, TOTAL traded and sold nearly 4.4 Mt of LPG (butane and propane) worldwide (compared to 5.2 Mt in 2008 and 2007), including 0.9 Mt in the Middle East and Asia, approximately 0.6 Mt in Europe on small coastal trading vessels and approximately 2.8 Mt on large vessels in the Atlantic and Mediterranean regions. Approximately 40% of these quantities come from fields or refineries operated by the Group. LPG trading involved the use of four time-charters and approximately sixty spot charters.

Since January 2008, SALPG (South Asian LPG Limited, a company in which TOTAL holds a 50% interest, in partnership with Hindustan Petroleum Company Ltd) has operated the underground import and storage LPG terminal located in Visakhapatnam, on the east coast of India in the state of Andhra Pradesh. This terminal, the first of its kind in India, has a storage capacity of 60 kt. In 2009, the cavern received 606 kt of LPG, compared to 535 kt in 2008.

## **Electricity and Cogeneration**

As a refiner and petrochemical producer, TOTAL has interests in several cogeneration facilities. Cogeneration is a process whereby the steam produced to turn turbines to generate electricity is then captured and used for industrial purposes. TOTAL also participates in another type of cogeneration, which combines power generation with water desalination and gas-fired electricity generation, as part of its strategy of pursuing opportunities throughout the gas value chain. As part of its diversification strategy for new energies, the Group is also involved in projects to generate electricity from solar or nuclear sources.

In *Abu Dhabi*, the Taweelah A1 cogeneration plant, in operation since May 2003, combines power generation and water desalination. It is owned and operated by Gulf Total Tractebel Power Cy, in which TOTAL has a 20% interest. The Taweelah A1 plant currently has a net

capacity of 1,600 MW (following the start-up of the 250 MW expansion in July 2009) and water desalination capacity of  $385,000 \text{ m}^3$  per day.

In addition, TOTAL, in partnership with the Spanish company Abengoa Solar, participated in a bidding process launched by Abu Dhabi Future Energy Company (ADFEC) in early 2008 as part of the MASDAR initiative to support new energies. This call for tenders concerns the construction of a 110 MW concentrated solar power plant.

TOTAL, together with GDF Suez, EDF and Areva, acknowledged ENEC's (Emirates Nuclear Energy Corporation) decision, announced in December 2009, to deny the bid they made as part of the call for tenders launched for the supply of nuclear power plants. The Group pursues its objective to eventually become a recognized nuclear operator.

In *France*, TOTAL has an 8.33% interest in the project to build and operate the second French EPR in Penly, in the northwest of the country, in partnership with GDF Suez and EDF.

In *Thailand*, TOTAL owns 28% of Eastern Power and Electric Company Ltd (EPEC), which has operated the combined-cycle gas-fired power plant of Bang Bo, with a capacity of 350 MW, since March 2003.

In *Nigeria*, TOTAL and its partner, the state-owned NNPC (Nigerian National Petroleum Corporation), own interests in two projects to build gas-fired power plants that are part of the government's objectives to develop power generation and increase the share of natural gas production for domestic use:

- The Afam VI project, part of the SPDC (Shell Petroleum Development Company) joint venture in which TOTAL holds a 10% interest, which concerns the development of a 630 MW combined-cycle power plant with a start-up of commercial operations scheduled for the second half of 2010.
- The development of a new 400 MW combined-cycle power plant near the city of Obite (Niger Delta) in connection with the OML 58 gas project, part of the joint venture between NNPC and TOTAL (40%, operator).
   Commissioning is scheduled in early 2013. The combined-cycle power plant will be connected to the existing power grid through a 108 km highvoltage transmission line.

## **Renewable Energy**

As part of its strategy to develop energy resources to complement oil and gas, the Gas & Power division continued in 2009 to strengthen its positions in

renewable energies, with a particular focus on solar-photovoltaic power where the Group has been present since 1983.

#### Solar-photovoltaic power

In the photovoltaic sector based on crystalline silicon technology, TOTAL is involved in the development of the photovoltaic cells production business as well as in the production and marketing of solar modules and systems. The Group, through several partnerships, is pursuing its R&D program for this technology and has also committed to developing new innovative solar technologies. Furthermore, TOTAL conducts projects to display solar application solutions at some Group sites, both for educational purposes in France and as part of decentralized rural electrification projects in other countries.

TOTAL is a shareholder in **Photovoltech**, a company specialized in manufacturing high-efficiency photovoltaic cells. The Group now holds 50% of Photovoltech's share capital, alongside GDF Suez, pursuant to the buyout in September 2009 by both companies of the 4.4% interest held by IMEC (Interuniversity MicroElectronics Centre). In 2009, Photovoltech pursued its project to increase the overall production capacity of its Tirlemont plant (Tienen, Belgium) from 80 Mwp/y in 2009 to 155 MWp/y in late 2010. In a challenging market and given the sharp decrease in the price of cells, Photovoltech's 2009 sales were €80 million, compared to €106 million in 2008 and €73 million in 2007.

TOTAL also plans to build an industrial photovoltaic plant in the Carling region in eastern France in partnership with GDF Suez.

TOTAL holds a 50% interest in **Tenesol**, in partnership with EDF. Tenesol, whose headquarters are located in Lyon (France), designs, manufactures, markets and operates solar-photovoltaic power systems. Its principal markets are for network connections in France, in the French Overseas Territories and in Europe. Tenesol is also active in certain professional applications (telecommunications, oil & gas sites, etc.). Tenesol owns two solar panel manufacturing plants: Tenesol Manufacturing in South Africa, with production capacity of 60 MWp/y; and Tenesol Technologies in the Toulouse region of France, with production capacity of 50 MWp/y. In 2009, despite strong pressure on the price of modules, Tenesol's consolidated sales increased by nearly 30% to €249 million (compared to nearly €193 million in 2008 and €133 million in 2007), representing a marketed production of 85 MWp.

Regarding R&D, TOTAL, GDF Suez and Photovoltech confirmed their cooperation with IMEC by signing an agreement in September 2009 as part of the IIAP (IMEC Industrial Affiliation Program), a multi-partner program

on crystalline silicon solar cells. The objective of the IIAP is to sharply reduce the use of silicon while increasing the efficiency of cells in order to substantially lower the cost for solar energy.

In September 2009, the Group also partnered with LPICM (*Laboratoire de Physique des Interfaces et des Couches Minces*), a research unit comprised of the French National Center for Scientific Research (CNRS) and France's Ecole Polytechnique engineering school to set up a joint research team — Nano PV — in the Saclay area near Paris focusing on thin-film technologies and siliconbased nano-materials. TOTAL committed €8 million for the first 4-year phase.

In December 2008, TOTAL acquired an interest in a U.S. start-up company, **Konarka**, which specializes in the development of organic solar technologies. In 2009, Konarka implemented new research projects in cooperation with the Gas & Power division and other Group Chemicals subsidiaries to develop solar film on a large scale. The Group is confident in the potential of this promising technology and decided to increase its interest in Konarka to nearly 25% of the share capital in early 2010.

Total Énergie Solaire, the subsidiary created in July 2008 as part of the Group's contribution to the "Grenelle de l'environnement", a program launched by the French government, started operating in 2009 with the installation of solar panels at two Group's sites in Pau and Lacq (France). A total of five educational projects are expected to be completed in late 2010 to display different photovoltaic applications at the Group's sites, with an overall installed capacity of between 2 MWp and 3 MWp and an investment of €15 million.

Furthermore, TOTAL conducts decentralized rural electrification operations by responding to calls for tenders from authorities in several countries, notably in South Africa where KES (Kwazulu Energy Services Company), in which TOTAL holds a 35% interest, intends to equip 30,000 isolated homes. New projects are under study related to Africa, Asia and the Middle East.

In addition, **Temasol**, a wholly-owned subsidiary of Tenesol since the transfer in 2008 of the respective shares of Total Maroc and EDF EDEV, is involved in decentralized rural electrification projects in Morocco. Since its creation in 2001, approximately 25,500 households have been equipped and are now operated by Temasol.

#### Solar power storage

In November 2009, TOTAL announced the signature of a research agreement with the Massachussetts Institute of Technology (MIT) to develop new stationary batteries

that are designed to enable the storage of solar power. This \$4 million agreement over five years is part of the MIT Energy Initiative, which TOTAL joined as a member in November 2008.

#### Wind power

TOTAL operates a 12 MW wind farm in Mardyck (near its Flanders refinery, located in Dunkirk, France).

#### Marine energy

In marine energy, TOTAL acquired a 10% interest in a pilot project located offshore Santona, on the northern coast of Spain, in June 2005. The construction of a first buoy, with a capacity of 40 kW, was completed and the buoy was launched in September 2008. This project is intended to assess the technical and economic potential of this technology.

With respect to tidal current energy, TOTAL held as of the end of 2007 a 24.9% interest in Scotrenewables Marine Power, located in the Orkney Islands in Scotland. Agreements bringing new partners into the company's share capital were signed in January 2008. As a result, the Group's participation was diluted to 16%. Scotrenewables Marine Power is developing tidal current energy converter technology. A 1/5 scale model was successfully tested offshore in 2009. Construction of a full-scale prototype is scheduled for 2010.

#### Coal

For nearly thirty years, TOTAL has exported steam coal from South Africa, primarily to Europe and Asia. The Group also trades steam coal through its subsidiaries Total Gas & Power Ltd and Total Energy Resources (Pacific Basin). In addition, TOTAL markets coal to French customers through its subsidiary CDF Energie.

With the start-up of production on the Tumelo mine in January 2009, the subsidiary Total Coal South Africa (TCSA) owns and operates four mines in South Africa. A fifth mine is under development in Dorstfontein with a start-up expected in late 2011. The Group is also looking into several other mining development projects.

South African coal, produced by TCSA or bought from third-party's mines, is exported through the port of Richard's Bay in which TOTAL has a 5.36% interest. In 2008, TOTAL and its partner Mmakau Mining acquired an additional 1 Mt/y of harbor handling rights through the interests they hold in the fifth phase of the port's development.

TOTAL sold approximately 7.3 Mt of coal worldwide in 2009 (compared to 8.4 Mt in 2008 and 10 Mt in 2007), mainly intended for power generation, of which 3.6 Mt was South African coal. Half of this volume was sold in Europe and the other half in Asia. On the South African domestic market, sales amounted to 0.3 Mt in 2009, primarily destined for the industrial and metallurgic sectors.

# DME (Di-Methyl Ether)

In Japan, TOTAL is involved with eight Japanese companies in a program intended to heighten consumer awareness regarding this new generation fuel. The 80 kt/y DME production plant, located in Niigata (Honshu Island, Japan), started up in January 2009 (TOTAL, 10%).

As part of the consortium led by Volvo, TOTAL is involved in the "bio-DME" European project, which is intended to test the whole DME chain, from its production from black liquor, a paper pulp residue, to its use by a fleet of trucks in four Swedish cities. This project, which includes the construction of a pilot in Pitea (Sweden), started in September 2009 and is expected to end in 2012. It is partly funded by the Swedish Energy Agency and the EU Seventh Framework Program.

In addition, the international working group established as part of the ISO standardization process for DME pursued its activities in 2009. For two years as from January 1, 2009, TOTAL will also chair the IDA (International DME Association).

# DOWNSTREAM

The Downstream segment comprises TOTAL's Refining & Marketing and Trading & Shipping divisions.

# Refining & Marketing

As of December 31, 2009, TOTAL's worldwide refining capacity was 2,594 kb/d. In 2009, the Group's worldwide refined products sales were 3,616 kb/d (including trading operations), compared to 3,658 kb/d in 2008 and 3,774 kb/d in 2007. TOTAL is the largest refiner/marketer in Western Europe<sup>(1)</sup>, and the largest marketer in Africa<sup>(2)</sup>. As of December 31, 2009, TOTAL's worldwide marketing network consisted of 16,299 retail stations (compared to 16,425 in 2008 and 16,497 in 2007), more than 50% of which are owned by the Group. In addition, TOTAL's refining operations allow the Group to produce a broad range of specialty products, such as lubricants, liquefied petroleum gas (LPG), jet fuel, special fluids, bitumen, marine fuels and petrochemical feedstock.

The Group is adapting its Refining business to an environment that is depressed due to weaker demand for refined products. TOTAL continues to improve its positions by focusing on three key areas: adapting its European refining system to market changes; modernizing its Port Arthur refinery in the United States and building a refinery in Jubail in Saudi Arabia.

Regarding its Marketing business, the Group intends to consolidate its position in Western Europe, pursue targeted developments in Africa and the growing markets of the Asia-Pacific region and expand its specialty products business worldwide.

Consistent with the optimization of its Downstream portfolio in Europe, TOTAL signed an agreement with

ERG in January 2010 to create a joint venture in the Refining and Marketing business in Italy<sup>(3)</sup>. "TotalErg" will be the name of this newly created company through the merger of Total Italia and ERG Petroli. The shareholders agreement calls for a joint governance of the company as well as the operating independence of the joint-venture. TOTAL and Erg will hold a 49% and a 51% interest, respectively. The transaction is subject to approval by the relevant authorities.

# Refining

As of December 31, 2009, TOTAL held interests in twenty-four refineries (including twelve that it operates), located in Europe, the United States, the French West Indies, Africa and China. 2009 was marked by the deterioration of the refining environment that led to sharp declines in refining margins and decreasing utilization rates in refineries worldwide.

In 2009, TOTAL continued its program of selective investments in Refining focused on three areas: pursuing major ongoing projects (Port Arthur coker, Jubail refinery), adapting the European refining system to structural market changes, and strengthening safety and energy efficiency.

 In Western Europe, TOTAL's refining capacity was 2,282 kb/d in 2009, accounting for more than 85% of the Group's overall refining capacity. The Group operates eleven refineries in Western Europe, and



<sup>1.</sup> Based on publicly available information, refining and/or sales capacities and quantities sold.

<sup>2.</sup> PFC Energy December 2009, based on quantities sold.

<sup>3.</sup> Excluding Sicilia and excluding jet fuels and AS24 payment cards.

holds interests in the German refinery of Schwedt and in four Spanish refineries through its holding in  ${\sf CEPSA}^{(1)}.$ 

 In *France*, the Group continues to adapt its refining capacities and to shift the production emphasis to diesel, in a context of structural decline in demand for petroleum products in Europe and an increase in gasoline surpluses.

TOTAL announced in March 2009 an industrial plan to adapt its refining base, primarily by reconfiguring the Normandy refinery and rescaling certain corporate departments at its Paris headquarters. At the Normandy refinery, the project will shift the production emphasis to diesel. To this end, an investment program estimated at €770 million will enable TOTAL to upgrade the refinery: the refinery's annual distillation capacity will be reduced to 12 Mt from 16 Mt, and the distillate hydrocracker (DHC) commissioned in 2006 will be expanded. These investments are designed to improve energy efficiency and reduce carbon dioxide emissions, while increasing the annual average diesel output by 10% and reducing gasoline surpluses by 60%. Consultation with employee representatives ended in July 2009. Implementation of the project has started and is scheduled to last until 2013.

In March 2010, the Group announced a plan to repurpose its Flanders refinery site. This plan calls for shutting down refining operations at the site (capacity of 137 kb/d), developing new refining operations support and petroleum logistics activities and implementing the planned LNG terminal project in partnership with French utility EDF, for which the final investment decision is expected before summer 2010 with a view to commissioning in 2014<sup>(2)</sup>. The permanent refinery shutdown will result in a gradual dismantling of units that could continue to 2013. Implementation of this project is subject to consultation with employee representative organizations. Furthermore, TOTAL pledged not to close or sell any French refinery over the next five years, with the exception of the planned repurposing of the Flanders refinery.

In December 2009, the Group signed an agreement to divest its minority interest (40%) in Société de la Raffinerie de Dunkerque (SRD), a company specialized in the production of bitumen and base oils, subject to the approval by the relevant authorities.

• In the United Kingdom, construction at the Lindsey refinery started in June 2007 on a

hydrodesulphurization unit (HDS) and a steam methane reformer (SMR) to process high-sulphur crudes and to increase its lowsulphur diesel production. The HDS unit is expected to be commissioned in the first half of 2010 and is designed to increase the portion of high-sulphur crude that the plant can process from 10% to nearly 70%.

- In *Germany*, a new desulphurization unit at the Leuna refinery started up in September 2009. This unit is designed to supply the German market with low-sulphur heating oil.
- In the *Netherlands*, TOTAL, as the majority shareholder in the Vlissingen refinery (55%), exercised its pre-emptive rights over the shares (45%) of this asset that were offered for sale by Dow Chemical in June 2009. Concurrently, TOTAL received from Lukoil a binding purchase offer for these shares (45%) and sold these shares to Lukoil, which constituted the development of a new partnership between the two companies.
- In *Italy*, following the agreement signed in January 2010, the TotalErg joint venture will hold a 100% interest in the Rome refinery and a 25.9% interest in the Trecate refinery.
- In Spain, CEPSA has been pursuing its investment plan to improve the conversion capacity of its refineries to meet the growing demand for middle-distillates in the Spanish market. The construction of a hydrocracker unit, two additional distillation units (one atmospheric and one vacuum) and a desulphurization unit is underway at the Huelva refinery. Commissioning is currently expected in the summer of 2010.
- In the United States, TOTAL operates the Port Arthur refinery in Texas, with a capacity of 174 kb/d. TOTAL began a modernization program at this refinery in 2008, which includes the construction of a deep-conversion unit (or coker), a vacuum distillation unit, a desulphurization unit and other associated units to enable the refinery to process more heavy and high-sulphur crudes and to increase production of lighter products, in particular low-sulphur distillates. Construction is ongoing and commissioning is expected in the first quarter of 2011.
- In Saudi Arabia, TOTAL and Saudi Arabian Oil Company (Saudi Aramco) created a joint venture in September 2008, Saudi Aramco Total Refining and Petrochemical Company (SATORP), to build a 400 kb/d refinery in Jubail held by Saudi Aramco (62.5%) and TOTAL (37.5%). Eventually, TOTAL and Saudi Aramco each plans to retain a 37.5% interest

<sup>1.</sup> Group's share in CEPSA: 48.83% as of December 31, 2009.

<sup>2.</sup> For additional information on the Dunkirk LNG project, see "Item 4. Business Overview—Gas & Power".

with the remaining 25% expected to be listed on the Saudi stock exchange in late 2011, subject to approval by the relevant authorities. Signing the main contracts for the construction of the refinery in July 2009 marked the start-up of work. Commissioning is expected in 2013.

The heavy conversion process for this refinery is designed for the processing of heavier crudes (Arabian Heavy) and for the production of fuels and lighter products that meet strict specifications, and are mainly intended for export.

- In Africa, TOTAL holds interests in five refineries as of December 31, 2009. In October 2009, TOTAL disposed of its 50% interest in the Indeni refinery in Zambia. In addition, TOTAL decreased its interest to 20% from 34% in Société africaine de raffinage (SAR) in Senegal in December 2009.
- In China, TOTAL has a 22.4% interest in the WEPEC refinery, located in Dalian, in partnership with Sinochem and PetroChina.

#### Crude oil refining capacity

The table below sets forth TOTAL's crude oil refining capacity<sup>(a)</sup>:

As of December 31, (kb/d)	2009	2008	2007
Refineries operated by the Group			
Normandy (France)	338	339	331
Provence (France)	158	158	158
Flanders (France)	137	137	141
Donges (France)	230	230	230
Feyzin (France)	117	117	117
Grandpuits (France)	101	101	101
Antwerp (Belgium)	350	350	350
Leuna (Germany)	230	230	227
Rome (Italy) <sup>(b)</sup>	64	64	63
Lindsey — Immingham (United Kingdom)	221	221	221
Vlissingen (Netherlands) <sup>(c)</sup>	81	81	81
Port Arthur, Texas (United States)	174	174	174
Sub-total	2,201	2,202	2,194
Other refineries in which the Group has an			
interest <sup>(d)</sup>	393	402	404
Total	2,594	2,604	2,598

(a) For refineries not 100% owned by TOTAL, the capacity shown represents TOTAL's share of the overall refining capacity of the refinery.

- (b) TOTAL's interest is 71.9%.
- (c) TOTAL's interest is 55%.
- (d) TOTAL has interests ranging from 16.7% to 50% in twelve refineries (five in Africa, four in Spain, one in Germany, one in Martinique and one in China). TOTAL disposed of its 50% interest in the Indeni refinery in Zambia in 2009 and of its 55.6% interest in the Luanda refinery in Angola in 2007.

#### **Refined products**

The table below sets forth by product category TOTAL's net share of refined quantities produced at the Group's refineries<sup>(a)</sup>:

(kb/d)	2009	2008	2007
Gasoline	407	443	501
Jet fuel <sup>(b)</sup>	186	208	208
Diesel and heating oils	851	987	964
Heavy fuel oils	245	257	254
Other products	399	417	412
Total	2,088	2,312	2,339

(a) Including TOTAL's share in CEPSA.(b) Avgas, jet fuel and kerosene.

b) Avyas, jei lue

# **Utilization rate**

The table below sets forth the utilization rate of the Group's refineries<sup>(a)</sup>:

	2009	2008	2007
Crude	78%	88%	87%
Crude and other feedstock	83%	91%	89%

(a) Including TOTAL's share in CEPSA.

In 2009, TOTAL had to reduce the utilization rate of its refineries to adapt to weaker demand. In particular, the Port Arthur, Lindsey and Flanders refineries as well as a distillation unit at the Normandy refinery were temporarily shut down for economic reasons.

In 2009, five refineries underwent major turnarounds.

#### Marketing

TOTAL is one of the leading marketers in Western Europe<sup>(1)</sup>. The Group is also the largest marketer in Africa, with a market share of nearly  $10\%^{(2)}$ .

TOTAL markets a wide range of specialty products, which it produces from its refineries and other facilities. TOTAL is among the leading companies in the specialty products market<sup>(3)</sup>, in particular for lubricants, LPG, jet fuel, special fluids, bitumen and marine fuels, with products marketed in approximately 150 countries<sup>(4)</sup>.

4. Including through national distributors.



<sup>1.</sup> Based on publicly available information, quantities sold. Portfolio: France, Benelux, United Kingdom, Germany, Italy and, through CEPSA, Spain and Portugal.

<sup>2.</sup> PFC Energy December 2009, based on quantities sold.

<sup>3.</sup> Based on publicly available information, quantities sold.

## Europe

In Europe, as of December 31, 2009, TOTAL has a network of 10,825 service stations in France, Belgium, the Netherlands, Luxembourg, Germany, the United Kingdom, Italy, and, through its interest in CEPSA, Spain and Portugal. TOTAL also has a network of more than 540 AS24-branded service stations dedicated to commercial transporters. TOTAL is among the leaders in Europe for fuel-payment cards, with approximately 3.5 million cards issued in twenty-eight European countries.

In *France*, the TOTAL-branded network benefits from a large number of service stations and a diverse selection of products (such as the *Bonjour* convenience stores and car washes). Elf-branded service stations offer quality fuels at prices that are particularly competitive. As of December 31, 2009, nearly 2,300 TOTAL-branded service stations and 281 Elf-branded service stations were operating in France. TOTAL also markets fuels at nearly 1,800 Elan-branded service stations, generally located in rural areas.

In *Western Europe*, TOTAL continued in 2009 its efforts to optimize its Marketing business.

- In *Italy*, the agreement signed between TOTAL and ERG in January 2010 to create the TotalErg joint venture will enable the Group to become the third marketing operator in Italy with a retail market share of nearly 13%<sup>(1)</sup> and more than 3,400 service stations.
- In France, TOTAL announced in January 2010 a restructuring plan of its petroleum product logistics operations. This plan calls for outsourcing the operations of five depots to specialized logistics companies, closing the Pontet depot and doubling the capacity of the Port-la-Nouvelle depot. Implementation of this project is subject to consultation with employee representative organizations.

TOTAL signed in July 2009 an agreement to acquire thirty-seven service stations. In October 2009, the Group also signed an agreement to dispose of thirty-four service stations located in Corsica. These transactions have been approved by the relevant authorities. In January 2010, TOTAL also finalized the disposal of half of its share (50%) in Société des Dépôts Pétroliers de Corse.

In July 2009, the Group inaugurated a logistic platform in Rouen designed to supply Europe and

other continents with lubricants and grease. This investment is intended to improve the competitiveness of the Lubricants business line.

 In *Portugal*, since TOTAL and CEPSA merged their oil marketing businesses in 2008, TOTAL has had a leading position in the country with a market share of nearly 11%<sup>(2)</sup>, a network of 300 service stations and a strengthened position in the specialty products market.

In *Northern, Central and Eastern Europe*, the Group is developing its positions primarily in the specialty products market. In 2009, TOTAL continued to expand its presence in the growing markets of Eastern Europe, in particular for lubricants. The Group intends to accelerate the growth of its specialty products business in Russia and Ukraine through the development of its direct presence in these markets since 2008.

AS24, which is present in twenty-two European countries and in Russia, continued to expand its network in 2009 by opening new marketing outlets in Europe, in particular in three new countries (Croatia, Bulgaria, Republic of Macedonia). During the next few years, the AS24 network is expected to continue to grow and expand to other countries in Europe, the Caucasus and the Mediterranean Basin.

# Africa & the Middle East

As of December 31, 2009, TOTAL is the leading marketer of petroleum products in the African continent, with a market share of nearly  $10\%^{(3)}$ , over 3,600 service stations in more than forty countries and two major networks in South Africa and Nigeria. TOTAL also has a large presence in the Mediterranean Basin, principally in Turkey, Morocco and Tunisia. In the Middle East, the Group is active mainly in the specialty products market and is pursuing its growth strategy in the region, notably through the production and marketing of lubricants.

In 2009, the Group continued to strengthen its positions on the African continent. In the second quarter of 2009, TOTAL completed the acquisition of marketing and logistics assets in Kenya and Uganda. The transaction covers 165 service stations, aviation products distribution as well as several logistics sites and a lubricant manufacturing plant.

# Asia-Pacific

As of December 31, 2009, TOTAL was present in nearly twenty countries in the Asia-Pacific region, primarily in the specialty products market. The Group is developing

<sup>1.</sup> PFC Energy, Unione Petrolifera, based on quantities sold.

<sup>2.</sup> Based on publicly available information, quantities sold.

<sup>3.</sup> PFC Energy December 2009, based on quantities sold.

its position as a fuel marketer in the region, in particular in China, and operates networks in Pakistan, the Philippines and Cambodia. TOTAL is also a significant player in the Pacific Islands. In addition, five service stations opened in Indonesia in 2009.

In *China*, the Group has approximately 110 service stations as of December 31, 2009, following two joint venture agreements signed in 2005 by TOTAL and Sinochem to develop a network of 500 service stations in the Beijing and Shanghai areas.

In *Vietnam*, TOTAL continues to strengthen its position in the specialty products market. After the acquisition of an LPG marketing company in December 2008, the Group finalized in December 2009 the acquisition of lubricants assets, making TOTAL one of the leaders of the Vietnamese lubricants market.

#### **The Americas**

In *Latin America* and the *Caribbean*, TOTAL is active in nearly twenty countries, primarily in the specialty products market. In the Caribbean, the Group holds a significant position in the fuel distribution business that was strengthened by the acquisition in the second half of 2008 of marketing and logistics assets in Puerto Rico, Jamaica and the Virgin Islands.

In *North America*, TOTAL markets lubricants and is continuing to grow with the signature in December 2009 of an agreement to acquire lubricant assets in the province of Quebec in Canada.

## Sales of refined products

The table below sets forth TOTAL's volumes of refined petroleum products sold by geographic area<sup>(a)</sup>:

(kb/d)	2009	2008	2007
France	808	822	846
Europe excluding France <sup>(a)</sup>	1,245	1,301	1,432
United States	118	147	162 <sup>(b)</sup>
Africa	281	279	286
Rest of world	189	171	167
Total excluding Trading	2,641	2,720	2,893 <sup>(b)</sup>
Trading	975	938	881
Total including trading	3,616	3,658	3,774 <sup>(b)</sup>

(a) Including TOTAL's share in CEPSA.

(b) The amount is different from that in TOTAL's 2007 Form 20-F due to a change in the calculation method for sales of the Port Arthur refinery.

#### 43

# Service stations

The table below sets forth the number of service stations in TOTAL's network by geographic area<sup>(a)</sup>:

As of December 31,	2009	2008	2007
France	4,606 <sup>(b)</sup>	4,782	4,992
Europe excluding France and CEPSA	4,485	4,541	4,762
CEPSA <sup>(c)</sup>	1,734	1,811	1,680
Africa	3,647	3,500	3,549
Rest of world	1,827	1,791	1,514
Total	16,299	16,425	16,497

(a) Excluding AS24-branded service stations.

(c) Including all service stations within the CEPSA network.

#### **Biofuels**

TOTAL is present in the biodiesel and biogasoline biofuel sectors. In 2009, TOTAL produced and blended 560 kt of ethanol<sup>(1)</sup> in gasoline at twelve European refineries<sup>(2)</sup> (compared to 425 kt in 2008 and 350 kt in 2007) and 1,870 kt of VOME<sup>(3)</sup> in diesel at fifteen European refineries<sup>(4)</sup> and several oil depots (compared to 1,470 kt in 2008 and 880 kt in 2007).

TOTAL, in partnership with the leading companies in this area, is developing second generation biofuels derived from biomass. The Group is also participating in French, European and international bioenergy development programs.

In this framework, the Group announced in 2009 that it would participate in the BioTfueL research project intended to develop a technology to transform biomass into biodiesel.

In April 2009, the Group announced that it had acquired an interest in Gevo, a U.S. company developing a portfolio of bioproducts intended for the transportation fuel and chemicals markets. Gevo is developing an innovative technology to convert sugars derived from biomass into higher alcohols and hydrocarbons.

The Group is also involved in Futurol, an R&D project for cellulosic bioethanol, which intends to develop and promote on an industrial scale a production process for bioethanol by fermentation of lignocellulosic biomass.

<sup>1.</sup> Including ethanol from ETBE (Ethyl-Tertio-Buthyl-Ether).

<sup>2.</sup> Including the Algeciras and Huelva refineries (CEPSA).

<sup>3.</sup> VOME: Vegetable-Oil-Methyl-Ester.

<sup>4.</sup> Including the Algeciras, Huelva and Tarragona refineries (CEPSA).

<sup>(</sup>b) Of which nearly 2,300 TOTAL-branded service stations, nearly 281 Elfbranded service stations and more than 1,800 Elan-branded service stations.

# Hydrogen and electric mobility

For several years, TOTAL has been involved in research and testing programs for fuel cell and hydrogen fuel technologies. The Group is a founding member of the industrial group created in 2007 to participate in the European Joint Technology Initiative to promote the development of hydrogen technology.

# Trading & Shipping

The Trading & Shipping division:

- sells and markets the Group's crude oil production;
- provides a supply of crude oil for the Group's refineries;
- imports and exports the appropriate petroleum products for the Group's refineries to be able to adjust their production to the needs of local markets;
- · charters appropriate ships for these activities; and
- undertakes trading on various derivatives markets.

In 2009, as part of the Clean Energy Partnership project, TOTAL built a new prototype hydrogen fueling station in Germany. Three other service stations of the Group are marketing hydrogen in Germany and Belgium.

In Germany, the Group is also involved in a demonstration project for marketing electricity at four TOTAL-branded service stations in Berlin, in partnership with the utility company Vattenfall.

Although the Trading & Shipping division's main focus is serving the Group, its know-how and expertise also allow this division to extend its scope of operations beyond meeting the strict needs of the Group.

Trading & Shipping's worldwide activities are conducted through various whollyowned subsidiaries, including TOTSA Total Oil Trading S.A., Total International Ltd, Socap International Ltd, Atlantic Trading & Marketing Inc., Total Trading Asia Pte, Total Trading and Marketing Canada L.P. and Chartering & Shipping Services S.A.

## Trading

TOTAL is one of the world's largest traders of crude oil and refined products on the basis of volumes traded. The table below sets forth selected information with respect to TOTAL's worldwide sales and source of supply of crude oil for each of the last three years.

## Supply and sales of crude oil

For the year ended December 31, (kb/d, except %)	2009	2008	2007
Sales of crude oil	3,679	3,839	4,194
Sales to Group Refining & Marketing division <sup>(a)</sup>	1,771	1,995	2,042
Share of sales to external customers	1,908	1,844	2,152
Sales to external customers/total sales	52%	48%	51%
Supply of crude oil	3,679	3,839	4,194
Share of production sold <sup>(b)(c)</sup>	1,310	1,365	1,502
Purchased from external suppliers	2,370	2,474	2,692
Production sold/total supply	36%	36%	36%

(a) Excluding share of CEPSA.

(b) Including condensates and natural gas liquids.

(c) Including TOTAL'S proportionate share of joint ventures production.

The Trading division operates extensively on physical and derivatives markets, both organized and over the counter. In connection with its trading business, TOTAL, like most other oil companies, uses derivative energy instruments (futures, forwards, swaps, options) to adjust its exposure to fluctuations in the price of crude oil and refined products. These transactions are entered into with various counterparties.

For additional information concerning Trading & Shipping's derivatives, see Notes 30 (Financial

instruments related to commodity contracts) and 31 (Market risks) to the Consolidated Financial Statements.

All of TOTAL's trading operations are subject to strict internal controls and trading limits.

Throughout 2009, the Trading division maintained a level of activity similar to the levels attained in 2008 and 2007, trading physical volumes of crude oil and refined products amounting to an average of approximately 5 Mb/d.

In 2009, the main market benchmarks were characterized by a strong contango<sup>(1)</sup>:

				2007	min	2009	max	2009
Brent ICE — 1 <sup>st</sup> Line <sup>(a)</sup>	(\$/b)	62.73	98.52	72.67	39.6	(Feb. 11)	79.7	(Oct. 14)
Brent ICE — 12 <sup>th</sup> Line <sup>(b)</sup>	(\$/b)	70.43	102.19	73.24	48.3	(Feb. 11)	86.4	(Nov. 24)
Contango time structure (12th-1st)	(\$/b)	7.70	3.59	0.57	3.8	(Aug. 07)	15.2	(Jan. 02)
Gasoil ICE — 1st Line <sup>(c)</sup>	(\$/t)	522.20	920.65	637.84	361.3	(Feb. 24)	653.8	(Oct. 15)
VLCC Ras Tanura Chiba — BITR <sup>(c)</sup>	(\$/t)	10.43	24.09	13.93	6.3	(May 05)	17.9	(Jan. 08)

(a) 1<sup>st</sup> line: Quotation for ICE Futures for delivery during the month M+1.
(b) 12<sup>th</sup> Line: Quotation for ICE Futures for delivery during the month M+12.
(c) VLCC: Very Large Crude Carrier. BITR: Baltic International Tanker Routes.

Highlights of 2009 included a significant oversupply of crude oil and petroleum products compared to demand. Demand recovered slightly in the second half of the year.

The oversupply led to increased inventory levels. This trend was exacerbated by the steepening of the contango structure for future oil prices. In early 2009, the contango reached its maximum for the year (15.2 b) and then decreased but remained high enough to finance oil storage in onshore tanks and, once saturated, in offshore oil tankers (floating storage).

#### Shipping

The Group's Shipping division arranges the transportation of crude oil and refined products necessary for the Group's activities. The Shipping division provides a wide range of shipping services required by the Group to develop its activities and maintains a rigorous safety policy. Like a certain number of other oil companies and shipowners, the Group uses freight rate derivative contracts in its shipping activity to adjust its exposure to freight rate fluctuations.

In 2009, the Shipping division chartered approximately 3,000 voyages to transport approximately 123 Mt. At year-end 2009, the Group employed a fleet of fifty-five vessels chartered under long-term or medium-term

agreements (including four LPG carriers and no single-hulled vessels). The fleet has an average age of approximately four years.

In 2009, the oil freight market was adversely affected by the combination of two factors:

A strong increase of more than 10% in the tonnage of the global supply of tankers of over 10,000 deadweight tons, mainly due to the delivery of numerous new vessels in every segment and few disposals of vessels.

A decline in demand for transport due to the 1.6% decrease in the average demand for oil in 2009. This global decrease, primarily due to the worldwide recession, led to a reduction in OPEC's production in late 2008. As a result, crude transport dropped, especially on long-haul VLCC routes from the Persian Gulf.

Freight rates decreased throughout 2009 and, starting in the second quarter, reached levels that barely covered the vessels' operating costs. Within a few months, the market turned from historically high levels in 2008 to record low levels in 2009. The weak freight rates and pricing structure for the crude oil market followed by the petroleum products market led to using vessels as floating storage.

# CHEMICALS

The Chemicals segment includes the Base Chemicals and Specialty Chemicals divisions:

- Base Chemicals encompasses the Group's petrochemicals and fertilizers businesses; and
- Specialty Chemicals encompasses the Group's rubber processing, resins, adhesives and electroplating businesses.

<sup>1.</sup> Contango is defined as a market situation in which the price of a good in the future is higher than its prompt price in the spot market.

# **Base Chemicals**

The Base Chemicals division includes TOTAL's petrochemical and fertilizer businesses.

In 2009, Base Chemicals sales were €8.66 billion, compared to €13.18 billion in 2008 and €12.56 billion in 2007. The 2009 market environment for the Base Chemicals division was marked by a decreasing

demand for petrochemical products in Europe and the United States and a decline in margins of products from steam crackers. The Group's operations in Qatar and Korea helped to offset the challenging environment in mature areas. The Fertilizers business was affected by decreasing volumes and very weak margins throughout the year.

## Petrochemicals

# TOTAL'S PRODUCTION CAPACITIES BY MAIN PRODUCT GROUPS AND REGIONS

		2009				2007
(kt)	Europe	North America	Asia and Middle East <sup>(c)</sup>	Worldwide	Worldwide	Worldwide
Olefins <sup>(a)</sup>	4,695	1,195	1,005	6,895	7,285	7,175
Aromatics	2,500	940	755	4,195	4,360	4,335
Polyethylene	1,320	440	280	2,040	2,035	2,035
Polypropylene	1,335	1,150	295	2,780	2,750	2,575
Styrenics <sup>(b)</sup>	1,110	1,350	630	3,090	3,220	3,160

(a) Ethylene, propylene and butadiene.

(b) Styrene and polystyrene.

(c) Including minority interests in Qatar and 50% of Samsung-Total Petrochemicals capacities in Daesan (South Korea).

The petrochemical business, grouped under Total Petrochemicals, includes base petrochemicals (olefins and aromatics) and their polymer derivatives (polyethylene, polypropylene and styrenics).

TOTAL's main petrochemical sites are located in Belgium (Antwerp, Feluy), France (Carling, Feyzin, Gonfreville, Lavéra), the United States (Carville in Louisiana and Bayport, La Porte and Port Arthur in Texas), Singapore and China (Foshan). Most of these sites are either adjacent to or connected by pipelines to Group refineries. As a result, most of TOTAL's petrochemical operations are closely integrated within the Group's refining operations.

TOTAL owns a 50% interest in the Daesan petrochemical site in South Korea, in partnership with Samsung. This integrated site is located 400 km off the Chinese coast.

In Qatar, the Group holds interests in two steam crackers and several polyethylene lines.

TOTAL has continued to strengthen its leadership positions in the industry by focusing on the following strategic areas:

 In mature markets, TOTAL is improving the competitiveness of its longestablished sites notably through costs management, better energy efficiency at its facilities and more flexibility in the choice of feedstock.

In an increasingly competitive environment, the Group launched two reorganization plans, one in 2006 and another in 2009, for the Carling and Gonfreville sites in France:

- The first plan called for the closing of a steam cracker and the styrene plant at Carling and the construction of a new world-class<sup>(1)</sup> styrene plant at Gonfreville to replace the plant closed in late 2008. The reorganization plan was completed in the first quarter of 2009.
- The second plan is focused on a project to consolidate the petrochemical business to improve competitiveness. This project includes

<sup>1.</sup> Facilities ranking among the first quartile for production capacities based on publicly available information.



a plan to upgrade the Group's most efficient units by investing approximately €230 million to increase energy efficiency to the most efficient level and improve the competitive strength of the steam cracker and high-density polyethylene unit in Gonfreville, and to consolidate polystyrene production at the Carling facility. It will also lead to the closing of structurally loss-making units: two low-density polyethylene lines, one in Carling (eastern France) and one in Gonfreville (northwestern France), and a polystyrene line in Gonfreville. This reorganization plan is also intended to improve the efficiency of the support services at both sites and of the central services at Total Petrochemicals France.

Furthermore, following the sole customer's termination of the supply contract for the secondary butyl alcohol produced at the Notre-Damede-Gravenchon facility in Normandy, this dedicated facility will have to be closed. Closure is expected in 2010.

TOTAL is continuing to expand in growth areas.

In Asia, the joint venture Samsung-Total Petrochemicals Co. Ltd inaugurated in September 2009 a polypropylene compounding plant located in Dongguang, China, and continues to optimize operations with the construction of a jet fuel production plant to develop co-products and a butane storage tank. This storage tank is intended to increase flexibility for the steam cracker feedstocks. In 2008, the joint venture completed the first modernization phase of the Daesan site in South Korea. This major development increased the site's initial production capacity by nearly onethird through the expansion of the steam cracking and styrene units, the construction of a new polypropylene line in 2007 and the start-up of a new metathesis<sup>(1)</sup> plant in 2008.

In the Middle East, construction of a 700 kt/y paraxylene unit at the Jubail refinery in Saudi Arabia was approved in May 2008 by TOTAL and Saudi Aramco. This world-class unit<sup>(2)</sup> is intended to supply the Asian market. Start-up is scheduled for 2013.

TOTAL is developing sites in countries with favorable access to raw materials.

In Qatar, through its interest in Qatofin and Qacpo, TOTAL holds a 49% interest in a Qatofin-operated world-class linear low-density polyethylene plant with a capacity of 450 kt/y in Mesaieed, which

started production in August 2009, as well as a 22% interest in an ethanebased steam cracker in Ras Laffan designed for processing 1.3 Mt/y of ethylene. The steam cracker started in March 2010.

In addition, construction of a 300 kt/y low-density polyethylene line is expected at Qapco, in which TOTAL holds a 20% interest, with commissioning scheduled in 2012.

Pursuant to the contract signed in July 2007, TOTAL is continuing discussions with Sonatrach, the Algerian national oil company, related to the construction a petrochemical site in Arzew (Algeria). The contemplated project includes an ethane-based steam cracker with production capacity of 1.1 Mt/y, two polyethylene units and a monoethylene glycol production unit. This world-class project would benefit from access to a particularly competitive feedstock and would be ideally located to supply Europe, the Americas and Asia.

In addition, TOTAL inaugurated in October 2008 a pilot MTO plant (Methanol to Olefins) at its Feluy site (Belgium). This project, one of the Group's most important research projects, is intended to assess, on a semi-industrial scale, the technical and economical feasibility of producing olefins from methanol derived from natural gas, coal and biomass, and to consider new methods to produce polyolefins.

In 2009, the Chemicals segment continued to improve its safety performance by focusing on on-the-job safety, safety management systems and major risk prevention. However, in the second half of 2009, the Chemicals segment faced four serious accidents. As a result, TOTAL launched a general review of thirteen French sites presenting technological risks, including two petrochemical sites (Gonfreville and Carling) and three sites from its Fertilizers business (Mazingarbe, Grandpuits and Grand Quevilly). The Group is concerned by these events, especially since safety results were steadily improving on the whole and work accident indicators were halved between 2005 and 2009.

#### **Base petrochemicals**

Base petrochemicals include olefins and aromatics produced by steam cracking petroleum cuts, mainly naphtha, as well as propylene and aromatics manufactured in the Group's refineries. The economic environment for this business is strongly influenced by supply and demand and by changes in the price of naphtha, the principal raw material used.

<sup>1.</sup> Conversion of ethylene and butene into propylene.

2009 was marked by a deterioration of margins due to a continuous increase in feedstock prices and the decline in demand for olefins and aromatics in Europe and the United States. The estimated utilization rate of steam crackers<sup>(1)</sup> in the industry worldwide decreased from 91% in 2005-2007 to 86% in 2008 and 85% in 2009 due to the commissioning of new capacities in the Middle East and the decrease in global demand.

# Polyethylene

Polyethylene is a plastic produced by the polymerization of ethylene manufactured in the Group's steam crackers. It is primarily intended for the packaging, automotive, food, cable and pipe markets. Margins are strongly influenced by the level of demand and by competition from expanding production in the Middle East, which benefits from favorable access to the raw material, ethane, to produce ethylene.

In 2009, demand growth was weak, estimated at +0.8% worldwide, with strong differences depending on regions: falling demand in mature zones (Europe and the United States) and strong growth in China (more than 25%), driven by a domestic demand satisfied by the significant increase in importations.

TOTAL's polyethylene sales volume dropped by 4% in 2009 compared to 2008 and margins remained weak in Europe. In the United States, margins maintained at a higher level mainly due to the competitive price of ethanebased ethylene. In Europe, the pressure on margins is expected to persist with the start-up of new ethane-based units in the Middle East, which began in late 2009, and in Asia.

In this context, TOTAL intends to focus on lowering the break-even point in its plants in Europe and strengthening its efforts to better differentiate its range of products.

# Polypropylene

Polypropylene is a plastic produced by the polymerization of propylene manufactured in the Group's steam crackers and refineries. It is primarily intended for the automotive, packaging, household, appliances, fabrics and health care markets. Margins are mainly influenced by the level of demand and the availability and price of propylene.

Highlights of 2009 included the slight recovery in the global marketplace, estimated at +1.8%, that was driven, like polyethylene, by increasing Chinese domestic demand.

Compared to 2008, TOTAL's sales volumes increased by 6% due to positive contributions from every region. To face the increasing competition from new plants in the Middle East, TOTAL owns plants with industrial performance, both in Europe and the United States, which place the Group among the industry's leaders.

# Styrenics

This line of business includes the production of styrene and polystyrene. Most of the styrene manufactured by the Group is used to produce polystyrene, a plastic principally used in food packaging, insulation, refrigeration, domestic appliances and electronic devices. Margins are strongly influenced by the level of polystyrene demand and the price of benzene, which is polystyrene's principal raw material.

In 2009, the global styrene market decreased by 3%. The global polystyrene market decreased by approximately 4% due to the weakness of the construction, refrigeration and television markets in mature zones. Nonetheless, 2009 was also marked by the recovery of growth in China, exceeding 10%, due to programs implemented to stimulate domestic demand.

In 2009, TOTAL's polystyrene sales volumes increased by 1%, driven by an increase in sales in Asia (+13%).

#### **Fertilizers**

Through its subsidiary GPN, TOTAL manufactures and markets nitrogen fertilizers made from natural gas. Margins are strongly influenced by the price of natural gas.

After a record high in 2008, the European fertilizers market decreased by more than 10% in 2009 and returned to the levels recorded in 2005-2006. Following the collapse of urea prices in late 2008, prices of nitrogen products decreased sharply in early 2009, leading to a drop in margins.

The Fertilizers business continued its major restructuring plan initiated in 2006:

- In France, GPN ceased production of complex fertilizers that are made from nitrogen, phosphorus and potassium products, due to the declining market for these products, and closed its plants in Bordeaux, Basse Indre and Granville. In addition, TOTAL sold its Dutch affiliate, Zuid Chemie, to Engrais Rosier, in which the Group holds a 57% share, to create a more competitive player in the Benelux market.
- 48

<sup>1.</sup> Based on publicly available information.

- The core activity of the Fertilizers business, which is the production of nitrogen fertilizers, was strengthened through a major investment in the construction of a competitive nitric acid plant in Rouen, which started up in the second half of 2009, and a urea plant in Grandpuits, which is expected to start up in the second quarter of 2010. This additional urea production is expected to position GPN in the growing markets of products that contribute to reducing nitrogen oxide emissions<sup>(1)</sup>: DENOX<sup>®</sup> for industrial applications and Adblue<sup>®</sup> for transportation applications.
- In France, the Oissel site and three obsolete nitric acid units in Rouen and Mazingarbe were closed in 2009.
- The Group is considering the sale of its mine and quarries business at Mazingarbe. Sale of this business has been submitted to prior consultation with employee representative organizations and to the approval by the relevant authorities.

This plan is expected to improve the competitiveness of GPN by regrouping its operations at two sites which feature production capacity greater than the European average.

# **Specialty Chemicals**

TOTAL's Specialty Chemicals division includes the rubber processing (Hutchinson), consumer products (Mapa<sup>®</sup> and Spontex<sup>®</sup>), resins (Cray Valley, Sartomer and Cook Composites & Polymers), adhesives (Bostik) and electroplating (Atotech) businesses. The division serves consumer and industrial markets for which customer-oriented marketing and service as well as innovation are key drivers. The Group markets specialty products in more than fifty-five countries. Its strategy is to pursue its international expansion by combining internal growth and targeted acquisitions while concentrating on growing markets and focusing on the marketing of new products with high added value.

In 2009, Specialty Chemicals faced a difficult environment due to the global economic slowdown, especially in the first half of the year. In this adverse environment, Specialty Chemicals sales decreased by 13% compared to 2008. Results substantially increased in the second half of 2009 compared to the same period in 2008, due to improving margins and cost reduction programs.

# **Rubber processing**

Hutchinson manufactures and markets products derived from rubber processing that are principally intended for the automotive, aerospace and defense industries.

Hutchinson, among the industry's leaders<sup>(2)</sup>, provides its customers with innovative solutions in the areas of fluid transfer, water and airtightness, transmission, mobility and vibration, as well as sound and thermal insulation.

Hutchinson's 2009 sales decreased by 11% in an uneven environment depending on the lines of business. Automotive products sales decreased substantially compared to 2008 in a challenging market environment,

1. Nitrogen oxide emissions are harmful to the environment and subject to regulation.

49

especially in the first half of the year, both in North America and in Europe. In other industrial markets, sales increased slightly in 2009 compared to 2008 due to sustained demand from the defense, aerospace and railway industries.

To strengthen its position in the aerospace industry, Hutchinson acquired Strativer in late 2008, a company that specializes in the expanding composite materials industry.

Throughout 2009, Hutchinson continued to develop in expanding markets, primarily Eastern Europe, South America and China, relying notably on the sites opened in 2006 in Brasov (Romania), Lodz (Poland) and Suzhou (China) and in 2009 in Sousse (Tunisia).

# **Consumer products**

The Consumer products business is organized into baby care products (Nuk<sup>®</sup> and Tigex<sup>®</sup>) and household specialties (Mapa<sup>®</sup> and Spontex<sup>®</sup>). The baby care products sector strengthened in 2009 with the acquisition of Gerber in late 2008. As a result, sales increased by 11% in 2009 compared to 2008. These markets depend heavily on the level of household consumption and due to the economic slowdown, like-for-like consumer products business is expected to continue to grow in Europe, the United States and emerging countries.

In early 2010, TOTAL launched a process to sell its Consumer products business. Sale of this business has been submitted to prior consultation with employee representative organizations and to the approval by the relevant authorities.

<sup>2.</sup> Based on publicly available information, consolidated sales.

# Resins

TOTAL produces and markets resins for adhesives, inks, paints, coatings and composite materials through three subsidiaries: Cray Valley, Sartomer, and Cook Composites & Polymers.

In 2009, sales decreased by 22%, reflecting the ongoing economic slowdown in the United States, which is the main market segment for the Resins business, and decreasing volumes in Europe.

In this environment, all the subsidiaries accelerated their programs to reduce fixed costs in Europe and the United States. In addition, they continued to refocus on their most profitable lines of business through a selective investment policy targeting in particular the most dynamic geographical areas. For instance, Sartomer continued to expand in China from its Nansha plant that started up in April 2008.

## Adhesives

Bostik is one of the world leaders in its sector, based on sales<sup>(1)</sup>, with leading positions in the industrial, hygiene, construction and consumer and commercial distribution markets.

In 2009, Bostik's sales decreased by 8% compared to 2008. These comparatively positive results in an adverse economy confirm Bostik's strategy of strengthening its position in the industrial market, which has been less affected than the construction industry, and continuing its development in growing markets, especially in the Asia-Pacific region.

# OTHER MATTERS

Various factors, including certain events or circumstances discussed below, have affected or may affect TOTAL's business and results.

#### Exploration and production legal considerations

TOTAL's exploration and production activities are conducted in many different countries and are therefore subject to an extremely broad range of regulations. These cover virtually all aspects of exploration and production activities, including matters such as leasehold rights, production rates, royalties, environmental protection, exports, taxes and foreign exchange rates. The terms of the concessions, licenses, permits and contracts governing the Group's ownership of oil and gas interests vary from country to country. For instance, new production units were commissioned in China (Zhuhai) and Australia (Sydney). In September 2009, Bostik launched the construction of a plant in Changshu (China) that is expected to eventually become the company's largest plant.

Furthermore, Bostik is actively pursuing its program for innovation and is focusing notably on new products and applications contributing to sustainable development.

## Electroplating

Atotech, which encompasses TOTAL's electroplating business, is the second largest company in this sector based on worldwide sales<sup>(1)</sup>. It is active in both the electronics (printed circuits, semiconductors) and general metal finishing markets (automotive, sanitary goods, furnishing).

The electroplating business was impacted by the global economic slowdown that affected the automotive and the electronics industries. Sales decreased by 20% in 2009 compared to 2008.

In this context of economic slowdown, Atotech successfully pursued its strategy designed to better differentiate its products through comprehensive service provided to its customers in terms of equipment, processes, design, chemical products and through the development of green, innovative technologies to reduce the environmental footprint. This strategy relies on global coverage provided by its technical centers located near customers. Finally, Atotech intends to continue to develop in Asia, which represents more than 50% of its global sales.

These concessions, licenses, permits and contracts are generally granted by or entered into with a government entity or a state-owned company and are sometimes entered into with private owners. These arrangements usually take the form of concessions or production sharing agreements.

The oil concession agreement remains the traditional model for agreements entered into with States: the oil company owns the assets and the facilities and is entitled to the entire production. In exchange, the operating risks, costs and investments are the oil company's responsibility and it agrees to remit to the relevant State, usually the owner of the subsoil resources, a production-based royalty, income tax, and possibly other taxes that may apply under local tax legislation.

<sup>1.</sup> Based on publicly available information.

The production sharing contract (PSC) involves a more complex legal framework than the concession agreement: it defines the terms and conditions of production sharing and sets the rules governing the cooperation between the company or consortium in possession of the license and the host State, which is generally represented by a state-owned company. The latter can thus be involved in operating decisions, cost accounting and production allocation.

The consortium agrees to undertake and finance all exploration, development and production activities at its own risk. In exchange, it is entitled to a portion of the production, known as "cost oil", the sale of which should cover all of these expenses (investments and operating costs). The balance of production, known as "profit oil", is then shared in varying proportions, between the company or consortium, on the one hand, and with the State or the state-owned company, on the other hand.

In some instances, concession agreements and PSCs coexist, sometimes in the same country. Even though other contractual structures still exist, TOTAL's license portfolio is comprised mainly of concession agreements. In all countries, the authorities of the host State, often assisted by international accounting firms, perform joint venture and PSC cost audits and ensure the observance of contractual obligations.

In some countries, TOTAL has also signed contracts called "contracts for risk services", which are similar to production sharing contracts, with the main difference being that the repayment of expenses and the compensation for services are established on a monetary basis. Current contracts for risk services are backed by a compensation agreement (buyback), which allows TOTAL to receive part of the production equal to the cash value of its expenses and compensation.

Hydrocarbon exploration and production activities are subject to public authorizations (permits), which can be different for each of these activities. These permits are granted for limited periods of time and include an obligation to return a large portion, in case of failure the entire portion, of the permit area at the end of the exploration period.

TOTAL is required to pay income tax on income generated from its production and sales activities under its concessions or licenses. In addition, depending on the country, TOTAL's production and sale activities may be subject to a range of other taxes, fees and withholdings, including special petroleum taxes and fees. The taxes imposed on oil and gas production and sale activities may be substantially higher than those imposed on other businesses. The legal framework of TOTAL's exploration and production activities, established through concessions, licenses, permits and contracts granted by or entered into with a government entity, a state-owned company or, sometimes, private owners, is subject to certain risks which in certain cases can diminish or challenge the protections offered by this legal framework.

# Industrial and environmental considerations

TOTAL's activities involve certain industrial and environmental risks which are inherent in the production of products that are flammable, explosive or toxic. Its activities are therefore subject to government regulations concerning environmental protection and industrial safety in most countries. More specifically, in Europe, TOTAL operates industrial sites that meet the criteria of the European Union Seveso II directive for classification as high-risk sites. Some of TOTAL's operated sites in the United States are subject to the Occupational Safety and Health Administration ("OSHA") Process Safety Management of Highly Hazardous Materials, as well as other OSHA regulations.

The broad scope of TOTAL's activities, which include drilling, oil and gas production, on-site processing, transportation, refining and petrochemical activities, storage and distribution of petroleum products, and production of base chemical and specialty products, involve a wide range of operational risks. Among these risks are those of explosion, fire or leakage of toxic products. In the transportation area, the type of risk depends not only on the hazardous nature of the products transported, but also on the transportation methods used (mainly pipelines, maritime, river-maritime, rail, road), the volumes involved, and the sensitivity of the regions through which the transport passes (population density, environmental considerations).

Most of these activities also involve environmental risks related to emissions into the air, water or soil and the creation of waste, and also require environmental site remediation and closure and decommissioning after production is discontinued.

Certain branches or activities face specific risks. In Exploration & Production, there are risks related to the physical characteristics of an oil or gas field. These include eruptions of crude oil or of natural gas, discovery of hydrocarbon pockets with abnormal pressure, crumbling of well openings, leaks generating toxic risks and risks of fire or explosion. All these events could possibly cause injury or even death, damage or even destroy crude oil or natural gas wells as well as related equipment and other property, lead to a disruption of activity or cause environmental damage. In addition, since exploration and production activities may take

place on sites that are ecologically sensitive (tropical forest, marine environment, etc.), each site requires a risk-based approach to avoid or minimize the impact on human health, the related ecosystem and biodiversity.

TOTAL's activities in the Chemicals segment and the Refining & Marketing division may also have health, safety and environmental risks related to the overall life cycle of the products manufactured, as well as raw materials used in the manufacturing process, such as catalysts, additives and monomer feedstocks. These risks can arise from the intrinsic characteristics of the products involved, which may, for example, be flammable, toxic, or result in long-term environmental impacts such as greenhouse gas emissions. Risk of facility contamination and off-site impacts may also arise from mercycling or disposing of materials and wastes at the end of their useful life.

## Health, safety and environment regulations

TOTAL is subject to extensive and increasingly strict health, safety and environmental ("HSE") regulations in the European Union, the United States and worldwide.

The following is a non-exhaustive list of HSE directives that affect TOTAL's operations and products in the European Union:

- The Integrated Pollution Prevention and Control Directive ("IPCC") provides for a cost/benefit framework used to comprehensively assess the environmental quality standards, prior environmental impacts, and potential additional emissions limits on, large industrial plants, including refineries and chemical sites. A proposed Industrial Emission Directive would replace a number of existing industrial emission directives, including the IPPC Directive and the Large Combustion Plant Directive, and could result in stricter emission limits on some of TOTAL's facilities.
- The Air Quality Framework Directive and related directives on ambient air quality assessment and management, among other things, limit emissions for sulphur dioxide, oxides of nitrogen, particulate matter, lead, carbon monoxide, benzene and ozone.
- The Sulphur Content Directive limits sulphur in diesel fuel to 0.1% (since January 2008) and limits sulphur in heavy fuel oil to 1% (since January 2003), with certain exceptions for combustion plants provided that local air quality standards are met.
- The Large Combustion Plant Directive, effective since 2008, limits certain emissions, including sulphur dioxide, nitrogen oxides and particulates, from large combustion plants.

- Existing Directives controlling and limiting exhaust emissions from cars and other motor vehicles are expected to continue to become more stringent over time. Since 2009, a maximum sulphur content of 10 ppm is mandatory throughout the European Union.
- The 1996 Major Hazards Directive (Seveso II) requires emergency planning, public disclosure of emergency plans, assessment of hazards and effective emergency management systems. EU Member States have implemented this Directive and provided for associated criminal sanctions.
- The Framework Directive on Waste Disposal is intended to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods that could unduly harm the environment. Numerous related directives regulate specific categories of waste. In November 2008, the Framework Directive on Waste Disposal was partially modified by the Directive on Waste 2008/98, which features more precise definitions and stronger provisions. This Directive is expected to completely enter into force and replace the Framework Directive and certain other waste related directives by 2010.
- A number of Maritime Safety Directives were passed in the wake of the Erika spill. Recent regulations require that tankers have double hulls and that ship owners acquire improved insurance coverage, mandate improvements to traffic monitoring, accident investigations and in-port vessel inspection (Port State Control), and further regulate organizations that inspect and confirm conformity to applicable regulations (Classification Societies).
- Numerous Directives impose water quality standards based on the various uses of inland and coastal waters, including ground water, by setting limits on the discharges of many dangerous substances and by imposing information gathering and reporting requirements.
- Adopted and effective since 2003, a comprehensive Framework Water Directive has been progressively replacing numerous existing Directives with a comprehensive set of requirements, including additional regulations obligating member countries to classify all water courses according to their biological, chemical and ecological quality, and to completely ban the discharges of approximately thirty toxic substances by 2017.
- Numerous Directives regulate the classification, labelling and packaging of chemical substances and their preparation, as well as restrict and ban the use

of certain chemical substances and products. On the one hand, the EU Parliament and Council adopted a new regulation in December 2008 on the Classification, Labelling and Packaging of Substances and Mixtures that incorporates the classification criteria and labelling rules agreed at the UN level (the so-called Globally Harmonised System of classification and labelling of Chemicals (GHS)). On the other hand, the EU Member States, the European Commission and the European Chemical Agency are in the process of implementing the Regulation adopted in 2006 for the Registration, Evaluation and Authorization of Chemicals (REACH) that replaces or complements the existing rules in this area. REACH required the pre-registration of chemical substances manufactured and imported into the EU by December 1, 2008, to qualify for full registration under a phase in during the period 2010-2018. As of December 2008, 165,000 substances had been pre-registered. This regulation is expected to impose substantial costs on TOTAL's operations in the European Union.

- In March 2004, the European Union adopted a Directive on Environmental Liability. This Directive was transposed into EU Member State national legislations in 2007 and 2008, and in France in August 2008. The Directive seeks to implement a strict liability approach for damage to water resources, soils and protected species and habitats by authorized industrial activities.
- Directives implementing the Aarhus Convention concerning public information rights and certain public participation rights in a variety of activities affecting the environment were adopted in January and May 2003, respectively, and implemented in most national EU legislations.
- In November 2008, the European Union adopted a Directive on the protection of the environment through criminal law that obliges EU Member States to provide for criminal penalties in respect of serious infringements of EC law. EU Member States must transpose this Directive into their national legislation by December 26, 2010.
- TOTAL's facilities in the EU are also subject to extensive workplace safety regulations initiated by the European Community and defined and promulgated by each Member State.
- With respect to the climate change issue, numerous initiatives in the European Union are pending or currently being revised, including:
  - A September 2003 Directive implementing the Kyoto Protocol within the European Union

established a system effective as of January 2005 for greenhouse gas emissions quotas. This system requires EU Member States to prepare, under the supervision of the EU Commission, national emissions plans identifying a global amount of quotas to be shared and delivered by the governments to each industrial installation of specific sectors, in particular the energy one. On the basis of these quotas, carbon dioxide emissions permits are then distributed. In accordance with the 2009 revision of the aforementioned directive, a quota auctioning mechanism is scheduled to be set up in 2013. When this system is established, TOTAL's industrial facilities may incur capital and operating costs to comply with such legislation including the acquisition of emissions allowances.

- At the UN summit in Copenhagen in December 2009, world leaders recognized the need to limit global temperature increases to two degrees celsius above pre-industrial levels, which could result in future directives limiting emissions of greenhouse gases in the European Union, or potential international agreements.
- The Kyoto Protocol is reaching an end in 2012. Although debates occurred at the December 2009 UN Summit in Copenhagen, no decision as to the follow-up was made. The future conferences on the subject scheduled for 2010 could result in the adoption of international agreements with respect to the continuation of the Kyoto Protocol.
- The Climate Action and Renewable Energy Package commits EU Member States to reduce overall emissions to at least 20% below 1990 levels by 2020, and requires Member States to improve energy efficiency and increase renewable energy usage. This legislation is likely to affect TOTAL's operations in the future.
- The 2009 Directive on Carbon Capture and Storage (CCS) has been adopted and is currently being transposed into Member States' national legislations. This legal framework forms the basis for developing CCS projects that are expected to serve as one of the most valuable solutions for the reduction of carbon dioxide emissions. Such projects are likely to have technical and financial impacts.
- In France, the provisions of the 2010 financial bill establishing a carbon tax was deemed unconstitutional and referred back to the French government, which is currently

preparing a new proposal. Should a carbon tax similar to the one in the 2010 financial bill be adopted, TOTAL's industrial facilities may incur capital and operating costs.

In the United States, where TOTAL's operations are less extensive than in Europe, TOTAL is also subject to significant HSE regulations at both the state and federal levels. Of particular relevance to TOTAL's lines of business are:

- The Clean Air Act and its regulations, which require, among other measures: stricter phased-in fuel specifications and sulphur reductions; enhanced emissions controls and monitoring at major sources of volatile organic compounds, nitrogen oxides, and other designated hazardous and non-hazardous air pollutants; stringent pollutant emission limits; construction and operating permits for major air emission sources at chemical plants, refineries, marine and distribution terminals and other facilities; and risk management plans for the handling and storage of hazardous substances.
- The Clean Water Act, which regulates the discharge of wastewater and other pollutants from both onshore and offshore operations and, among other measures, requires industrial facilities to obtain permits for most wastewater and surface water discharges, install control equipment and treatment systems, implement operational controls, and preventative measures, including spill prevention and control plans and practices to control storm water runoff.
- The Resource Conservation and Recovery Act (RCRA), which regulates the generation, storage, handling, treatment, transportation and disposal of hazardous waste and imposes corrective action requirements on regulated facilities requiring investigation and remediation of potentially contaminated areas at these facilities.
- The Comprehensive Environmental Response, Compensation, and Liability Act (also known as CERCLA or Superfund), under which waste generators, former and current site owners and operators, and certain other parties can be held jointly and severally liable for the entire cost of remediating active, abandoned or non-operating sites contaminated by releases of hazardous substances regardless of fault or the amount or share of hazardous substances sent by a party to a site. The U.S. Environmental Protection Agency ("EPA") has authority under Superfund to order responsible parties to clean up contaminated sites and may seek recovery of the government's response costs from responsible parties. States have similar legal authority to compel site

investigations and cleanups and to recover costs from responsible parties. The U.S. government and states may also sue responsible parties for injuries to natural resources (*e.g.*, rivers and wetlands) arising from contamination.

 National and international maritime oil spill laws, regulations and conventions, including the Oil Pollution Act of 1990, which imposes significant oil spill prevention requirements, spill response planning obligations, ship design requirements (including in certain instances double hull requirements), operational restrictions, spill liability for tankers and barges transporting oil, offshore oil platform facilities and onshore terminals and sets up an oil liability spill fund paid for by taxes on imported and domestic oil.

Other significant U.S. environmental legislation includes the Toxic Substances Control Act, which regulates the development, testing, import, export and introduction of new chemical products into commerce and the Emergency Planning and Community Right-to-Know Act, which requires emergency planning and spill notification as well as public disclosure of chemical usage and emissions.

TOTAL facilities in the United States are also subject to extensive workplace safety regulations promulgated by OSHA. Most notable among OSHA regulations is the Process Safety Management of Highly Hazardous Chemicals (PSM), a comprehensive regulatory program that requires major industrial sources, including petroleum refineries and chemical manufacturing facilities, to undertake significant hazard assessments during the design of new industrial processes and during modifications to existing processes.

In 2009, the EPA issued a finding that greenhouse gas ("GHG") emissions endanger public health and the environment. This endangerment finding would allow the EPA to regulate these emissions under the Clean Air Act. The EPA has also proposed to regulate GHG emissions from automobiles and new or existing industrial facilities and plans to issue regulations in 2010. These proposed rules may result in limits being placed on GHG emissions from petroleum refineries, chemical plants and other large industrial sources, including TOTAL's facilities in the United States.

In response to public concerns over the effects of climate change, a number of legislative initiatives are currently pending in the U.S. Congress, including the American Clean Energy and Security Act (ACES), passed by the U.S. House of Representatives in June 2009, and draft legislation in the U.S. Senate that contain requirements intended to limit GHG emissions from industrial sources through "cap-and-trade" market mechanisms. Should a GHG cap-and-trade system,

carbon tax or other GHG regulation become law, industrial facilities owned by TOTAL subsidiaries in the United States may incur additional capital and operating costs to comply with such legislation including the acquisition of emissions allowances to continue operating.

Proceedings instituted by governmental authorities are pending or known to be contemplated against certain U.S.-based subsidiaries of TOTAL under applicable environmental laws that could result in monetary sanctions in excess of \$100,000. No individual proceeding is, nor are the proceedings as a group, expected to have a material adverse effect on TOTAL's consolidated financial position or profitability.

#### **Risk evaluation**

Prior to developing their activities and ongoing during their operation, business units evaluate the related industrial and environmental risks, taking into account regulatory requirements in the countries where these activities are located as well as recognized and generally accepted good engineering practices.

On sites with significant technological risks, Process Hazard Analyses are performed on all new processes and on existing processes where significant changes are proposed. These analyses are generally re-evaluated every five years. To ensure risks are appropriately analyzed and monitored, TOTAL has developed a Group-wide risk management approach, which is being implemented progressively throughout the sites it operates. On the basis of these analyses, relevant sites are finalizing safety management plans and emergency plans in the event of accidents. In the United States, TOTAL is implementing a Process Safety Management Improvement Plan (PSMIP).

In France, all the sites that meet the criteria of the European Union Seveso II directive are developing Risk Management Plans pursuant to the French law of July 30, 2003. Each of these plans will introduce various urban planning measures to reduce risks to urban environments surrounding industrial sites that are considered as high risk according to the Seveso II directive criteria. French administrative authorities are preparing such plans while taking into account input from site operators and neighboring residents.

Similarly, environmental impact studies are carried out prior to any industrial development through a thorough initial site analysis, taking into account any special sensitivity as well as developing plans to prevent and reduce the impact of accidents. These studies also take into account the health impact of such operations on the local population, based on a shared methodology. In countries where prior administrative authorization and supervision is required, projects are not undertaken

without the authorization of the relevant authorities and are developed according to the studies the authorities are provided with.

For new products, risk characterizations and evaluations are carried out. Furthermore, life cycle analyses for related risks are performed on certain products to study all the stages of a product's life cycle from its conception until the end of its useful life.

TOTAL's entities actively monitor regulatory developments to comply with local and international rules and standards for the evaluation and management of industrial and environmental risks. In case of operations being stopped, the Group's environmental contingencies and asset retirement obligations are addressed in "Asset retirement obligation" and "Provisions for environmental contingencies" in Note 19 to the Consolidated Financial Statements. Future expenses related to asset retirement obligations are accounted for in accordance with the principles described in paragraph Q of Note 1 to the Consolidated Financial Statements.

#### **Risk management**

Risk management control measures involve equipment design, the reinforcement of safety devices, the design of structures to be built and the protection against the consequences of environmental events.

TOTAL seeks to minimize industrial and environmental risks inherent to its operations and, to this end, has developed efficient organizations as well as quality, safety and environmental management systems. The Group is also targeting the certification for or assessment of its management systems (including International Safety Rating System, ISO 14001, European Management and Audit Scheme) and conducts thorough inspections and audits, trains appropriate personnel, heightens awareness of all the parties involved and implements an active investment policy.

More specifically, following up on the Group's 2002-2005 plan, an action plan was defined by the Group for the 2006-2009 period that focused on two initiatives for improvement: reducing the frequency and severity of on-the-job accidents and strengthening the management of technological risks. The results related to reducing on-the-job accidents are in line with the goals set by the plan, with a significant decrease in the rate of accidents (with or without time-lost) per million hours worked by more than 75% between the end of 2001 and the end of 2009. In terms of technological risks, this plan's initiatives include specific organization and behavioral plans as well as plans to minimize risks at the source and to increase safety for people and for equipment use.

Several environmental action plans have been implemented for different activities of the Group covering periods up to 2012. These plans are designed to improve environmental performance, particularly regarding the use of natural resources, air and water pollution, waste production and treatment, and site decontamination. They also contain quantified objectives to reduce, most notably, greenhouse gas emissions, water pollution as well as sulphur dioxide emissions and to improve energy efficiency.

As part of its efforts to combat climate change and reduce greenhouse gases, the Group committed to reducing gas flaring at its Exploration & Production sites by 2014 to 50% of the 2005 level. By the end of 2012, the Group intends to obtain ISO 14001 certification for all of its sites that it considers particularly important to the environment according to criteria updated in 2009. As of today, 89% of such sites are ISO 14001-certified, representing more than 280 of the Group's sites worldwide. These activities are monitored through periodic and coordinated reporting by all Group entities.

The Group believes that, according to its current estimates, contingencies or liabilities related to health, safety and environmental concerns would not have a material impact on its consolidated financial situation, its cash flow or its income. Due to the nature of such concerns, however, it is impossible to predict whether additional future commitments or liabilities could have a material adverse effect on the Group's activities.

# Asbestos

Like many other industrial groups, TOTAL is affected by reports of occupational diseases caused by asbestos exposure. The circumstances described in these reports generally concern activities prior to the beginning of the 1980s, long before the adoption of more comprehensive bans on the new installation of asbestos-containing products in most of the countries where the Group operates (January 1, 1997, in France). The Group's various businesses are not particularly likely to lead to significant exposure to asbestos-related risks, since this material was generally not used in manufacturing processes, except in limited cases. The main potential sources of exposure are related to the use of certain insulating components in industrial equipment. These components are being gradually eliminated from the Group's equipment through asbestoselimination plans that have been underway for several years. However, considering the long period of time that may elapse before the harmful results of exposure to asbestos arise (up to 40 years), TOTAL anticipates that other reports may be filed in the years to come. Asbestos-related issues have been subject to close monitoring in all the Group's business units. As of December 31, 2009, the Group estimates that the ultimate cost of all asbestosrelated claims paid or pending is not likely to have a material effect on the financial situation of the Group.

# Oil and gas exploration and production operations

Oil and gas exploration and production require high levels of investment and are associated with particular risks and opportunities. These activities are subject to risks related specifically to the difficulties of exploring underground, to the characteristics of hydrocarbons and to the physical characteristics of an oil or gas field. Of risks related to oil and gas exploration, geologic risks are the most important. For example, exploratory wells may not result in the discovery of hydrocarbons, or may result in amounts that would be insufficient to allow for economic development. Even if an economic analysis of estimated hydrocarbon reserves justifies the development of a discovery, the reserves can prove lower than the estimates during the production process, thus adversely affecting the economic development.

Almost all the exploration and production operations of TOTAL are accompanied by a high level of risk of loss of the invested capital due to the risks related to economic or political factors detailed hereafter. It is impossible to guarantee that new resources of crude oil or of natural gas will be discovered in sufficient amounts to replace the reserves currently being developed, produced and sold to enable TOTAL to recover the capital it has invested.

The development of oil and gas fields, the construction of facilities and the drilling of production or injection wells require advanced technology in order to extract and exploit fossil fuels with complex properties over several decades. The deployment of this technology in such a difficult environment makes cost projections uncertain. TOTAL's operations can be limited, delayed or cancelled as a result of numerous factors, such as administrative delays, particularly in terms of the host states' approval processes for development projects, shortages, late delivery of equipment and weather conditions, including the risk of hurricanes in the Gulf of Mexico. Some of these risks may also affect TOTAL's projects and facilities further down the oil and gas chain.

# Economic or political factors

The oil sector is subject to domestic regulations and the intervention of governments or state-owned companies in such areas as:

- the award of exploration and production interests;
- authorizations by governments or by a state-controlled partner, especially for development projects, annual programs or the selection of contractors or suppliers;
- the imposition of specific drilling obligations;
- environmental protection controls;
- control over the development and abandonment of a field causing restrictions on production;

- calculating the costs that may be recovered from the relevant authority and what expenditures are deductible from taxes; and
- possible, though exceptional, nationalization, expropriation or reconsideration of contractual rights.

The oil industry is also subject to the payment of royalties and taxes, which may be high compared with those imposed with respect to other commercial activities and which may be subject to material modifications by the governments of certain countries.

Substantial portions of TOTAL's oil and gas reserves are located in certain countries which may be considered as politically and economically unstable. These reserves and the related operations are subject to certain additional risks, including:

- the establishment of production and export quotas;
- the compulsory renegotiation of contracts;
- the expropriation or nationalization of assets;
- risks relating to changes of local governments or resulting changes in business customs and practices;
- payment delays;
- currency exchange restrictions;
- depreciation of assets due to the devaluation of local currencies or other measures taken by governments that might have a significant impact on the value of activities; and
- losses and impairment of operations due to armed conflicts, civil unrest or the actions of terrorist groups.

TOTAL, like other major international oil companies, has a geographically diverse portfolio of reserves and operational sites, which allows it to conduct its business and financial affairs so as to reduce its exposure to such political and economic risks. However, there can be no assurance that such events will not adversely affect the Group.

# Business Activities in Cuba, Iran, Sudan and Syria

The U.S. Department of State has identified Cuba, Iran, Sudan and Syria as state sponsors of terrorism. Provided in this section is certain information relating to TOTAL's activities in these jurisdictions.

# U.S. and Other Legal Restrictions

In 1996, the United States adopted legislation implementing sanctions against non-U.S. companies doing business in Iran and Libya (the Iran and Libya Sanction Act, referred to as "ILSA"), which in 2006 was amended to concern only business in Iran (then renamed the Iran Sanctions Act, referred to as "ISA").

The ISA is set to expire in December 2011. Pursuant to this statute, the President of the United States is authorized to initiate an investigation into the activities of non-U.S. companies in Iran and the possible imposition of sanctions (from a list that includes denial of financing by the U.S. Export-Import Bank, limitations on the amount of loans or credits available from U.S. financial institutions and prohibition of U.S. federal procurements from sanctioned persons) against persons found, in particular, to have knowingly made investments of \$20 million or more in any 12-month period in the petroleum sector in Iran. In May 1998, the U.S. government waived the application of sanctions for TOTAL's investment in the South Pars gas field. This waiver, which has not been modified since it was granted, does not address TOTAL's other activities in Iran, although TOTAL has not been notified of any related sanctions.

In November 1996, the Council of the European Union adopted regulations which prohibit TOTAL from complying with any requirement or prohibition based on or resulting directly or indirectly from certain enumerated legislation, including the ILSA (now ISA). It also prohibits TOTAL from having its waiver for South Pars extended to other activities.

In each of the years since the passage of the ILSA and until 2007, TOTAL made investments in Iran in excess of \$20 million (excluding the investments made as part of the development of South Pars). Since 2008, TOTAL's position has consisted essentially in being reimbursed for its past investments as part of buyback contracts signed between 1995 and 1999 with respect to permits on which the Group is no longer the operator. In 2009, TOTAL's production in Iran represented approximately 0.4% of the Group's worldwide production. TOTAL does not believe that its operations in Iran have a material impact on the Group's results.

In the future, TOTAL may decide to invest amounts in excess of \$20 million per year in Iran. To our knowledge, sanctions under the ISA have not been imposed on any non-U.S. oil and gas company which has investments in Iran. However, TOTAL cannot predict whether the U.S. government will take any action under the ISA with respect to its previous or possible future activities in Iran. It is possible, however, that the United States may determine that these or other activities constitute activity prohibited by the ISA and will subject TOTAL to sanctions. TOTAL does not believe that enforcement of the ISA against TOTAL, including the imposition of the maximum sanctions under the current version of the ISA, would have a material adverse effect on its results of operations or financial condition, although it could result in reputational harm.

However, the U.S. House of Representatives and the Senate have recently passed bills which, if adopted, would expand the scope of the ISA and could restrict

the President's ability to grant waivers. The proposed legislation would, among other things, require imposition of specific sanctions against companies that supply refined petroleum products to Iran, contribute to Iran's ability to maintain or expand domestic production or engage in certain related conduct. The sanctions to be imposed against violating firms would generally prohibit transactions in foreign exchange by the sanctioned company, prohibit any transfers of credit or payments between, by, through or to any financial institution to the extent that such transfers or payments involve any interest of the sanctioned company, and require blocking of any property of the sanctioned company that is subject to the jurisdiction of the United States. The bills would also generally forbid federal procurements from and assistance to non-U.S. companies that engage in sanctions-triggering actions.

TOTAL is closely monitoring legislative and other developments in the United States in order to determine whether its limited activities in Iran could subject it to application of either current or any future ISA sanctions. In the event the proposed legislation were adopted in its current form, such new legislation could potentially have a material adverse effect on TOTAL.

France and the European Union have adopted measures, based on United Nations Security Council resolutions, which restrict the movement of certain individuals and goods to or from Iran as well as certain financial transactions with Iran, in each case when such individuals, goods or transactions are related to nuclear proliferation and weapons activities or likely to contribute to their development. As currently applicable, the Group believes that these measures are not applicable to its activities and projects in this country.

The United States also imposes sanctions based on the United Nations Security Council resolutions described above, as well as broad and comprehensive economic sanctions, which are administrated by the U.S. Treasury Department's Office of Foreign Assets Control (referred to as "OFAC"). These OFAC sanctions generally apply to U.S. persons and activities taking place in the United States or that are otherwise subject to U.S. jurisdiction. Sanctions administered by OFAC target Cuba, Iran, Myanmar (Burma), Sudan and Syria. TOTAL does not believe that these sanctions are applicable to any of its activities in these countries.

In addition, many U.S. states have adopted legislation requiring state pension funds to divest themselves of investments in any company with active business operations in Iran or Sudan. Recently, there have been similar initiatives by state insurance regulators relating to investments by insurance companies in companies doing business with the Iranian oil and gas, nuclear and defense sectors. TOTAL has no business operations in Sudan and, to date, has not made any significant

investments or industrial investments there. The Genocide Intervention Network (formerly known as Sudan Divestment Task Force) report states that TOTAL should be regarded as "inactive" in Sudan by the U.S. states that have adopted such divestment legislation. On December 31, 2007, the U.S. congress adopted the Sudan Accountability and Divestment Act, which supports these state legislative initiatives. Similar legislation is pending in the U.S. Congress that supports state legislative initiatives regarding Iran. If TOTAL's operations in Iran or Sudan were determined to fall within the prohibited scope of these laws, and TOTAL were to not qualify for any available exemptions, certain U.S. state pension funds holding interests in TOTAL may be required to sell their interests. If significant, sales resulting from such laws and/or regulatory initiatives could have an adverse effect on TOTAL's share price.

## Activities in Cuba, Iran, Sudan and Syria

Provided below is certain information on TOTAL's activities in Cuba, Iran, Sudan and Syria.

Cuba

In 2009, TOTAL had limited marketing activities for the sale of specialty products to non-state entities in Cuba and paid taxes on such activities. In addition, TOTAL's Trading & Shipping division purchased hydrocarbons pursuant to spot contracts from a state-controlled entity for approximately €18 million.

Iran

TOTAL's Exploration & Production division has been active in Iran through buyback contracts. Under such contracts, the contractor is responsible for and finances development operations. Once development is completed, operations are handed over to the national oil company, which then operates the field. The contractor receives payments in cash or in kind to recover its expenditures as well as a remuneration based on the field's performance. Furthermore, upon the national oil company's request, a technical services agreement may be implemented in conjunction with a buyback contract to provide qualified personnel and services until full repayment of all amounts due to the contractor.

To date, TOTAL has entered into such buyback contracts with respect to the development of four fields: Sirri, South Pars 2 & 3, Balal and Dorood. For all of these contracts, development operations have been completed and TOTAL retains no operational responsibilities. In addition, a technical services agreement exists with respect to the Dorood field. As TOTAL is no longer involved in the operation of these fields. TOTAL has no information on the production from these fields. Some payments are yet to be reimbursed to

TOTAL with respect to South Pars 2 & 3, Balal and Dorood. In 2009, TOTAL's production in Iran, corresponding to such payments in kind, was approximately 8 kboe/d.

No royalties or fees are paid by the Group in connection with these buyback and service contracts. In 2009, TOTAL made non-material payments to the Iranian administration with respect to certain taxes and social security.

With respect to TOTAL's Refining & Marketing division's activities in Iran, Beh Total, a company held 50/50 by Behran Oil and Total Outre-Mer, a subsidiary of the Group, produces and markets small quantities of lubricants for sale to domestic consumers in Iran. In 2009, revenue generated from Beh Total's activities was €27.4 million and cash flow was €5.6 million. Beh Total paid €605,000 in taxes. TOTAL does not own or operate any refineries or chemicals plants in Iran.

In 2009, TOTAL's Trading & Shipping division purchased in Iran pursuant to a mix of spot and term contracts approximately fifty-eight million barrels of hydrocarbons from state-controlled entities for approximately €2.6 billion, and paid to a state-owned entity approximately €24 million pursuant to shipping contracts.

#### Sudan

TOTAL holds an interest in Block B in Southern Sudan through a 1980 Exploration and Production Sharing Agreement (EPSA). Operations were voluntarily suspended in 1985 because of escalating security concerns, but the company maintained its exploration rights. The Group's initial interest was 32.5%. Despite the withdrawal of a partner, TOTAL does not intend to increase its interest above its initial level. Consequently, the Group has entered into negotiations with new partners to transfer the former partner's interests for which the Group financially carries a share.

The EPSA was revised, effective December 21, 2004, to provide that the parties (the Government of Sudan and the consortium partners) would mutually agree upon a resumption date when the petroleum operations could be safely undertaken in the contract area. Such resumption date would mark the starting point of the Group's work obligations as foreseen in the contract. A joint decision on the resumption date has not yet been taken.

Pursuant to the EPSA in 2009, TOTAL paid to the Government of Sudan an annual surface rental fee of approximately \$200,000 and disbursed nearly \$3 million as scholarship bonus, social development contribution and contribution to the construction of social infrastructures, schools and water wells along with

non-governmental organizations and other stakeholders involved in Southern Sudan.

If TOTAL were to resume its activities in Southern Sudan, it would do so in compliance with applicable national, European and international laws and regulations, as well as with the Group's Code of Conduct and Ethics Charter. Within its scope of operations and authority, the Group is committed to upholding human rights and fundamental freedoms, including social, economic and cultural rights, and the rights and interests of local residents and minorities. In particular, the Group is studying the situation with non-governmental organizations (NGOs) and stakeholders involved in Southern Sudan and conducting socio-economic programs adapted to the needs of the local population.

#### Syria

In Syria, in 2009, TOTAL had two contracts relating to oil and gas Exploration & Production activities: a Production Sharing Agreement entered into in 1988 ("PSA 1988") for an initial period of twenty years and renewed at the end of 2008 for an additional 10-year period, and the Tabiyeh Gas Project risked Service Contract (the "Tabiyeh contract") effective from the end of October 2009. TOTAL owns 100% of the rights and obligations under PSA 1988, and is operating on various oil fields in the Deir Ez Zor area through a dedicated non-profit operating company owned equally by the Group and the state-owned Syrian Petroleum Company ("SPC").

The main terms of PSA 1988 are similar to those normally used in the oil and gas industry. The Group's revenues derived from PSA 1988 are made up of a combination of "cost oil" and "profit oil". "Cost oil" represents the reimbursement of operating and capital expenditures and is accounted for in accordance with normal industry practices. The Group's share of "profit oil" depends on the total annual production level. TOTAL receives its revenues in cash payments made by SPC. TOTAL pays to the state-owned Syrian company SCOT a transportation fee equal to \$2/bl for the oil produced in the area, as well as non-material payments to the Syrian government related to PSA 1988 for such items as withholding taxes and Syrian social security.

The Tabiyeh contract may be considered as an addition to PSA 1988 as production, costs and revenues for the oil and part of the condensates coming from the Tabiyeh field are governed by the contractual terms of PSA 1988. This project is designed to enhance liquids and gas output from the Tabiyeh field through the drilling of "commingled" wells and through process modifications in Deir Ez Zor Gas Plant operated by the Syrian Gas Company. TOTAL is financing and implementing the Tabiyeh Gas Project and operates the Tabiyeh field.

For 2009, technical production for PSA 1988 (for full year 2009) and the Tabiyeh contract (since October 2009, the effective date of the contract) taken together amounted to 36 kboe/d of which 20 kboe/d were accounted for as the Group's share of production. The amount identified as technical production under the agreements, minus the amount accounted for as the Group's share of production, does not constitute the total economic benefit accruing to Syria under the terms of the agreements since Syria retains a margin on a portion of the Group's production and receives certain production taxes.

In 2009, TOTAL's Trading & Shipping division purchased in Syria pursuant to a mix of spot and term contracts nearly twelve million barrels of hydrocarbons from state-controlled entities for approximately €472 million.

#### Competition

The Group is subject to intense competition within the oil sector and between the oil sector and other sectors aiming to fulfill the energy needs of the industry and of individuals. TOTAL is subject to competition from other oil companies in the acquisition of assets and licenses for the exploration and production of oil and natural gas. Competition is particularly strong with respect to the acquisition of resources of oil and natural gas. Competition is also intense in the sale of manufactured products based on crude and refined oil.

In this regard, the major international oil companies in competition with TOTAL are ExxonMobil, Royal Dutch Shell, Chevron and BP. As of December 31, 2009, TOTAL ranked fifth among these companies in terms of market capitalization.<sup>(1)</sup>

#### Insurance and risk management

## Organization

TOTAL has its own insurance and reinsurance company, Omnium Insurance and Reinsurance Company (OIRC). OIRC is integrated into the Group's insurance management and is used as a centralized global operations tool for covering the Group's risks. It allows the Group to implement its worldwide insurance program in compliance with the various regulatory environments in the countries where the Group operates.

Some countries require the purchase of insurance from a local insurance company. If the local insurer accepts to cover the subsidiary of the Group in compliance with its worldwide insurance program, OIRC requests a

1. Source: Reuters.

retrocession of the covered risks from the local insurer. As a result, OIRC negotiates reinsurance contracts with the subsidiaries' local insurance companies, which transfer most of the risk to OIRC. When a local insurer covers the risks at a lower level than that defined by the Group, OIRC provides additional coverage so as to standardize coverage throughout the Group.

At the same time, OIRC negotiates a reinsurance program at the Group level with mutual insurance companies for the oil industry and commercial reinsurers. OIRC enables the Group to better manage changes in price in the insurance market by taking on a greater or lesser amount of risk corresponding to the price trends in the insurance market.

In 2009, the net amount of risk retained by OIRC after reinsurance was at a maximum of €50 million per property/business interruption insurance claim and €50 million per third-party liability insurance claim.

## **Risk and insurance management policy**

In this context, the Group risk and insurance management policy is to work with the relevant internal department of each subsidiary to:

- define scenarios of major disaster risks (estimated maximum loss);
- assess the potential financial impact on the Group in case these catastrophic events should occur;
- help in implementing measures to limit the probability that a catastrophic event occurs and the extent of such events; and
- manage the level of risk from such events to be either covered internally by the Group or to be transferred to the insurance market.

#### Insurance policy

The Group has worldwide third-party liability and property insurance coverage for all its subsidiaries. These programs are contracted with first-class insurers (or reinsurers and mutual insurance companies of the oil industry through OIRC).

The amounts insured depend on the financial risks defined in the disaster scenarios and the coverage terms offered by the market (available capacities and price conditions).

More specifically, for:

 Third-party liability insurance: since the maximum financial risk cannot be evaluated by a systematic approach, the amounts insured are based on market conditions and industry practice, in particular, the oil industry. The insurance cap in 2009 for general and product liability was \$800 million.

 Property damage and business disruption: the amounts insured by sector and by site are based on estimated costs and reconstruction scenarios under the estimated maximum loss scenarios and on insurance market conditions. The Group subscribed for business disruption coverage in 2009 for its main refining and petrochemical sites.

For example, for the highest estimated risks of the Group (floating production, storage and offloading units (FPSO) in Angola and main European refineries), the limit of indemnity was close to \$1.5 billion in 2009.

Deductibles for property damages fluctuate between €0.1 million and €10 million depending on the level of risk, and are borne by the subsidiary. For business interruption, they represent sixty days.

Other insurance contracts are bought by the Group in addition to property damage and third-party liability coverage, mainly for car fleets, credit insurance and employee benefits. These risks are entirely underwritten by outside insurance companies.

The above-described policy is given as an example of past practice over a certain period of time and cannot be considered as representative of future conditions. The Group's insurance policy may be changed at any time depending on the market conditions, specific circumstances and on management's assessment of the risks incurred and the adequacy of their coverage. The Group cannot guarantee that it will not suffer any uninsured loss.

#### **Organizational Structure**

TOTAL S.A. is the parent company of the TOTAL Group. As of December 31, 2009, there were 712 consolidated subsidiaries, of which 617 were fully consolidated, 12 were proportionately consolidated and 83 were accounted for under the equity method. For a list of the principal subsidiaries of the Company, see Note 35 to the Consolidated Financial Statements.

# Tender Offer by TOTAL S.A. for Outstanding Elf Aquitaine Shares

As of December 31, 2009, TOTAL S.A. held, directly and indirectly, 279,875,134 shares of Elf Aquitaine, taking into account the 10,635,844 Elf Aquitaine treasury shares held by Elf Aquitaine. This represented 99.48% of Elf Aquitaine's share capital (281,343,859 shares) and 538,308,099 voting rights, or 99.72% of the 539,811,865 voting rights exercisable at Shareholders Meetings.

On March 24, 2010, TOTAL S.A. filed a public tender offer followed by a squeeze out with the French Autorité des marchés financiers (AMF) in order to buy the 1,468,725 Elf Aquitaine shares that it does not already hold at a price of €305 per share (including the remaining 2009 dividend). Subject to a clearance decision from the AMF, the Elf Aquitaine shares targeted by the offer which have not been tendered to the offer will be transferred to TOTAL S.A. under the squeeze out on the first trading day after the offer closing date, upon payment to the shareholders equal to the offer price. After the squeeze out, TOTAL S.A. will hold all Elf Aquitaine shares either directly or indirectly. These shares will then be delisted from the Compartment of the delisted securities on the regulated market managed by Euronext Paris S.A.

## **Property, Plants and Equipment**

TOTAL has freehold and leasehold interests in numerous countries throughout the world, none of which is material to TOTAL. See "— Business Overview — Upstream" for a description of TOTAL's reserves and sources of crude oil and natural gas.

## **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 included elsewhere in this Annual Report. The Consolidated Financial Statements are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the IASB and IFRS as adopted by the European Union.

# 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. Higher crude oil and natural gas prices generally have a positive effect on the income of TOTAL, since its Upstream oil and gas business benefits from the resulting increase in revenues realized from production. Lower crude oil and natural gas prices generally have a corresponding negative effect. The effect of changes in crude oil prices on TOTAL's Downstream activities depends upon the speed at which the prices of refined petroleum products adjust to reflect such changes. In the past several years, crude oil and natural gas prices have varied greatly, with prices increasing sharply until the fourth guarter of 2008, when prices dropped significantly. As TOTAL reports its results in euros, but conducts its operations mainly in dollars, the effect of an increase in crude oil and natural gas prices is partly offset by the effect of the variation in exchange rates during periods of weakening of the dollar relative to the euro and strengthened during periods of strengthening of the dollar relative to the euro. TOTAL's results are also significantly affected by the costs of its activities, in particular related to exploration and production, and by the outcome of its strategic decisions with respect to cost reduction efforts in the current period of significant economic uncertainty. TOTAL's results are also 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. Key Information - Risk Factors" and "Item 4. Information on the Company - Other Matters".

In 2009, the oil and gas market environment was marked by a sharp decline in the demand for oil, natural gas and refined products. Crude oil prices, nonetheless, rebounded during the year to average \$61.7/b primarily thanks to the support from OPEC reductions and the anticipation by the market of an economic recovery. In contrast, natural gas spot prices remained depressed and refining margins fell to historically low levels, under

This section contains forward-looking statements which 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" on page vi.

pressure from significant overcapacity. In Chemicals, despite strong demand for polymers in China, the environment was hurt by low margins and a sharp drop in demand in OECD markets.

In this context, TOTAL's 2009 net income (Group share) was €8,447 million, a decrease of 20% compared to 2008, mainly due to the negative impact of lower hydrocarbon prices and refining margins, partially offset primarily by the positive after-tax impact of prices on inventory valuation. In the fourth quarter 2009, based on a 6% increase in production in the Upstream segment, higher oil prices and Downstream segment results that remained slightly positive despite very weak refining margins, net income (Group share) rose to €2,065 million, an increase of 7% compared to the third quarter 2009.

With its strong balance sheet and financial flexibility, TOTAL has been able to continue its investment program and dividend policy in 2009, while keeping its net-debt-to-equity ratio, in line with its objectives, at 27% at the end of December 2009.

In the Upstream segment, five major projects started production in 2009 in Nigeria, the Gulf of Mexico, Angola, Qatar and Yemen. The Group also approved the investment to launch the Surmont Phase II project in Canada, and, to further strengthen its portfolio, entered into a number of joint ventures, notably with Chesapeake and Cobalt in the United States, Novatek in Russia, and Sonatrach in Algeria. These additions were made within the framework of the company's strict financial criteria. In addition, cost reduction plans launched in late 2008 led to an 8% reduction in operating costs per barrel and allowed the company to maintain its technical costs at \$15.4/boe, the same level as in 2008.

The Downstream and Chemicals segments continued to implement plans to adapt to the particularly difficult conditions they faced in 2009 that included reducing capacity to restore profitability to these activities in an environment undergoing profound transformation. The measures taken in the modernization of the refining and

petrochemicals site at Normandy demonstrate the Group's will to be socially responsible as it adapts its industrial operations to structural changes in the market.

In addition, outlays for research and development rose to  $\oplus$ 50 million in 2009, an increase of 6% compared to 2008. In particular, this allowed the Group to start up this year the pilot project for CO<sub>2</sub> capture and storage at Lacq, which illustrates its commitment to the fight against global climate change.

In reaffirming the priority of safety and the environment and by building on its investment discipline, its high-quality portfolio and its recognized expertise, TOTAL is confident in its ability to pursue its strategy of profitable and responsible growth to create value for all of its stakeholders.

## Outlook

In the Upstream segment, 2010 production is expected to increase thanks to the ramp-up on projects started up in 2009. TOTAL intends to continue to build on its large and diversified portfolio, its recognized expertise in project management and cost control. Following the launch of the Surmont Phase II project announced in January 2010, TOTAL expects to launch several other major

# **Critical Accounting Policies**

A summary of the Group accounting policies is included in Note 1 to the Consolidated Financial Statements. Management believes that the application of these policies on a consistent basis enables the Group to report useful and reliable information about the Group's financial condition and results of operations.

The Company has changed its method for reserve estimates due to the adoption of the Accounting Standards Update No. 2010-03, Oil and Gas Reserve Estimation and Disclosures, effective for annual reporting periods ended on or after December 31, 2009.

The preparation of financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of preparation of the financial statements and reported income and expenses for the period. Management reviews these estimates and assumptions on an ongoing basis, by reference to past experience and various other factors considered as reasonable which form the basis for assessing the book value of assets and liabilities.

projects, including CLOV in Angola, Laggan/Tormore in the United Kingdom, and Ofon II and Egina in Nigeria.

In the Downstream and Chemicals segments, the Group plans to continue to adapt its activities in mature areas and reinforce its portfolio in growing markets, notably with the construction of the Jubail refinery and the benefit from the start-up of a new ethane cracker in Qatar.

The Group is continuing to pursue its growth policy in 2010 with an investment budget of approximately €13 billion<sup>(1)</sup>, relatively stable compared to 2009; 80% of the investments will be dedicated to the Upstream segment. In addition, TOTAL intends to divest non-strategic assets, in particular through the progressive sale of its shares in Sanofi-Aventis and a project to sell Mapa-Spontex, a subsidiary in its Specialty chemicals sector. Based on this, the Group maintains its net-debt-to-equity ratio objective of around 25-to-30%. TOTAL is confident in its ability to maintain its dividend policy.

Since the beginning of the first quarter 2010, the price of Brent has traded between \$70/b and \$80/b and natural gas prices have recovered somewhat. The environment for refining and petrochemicals remains difficult.

Actual results may differ significantly from these estimates, if different assumptions or circumstances apply.

Lastly, where the accounting treatment of a specific transaction is not addressed by any accounting standards or interpretation, management applies its judgment to define and apply accounting policies that will lead to relevant and reliable information, so that the financial statements:

- give a true and fair view of the Group's financial position, financial performance and cash flows;
- reflect the substance of transactions;
- are neutral;
- · are prepared on a prudent basis; and
- are complete in all material aspects.

The following summary provides further information about the critical accounting policies, which could have a significant impact on the results of the Group. It should be read in conjunction with Note 1 to the Consolidated Financial Statements.

1. Including net investments in equity affiliates and non-consolidated companies, excluding acquisitions, based on €1 = \$1.40 for 2010.

The assessment of critical accounting policies below is not meant to be an allinclusive discussion of the uncertainties in financial results that can occur from the application of the full range of the Company's accounting policies. Materially different financial results could occur in the application of other accounting policies as well. Likewise, materially different results can occur upon the adoption of new accounting standards promulgated by the various rule-making bodies.

# Successful efforts method of oil and gas accounting

The Group follows the successful efforts method of accounting for its oil and gas activities. The Group's oil and gas reserves are estimated by the Group's petroleum engineers in accordance with industry standards and SEC regulations. In December 2008, the SEC published a revised set of rules for the estimation of reserves. These revised rules were used for the 2009 year-end estimation of reserves. Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations, prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. These estimates do not include probable or possible reserves. Estimated oil and gas reserves are based on available reservoir data and prices and costs in the accounting period during which the estimate is made and are subject to future revision. The Group reassesses its oil and gas reserves at least once a year on all its properties.

Exploration leasehold acquisition costs are capitalized when acquired. During the exploration phase, management exercises judgment on the probability that prospects ultimately would partially or fully fail to find proved oil and gas reserves. Based on this judgmental approach, a leasehold impairment charge may be recorded. This position is assessed and adjusted throughout the contractual period of the leasehold based in particular on the results of exploratory activity and any impairment is adjusted prospectively.

When a discovery is made, exploratory drilling costs continue to be capitalized pending determination of whether potentially economic oil and gas reserves have been discovered by the drilling effort. The length of time necessary for this determination depends on the specific technical or economic difficulties in assessing the recoverability of the reserves. If a determination is made that the well did not encounter oil and gas in economically viable quantities, the well costs are expensed and are reported in exploration expense.

Exploratory drilling costs are temporarily capitalized pending determination of whether the well has found proved reserves if both of the following conditions are met:

- the well has found a sufficient quantity of reserves to justify, if appropriate, its completion as a producing well, assuming that the required capital expenditure is made; and
- satisfactory progress toward ultimate development of the reserves is being achieved, with the Company making sufficient progress assessing the reserves and the economic and operating viability of the project.

The Company evaluates the progress made on the basis of regular project reviews which take into account the following factors:

- First, if additional exploratory drilling or other exploratory activities (such as seismic work or other significant studies) are either underway or firmly planned, the Company deems there is satisfactory progress. For these purposes, exploratory activities are considered firmly planned only if they are included in the Company's three-year exploration plan/budget.
- In cases where exploratory activity has been completed, the evaluation of satisfactory progress takes into account indicators such as the fact that costs for development studies are incurred in the current period, or that governmental or other third-party authorizations are pending or that the availability of capacity on an existing transport or processing facility awaits confirmation.

The successful efforts method, among other things, requires that the capitalized costs for proved oil and gas properties (which include the costs of drilling successful wells) be amortized on the basis of reserves that are produced in a period as a percentage of the total estimated proved reserves. The impact of changes in estimated proved reserves is dealt with prospectively by amortizing the remaining book value of the asset over the expected future production. If proved reserve estimates are revised downward, earnings could be affected by higher depreciation expense or an immediate write-down of the property's book value. Conversely, if the oil and gas quantities were revised upwards, future per-barrel depreciation and depletion expense would be lower.

## Valuation of long-lived assets

In addition to oil and gas assets that could become impaired under the application of successful efforts accounting, other assets could become impaired and require write-down if circumstances warrant. Conditions

that could cause an asset to become impaired include lower-than-forecasted commodity sales prices, changes in the Group's business plans or a significant adverse change in the local or national business climate. The amount of an impairment charge would be based on estimates of an asset's fair value compared with its book value. The fair value usually is based on the present values of expected future cash flows using assumptions commensurate with the risks involved in the asset group. The expected future cash flows used for impairment reviews are based on judgmental assessments of future production volumes, prices and costs, considering information available at the date of review.

# Asset retirement obligations and environmental remediation

When legal and contractual obligations require it, the Group, upon application of International Accounting Standard (IAS) 37 and IAS 16, records provisions for the future decommissioning of production facilities at the end of their economic lives. Management makes judgments and estimates in recording liabilities. Most of these removal obligations are many years in the future and the precise requirements that will have to be met when the removal event actually occurs are uncertain. Asset removal technologies and costs are constantly changing, as well as political, environmental, safety and public expectations.

The Group also makes judgments and estimates in recording costs and establishing provisions for environmental clean-up and remediation costs, which are based on current information on costs and expected plans for remediation. For environmental provisions, actual costs can differ from estimates because of changes in laws and regulations, public expectations, discovery and analysis of site conditions and changes in clean-up technology.

#### Pensions and post-retirement benefits

Accounting for pensions and other post-retirement benefits involves judgments about uncertain events, including estimated retirement dates, salary levels at retirement, mortality rates, rates of return on plan assets, determination of discount rates for measuring plan obligations, healthcare cost-trend rates and rates of utilization of healthcare services by retirees. These assumptions are based on the environment in each country. The assumptions used are reviewed at the end of each year and may vary from year-to-year, based on the evolution of the situation, which will affect future results of operations. Any differences between these assumptions and the actual outcome will also impact future results of operations. The significant assumptions used to account for pensions and other postretirement benefits are determined as follows:

Discount and inflation rates reflect the rates at which the benefits could be effectively settled, taking into account the duration of the obligation. Indications used in selecting the discount rate include rates of annuity contracts and rates of return on high-quality fixed-income investments (such as government bonds). The inflation rates reflect market conditions observed on a country-by-country basis.

Salary increase assumptions (when relevant) are determined by each entity. They reflect an estimate of the actual future salary levels of the individual employees involved, including future changes attributed to general price levels (consistent with inflation rate assumptions), productivity, seniority, promotion and other factors.

Healthcare cost trend assumptions (when relevant) reflect an estimate of the actual future changes in the cost of the healthcare related benefits provided to the plan participants and are based on past and current healthcare cost trends including healthcare inflation, changes in healthcare utilization, and changes in health status of the participants.

Demographic assumptions such as mortality, disability and turnover reflect the best estimate of these future events for the individual employees involved, based principally on available actuarial data.

Determination of expected rates of return on assets is made through compound averaging. For each plan, the distribution of investments among bonds, equities and cash and the expected rates of return on bonds, equities and cash are taken into account. A weighted-average rate is then calculated.

The effect pensions had on results of operations, cash flow and liquidity is fully set out in Note 18 to the Consolidated Financial Statements. Net employee benefit expense in 2009 amounted to €307 million and the Company's contributions to pension plans were €126 million.

Differences between projected and actual costs and between the projected return and the actual return on plan assets routinely occur and are called actuarial gains and losses.

The Group applies the corridor method to amortize its actuarial losses and gains. This method amortizes the net cumulative actuarial gains and losses that exceed 10% of the greater of (i) the present value of the defined benefit obligation, and (ii) the fair value of plan assets, over the average expected remaining working lives of the employees participating in the plan.

The unrecognized actuarial losses of pension benefits as of December 31, 2009, were €1,045 million compared to €953 million for 2008. The increase in unrecognized actuarial losses is explained by actuarial losses due to a decrease in discount rates in 2009 partially offset by an increase in the value of plan assets. As explained above, pension accounting principles allow that such actuarial losses be deferred and amortized over future periods, in the Company's case a period of fifteen years.

While the Company has not completed its calculations for 2010, it is considering an increased weighted-average expected return on pension plan assets for the year (6.39% compared to the 2009 rate of 6.14%), due to a change in the pension assets allocation as of December 31, 2009, that was offset by a decrease in discount rates in 2009. The Company does not believe that it will be significantly modifying its discount rate in the near future.

The Company's estimates indicate that a 1% increase or decrease in the expected rate of return on pension plan assets would have caused a  $\pounds$ 8 million decrease or increase, respectively, in the 2009 net periodic pension cost. The estimated impact on expense of the amortization of the unrecognized actuarial losses of €1,045 million as of December 31, 2009, is €8 million for 2010, compared to €50 million 2009.

### Income tax computation

The computation of the Group's income tax expense requires the interpretation of complex tax laws and regulations in many taxing jurisdictions around the world, the determination of expected outcomes from pending litigation, and the assessment of audit findings that are performed by numerous taxing authorities. Actual income tax expense may differ from management's estimates.

# Results 2007-2009

As of and for the year ended December 31, (M€, except per share data)	2009	2008	2007
Non-Group sales	131,327	179,976	158,752
Net income (Group share)	8,447	10,590	13,181
Diluted earnings per share	3.78	4.71	5.80

### Group Results 2009 vs. 2008

In 2009, the oil and gas market environment was characterized by a sharp decline in the demand for oil, natural gas and refined products. Following a significant decrease in the fourth quarter of 2008, crude oil prices rebounded during 2009 to an average Brent oil price of \$61.7/b, which represents a decrease of approximately 37% compared to the average Brent oil price of \$97.30/b in 2008. Natural gas spot prices remained depressed throughout 2009, with an average of \$5.17/Mbtu, which represents a decrease of 30% compared to \$7.38/Mbtu in 2008. The decrease in oil and gas prices was partially offset by the slight strengthening of the dollar comparative to the euro: the average euro-dollar exchange rate was \$1.39/ $\in$ in 2009 compared to \$1.47/ $\in$ in 2008. Comparing 2009 to 2008, TOTAL's average realized liquids price decreased by 36% and average realized natural gas price decreased by 30%.

Refining margins fell in 2009 to historically low levels, with TOTAL's European Refining Margin Indicator (ERMI) falling by 65% to \$17.8/t compared to \$51.1/t in 2008. ERMI is a new indicator, reported by TOTAL since January 2010, intended to represent the margin after variable costs for a theoretical complex refinery located around Rotterdam in Northern Europe that processes a mix of crude oil and other inputs commonly supplied to this region to produce and market the main refined

products at prevailing prices in this region. The indicator margin may not be representative of the actual margins achieved by TOTAL in any period because of TOTAL's particular refinery configurations, product mix effects or other company-specific operating conditions. TOTAL's refining margin indicator reported in previous quarters was TRCV. For comparative purposes, TRCV fell by 61% to \$14.8/t in 2009, compared to \$37.8/t in 2008. TRCV was discontinued effective in the first quarter 2010.

In the Chemicals segment, despite strong demand for polymers in China, the environment was affected by low margins and a sharp drop in demand for polymers and specialty chemicals in OECD markets.

Consolidated sales of TOTAL were €131.3 billion in 2009, a decrease of 27% from €180 billion in 2008, as a result of a decline in sales in the Upstream, Downstream and Chemicals segments of 34%, 26% and 27%, respectively.

TOTAL's net income (Group share) decreased to €8,447 million in 2009 from €10,590 million in 2008. The 20% decrease in net income (Group share) in 2009 compared to 2008 was mainly due to the negative impact of lower hydrocarbon prices and refining margins (-€6.8 billion). Other factors contributing to a decrease in net income (Group share) in 2009 compared to 2008

included special items (- $\oplus$ 0.1 billion). These negative impacts were partially offset by the positive impacts of: the after-tax impact of prices on inventory valuation accounted for in the Downstream and Chemicals segments (+ $\oplus$ 4.0 billion); the Group's equity share of adjustments (concerning amortization and impairment of intangibles related to the Sanofi-Aventis merger) and, from 2009, selected items related to Sanofi-Aventis (+ $\oplus$ 0.1 billion); and a stronger dollar (+ $\oplus$ 0.5 billion).

In 2009, income taxes amounted to €7,751 million, a decrease of 45% compared to €14,146 in 2008, primarily as a result of the decline in taxable income.

The Group did not buy back shares in 2009. The number of fully-diluted shares at December 31, 2009, was 2,243.7 million compared to 2,235.3 million at December 31, 2008.

Fully-diluted earnings per share, based on 2,237.3 million weighted-average shares, was €3.78 compared to €4.71 in 2008, a decrease of 20%.

## Group Results 2008 vs. 2007

Unprecedented volatility marked the 2008 oil market environment. In the first part of the year, the price of Brent crude climbed rapidly toward \$150/b. In the second part of the year, the global economy suffered a sharp slowdown, which contributed to driving Brent down to a new low for the year of \$35/b in December. The average Brent oil price in 2008 increased by 34% to \$97.30/b from \$72.40/b in 2007, and its price averaged \$55/b for the fourth quarter of 2008. Refining margins also increased in 2008, with the European refining margin indicator used by TOTAL's management (TRCV) up 16% to \$37.80/t from \$32.50/t in 2007, turning sharply negative at year-end due to decreasing demand resulting from the global economic slowdown. While the dollar lost 7% of its value against the euro during 2008, with the average dollar/euro exchange rate being \$1.47/€in 2008 compared to \$1.37/€in 2007, it did gain 14% against the euro during the fourth quarter.

TOTAL's consolidated sales increased by 13% to €180.0 billion in 2008 from €158.8 billion in 2007.

TOTAL's net income (Group share) was €10,590 million in 2008 compared to €13,181 million in 2007. The 20% decrease in net income in 2008 compared to 2007 was mainly due to the negative after-tax impact of prices on inventory valuation (-€3.8 billion), due to the sharp drop in oil prices in the last quarter of 2008. Other factors contributing to the decrease in net income in 2008

compared to 2007 consisted mainly of: the weaker dollar (-€0.8 billion); special items (-€0.5 billion); higher Upstream costs (-€0.5 billion); lower production (-€0.5 billion); less favorable results from U.S. refining, mainly due to a less favorable business environment and hurricanes (-€0.2 billion); a less favorable environment in the Chemicals business (-€0.2 billion); the Group's equity share of the amortization of intangibles related to the Sanofi-Aventis merger (-€0.1 billion); and a decrease in income from equity affiliates in the Downstream segment, mainly due to losses incurred through TOTAL's participation in Wepec, its affiliate for refining in China (-€0.1 billion). These negative impacts were partially offset by the positive impacts of higher hydrocarbon prices (+€0.5 billion).

In 2008, the Group bought back 27.6 million of its shares<sup>(1)</sup> for €1,339 million. The number of fully-diluted shares at December 31, 2008, was 2,235 million compared to 2,265 million at December 31, 2007.

Diluted earnings per share, based on 2,247 million fully-diluted weighted-average shares, decreased by 19% to €4.71 in 2008 from €5.80 in 2007.

## **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 qualified as "special items" are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. However, in certain instances, certain transactions such as restructuring costs or assets disposals, which are not considered to be representative of the normal course of business, may be qualified 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 the financial statements according to the FIFO (First-In, First-Out) method and other inventories using the weighted-average cost method. Under the FIFO method, inventories are valued at the last acquisition or production cost. In volatile energy markets, this can have a significant distorting effect on reported income. Accordingly, the segment measure of profitability for the Downstream and Chemicals segments is based on a replacement cost method in order to exclude the impact of oil price changes on the replacement of inventories, as

1. Includes 2.8 million shares purchased to cover restricted share grants pursuant to the decision of the Board on September 9, 2008.

management believes such measure reflects more accurately the operating performance of these segments. In this replacement cost method, which is conceptually close to the LIFO (Last-In, First-Out) method, decreases in inventories are valued using the monthly average of the acquisition or production costs for the month in question rather than the cost of the oldest articles in the inventories. The inventory valuation effect is the difference between the results according to the FIFO method and this replacement cost method. When the replacement cost is higher than the cost of the oldest articles in the inventories (*i.e.*, positive inventory valuation effect), a provision for oil price changes in the adjusted results is established and affects operating expenses. When the replacement cost is lower than the cost of the oldest articles in the inventories (*i.e.*, negative inventory valuation effect), the provision for oil price changes is reversed.

The Group also adjusts for its equity share of adjustments (concerning amortization and impairment of intangibles related to the Sanofi-Aventis merger) and, from 2009, selected items related to Sanofi-Aventis.

The adjusted business segment results (adjusted operating income and adjusted net operating income) are defined as replacement cost results, adjusted for special items and Sanofi-Aventis related items. For further information on the adjustments affecting

## **Upstream results**

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 4 to the Consolidated Financial Statements.

The Group measures performance at the segment level on the basis of net operating income and 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, capitalized interest expenses), and after income taxes applicable to the above. The income and expenses not included in net operating income but included in net income are interest expenses related to net financial debt only, after applicable income taxes (net cost of net debt and minority interests). Adjusted net operating income excludes the effect of the adjustments (special items, the inventory valuation effect and Sanofi-Aventis related items) described above. For further discussion on the calculation of net operating income and the calculation of return on average capital employed (ROACE)<sup>(1)</sup>, see Note 2 to the Consolidated Financial Statements.

(M <del>Q</del> )	2009	2008	2007
Non-Group sales	16,072	24,256	19,706
Operating income <sup>(a)</sup>	12,858	23,468	19,503
Equity in income (loss) of affiliates and other items	846	1,541	1,330
Tax on net operating income	(7,486)	(14,563)	(11,996)
Net operating income <sup>(a)</sup>	6,218	10,446	8,837
Adjustments affecting net operating income	164	278	12
Adjusted net operating income <sup>(b)</sup>	6,382	10,724	8,849
Investments	9,855	10,017	8,882
Divestments	398	1,130	751
ROACE	18%	36%	34%

(a) For the definition of operating income and net operating income, see Note 2 to the Consolidated Financial Statements. (b) Adjusted for special items. See Notes 2 and 4 to the Consolidated Financial Statements.

#### 2009 vs. 2008

Upstream segment sales (excluding sales to other segments) were down 34% to  $\pounds$ 6,072 million in 2009 compared to  $\pounds$ 24,256 million in 2008, reflecting essentially lower average hydrocarbon prices and a decrease in production, which were partially offset by the impact of the appreciation of the dollar compared to the euro.

In 2009, TOTAL's average liquids price realization<sup>(2)</sup> decreased 36% to \$58.1/b from \$91.1/b in 2008, in line with the decrease in the average Brent price of oil, which was \$61.7/b in 2009 compared to \$97.3/b in 2008. TOTAL's average natural gas price realization<sup>(2)</sup> decreased 30% to \$5.17/MBtu in 2009 from \$7.38/MBtu in 2008.

<sup>2.</sup> Consolidated subsidiaries, excluding fixed margin and buyback contracts.



<sup>1.</sup> ROACE = adjusted net operating income divided by average capital employed.

For the full year 2009, oil and gas production averaged 2,281 kboe/d, compared to 2,341 kboe/d in 2008. This 2.6% decrease was due mainly to the negative impacts of OPEC reductions and lower gas demand (-3%), changes in the portfolio, essentially in Venezuela and Libya (-2%), and disruptions in Nigeria related to security issues (-1%), partially offset by the positive impact of ramp-ups and start-ups of new fields net of the normal decline on existing fields (+2%) and the price effect<sup>(1)</sup> (+1.5%). Excluding the impact of OPEC reductions, production was stable compared to 2008.

Proved reserves based on the revised rules published by the SEC in December 2008 were 10,483 Mboe at December 31, 2009 (Brent at \$59.91/b), compared to 10,458 Mboe at December 31, 2008. At the 2009 average rate of production, the reserve life is more than twelve years.

See "Item 4. Information on the Company — Exploration & Production — Reserves" for a discussion of proved reserves and "Supplemental Oil and Gas Information (Unaudited)" contained elsewhere herein for additional information on proved reserves, including tables showing changes in proved reserves by region.

Upstream net operating income in 2009 amounted to 6,218 million (for 2008, 10,446 million) from operating income of 2,858 million (for 2008, 23,468 million), with the difference resulting primarily from taxes on net operating income of  $\Huge{7},486$  million ( $\Huge{€}1,563$  million in 2008), partially offset by income from equity affiliates and other items of  $\Huge{6}846$  million ( $\Huge{€}1,541$  million in 2008).

Over the full year 2009, adjusted net operating income for the Upstream segment was 6,382 million compared to €0,724 million in 2008, a decrease of 40%, essentially due to lower hydrocarbon prices (-€4.6 billion), partially offset by the positive impact of a slightly stronger dollar compared to the euro (+€0.4 billion). Technical costs for consolidated subsidiaries, in accordance with ASC 932<sup>(2)</sup> (previously FAS69) were \$15.4/boe in 2009, stable compared to 2008, with a decrease of 8% in operating expenses per barrel offsetting an increase in depreciation, depletion and amortization (DD&A) charges related notably to the start-up of new projects.

Adjusted net operating income for the Upstream segment excludes special items. In 2009, the exclusion of special items (comprised principally of asset impairments and other elements) had a positive impact of €164 million on adjusted net operating income for the

Upstream segment compared to a positive impact of €278 million in 2008 (comprised principally of an asset impairment of €171 million on the Joslyn project and the net impact of contract renegotiations of €106 million).

The Upstream segment's total capital expenditures decreased by 2% to €9,855 million in 2009 from €10,017 million in 2008. The capital expenditures in 2009 mainly included the following projects: Kashagan in Kazakhstan; Pazflor, Angola LNG and Tombua Landana in Angola; Akpo, Usan and Ofon II in Nigeria; Ekofisk in Norway; the Mahakam zone in Indonesia; the Alwyn zone in the United Kingdom; Moho Bilondo in the Republic of the Congo; and Anguille in Gabon.

ROACE for the Upstream segment decreased to 18.2% in 2009 from 35.9% in 2008. The decrease was mainly due to the adjusted net operating income having decreased, principally due to lower hydrocarbon prices.

#### 2008 vs. 2007

Upstream segment sales (excluding sales to other segments) were up 23% to €24,256 million in 2008 compared to €19,706 million in 2007, reflecting higher average hydrocarbon prices, which more than offset the impacts of the decrease of the dollar compared to the euro and a decrease in production.

TOTAL's average liquids price realization<sup>(3)</sup> in 2008 increased 32% to \$91.1/b from \$68.9/b in 2007, in line with the increase in the average Brent price of oil, which was \$97.3/b in 2008 compared to \$72.4/b in 2007. TOTAL's average natural gas price realization<sup>(3)</sup> increased 37% to \$7.38/MBtu in 2008 from \$5.40/MBtu in 2007.

For 2008, adjusted net operating income for the Upstream segment increased 21% to €10,724 million compared to €8,849 million in 2007. The increase in adjusted net operating income was mainly due to the positive impacts of the price of hydrocarbons (+€3.5 billion) partially offset by the negative impacts of the weaker dollar (-€0.6 billion), lower production (-€0.5 billion) and higher production costs (-€0.5 billion).

The exclusion of special items (which in 2008 comprised principally an asset impairment of €171 million on the Joslyn project and the net impact of contract renegotiations of €06 million) had a positive impact of €278 million on adjusted net operating income for the Upstream segment in 2008 compared to a positive impact of €12 million in 2007 (comprised principally of asset impairments of €33 million largely offset by capital gains of €89 million).

The "price effect" refers to the impact of 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 normally decreases.

<sup>2.</sup> FASB Accounting Standards Codification Topic 932, Extractive industries — Oil and Gas.

<sup>3.</sup> Consolidated subsidiaries, excluding fixed margin and buyback contracts.

ROACE for the Upstream segment increased to 35.9% in 2008 from 33.6% in 2007. The increase was mainly due to adjusted net operating income having increased more than the average level of capital employed, which was principally due to higher hydrocarbon prices.

In 2008, Upstream net operating income amounted to €10,446 million (for 2007, €8,837 million) from operating income of €23,468 million (for 2007, €19,503 million), with the difference resulting primarily from taxes on net operating income of €14,563 million (€11,996 million in 2007), partially offset by income from equity affiliates and other items of €1,541 million (€1,330 million in 2007).

Oil and gas production in 2008 averaged 2,341 kboe/d compared to 2,391 kboe/d in 2007. This 2% decrease was due to the negative impacts of the price effect (-2%), unscheduled shutdowns (-2.5%, mainly on the Elgin Franklin field in February, the Bruce and Alwyn fields in the summer and the Al Jurf field from April to the end of December 2008, as described in Item 4 of this Annual Report) and changes in the portfolio (-1%) partially offset by the positive impact of underlying production growth (+3.5%, primarily from production ramp-ups and start-ups of major TOTAL-operated projects, including Dolphin, Rosa, Jura and Dalia, net of the normal decline on existing fields).

production growth in 2008, excluding the price effect and changes in the portfolio, was +1%.

The Group's proved reserves at December 31, 2008, remained steady at 10,458 Mboe compared to 10,449 Mboe at December 31, 2007. At the 2008 average rate of production, these reserves represent approximately 12 years of production.

See "Item 4. Information on the Company — Exploration & Production — Reserves" for a table showing changes in proved reserves by year and "Supplemental Oil and Gas Information (Unaudited)" contained elsewhere herein for additional information on proved reserves, including tables showing changes in proved reserves by region.

Total capital expenditures of the Upstream segment increased by 13% to €10,017 million in 2008 from €8,882 million in 2007. In 2008, capital expenditures mainly included the following projects: Kashagan in Kazakhstan; Akpo, Usan and OML 58 in Nigeria; Pazflor, Angola LNG and Tombua Landana in Angola; Ekofisk in Norway; the Mahakam zone in Indonesia; the Alwyn zone in the United Kingdom; Moho Bilondo in the Republic of the Congo and Anguille in Gabon.

### **Downstream results**

(Me)	2009	2008	2007
Non-Group sales	100,518	135,524	119,212
Operating income <sup>(a)</sup>	2,237	826	4,824
Equity in income (loss) of affiliates and other items	169	(158)	284
Tax on net operating income	(633)	(143)	(1,482)
Net operating income <sup>(a)</sup>	1,773	525	3,626
Adjustments affecting net operating income	(820)	2,044	(1,091)
Adjusted net operating income <sup>(b)</sup>	953	2,569	2,535
Investments	2,771	2,418	1,875
Divestments	133	216	394
ROACE	7%	20%	21%

(a) For the definition of operating income and net operating income, see Note 2 to the Consolidated Financial Statements. (b) Adjusted for special items and the inventory valuation effect. See Notes 2 and 4 to the Consolidated Financial Statements.

2009 vs. 2008

Downstream segment sales (excluding sales to other segments) were €100,518 million in 2009, a decrease of 26% from €135,524 million in 2008.

Refined product sales averaged 3,616 kb/d in 2009, decreasing slightly from 3,658 kb/d in 2008. Refinery throughput in 2009 was 2,151 kb/d, a 9% decrease compared to 2,362 kb/d in 2008. For the full year 2009, the refinery utilization rate based on crude throughput was 78% (83% for crude and other feedstock) compared to 88% in 2008 (91% for crude and other

feedstock), reflecting the voluntary throughput reductions in the Group's refineries. Five refineries had scheduled turnarounds for maintenance in 2009 compared to six in 2008. Turnaround activity in 2010 is expected to be lower than in 2009.

In 2009, Downstream net operating income increased to €1,773 million (for 2008, €525 million) from operating income of €2,237 million (for 2008, €826 million), with the difference between net operating income and operating income resulting primarily from taxes on net operating income of €333 million (for 2008, €143 million), partially offset by income from equity affiliates and other items of €169 million (for 2008, loss of €158 million).

The Downstream segment's adjusted net operating income in 2009 decreased 63% to €953 million compared to €2,569 million in 2008, reflecting essentially the sharp decrease in the demand for refined products and in refining margins.

Adjusted net operating income for the Downstream segment excludes any after-tax inventory valuation effect and special items. The adjustment for the inventory valuation effect had a negative impact on Downstream adjusted net operating income of €1,285 million compared to a positive impact of €1,971 million in 2008. The exclusion of special items (relating mainly to refining asset impairments and other elements) in 2009 had a positive impact of \$465 million on the adjusted net operating income. In 2008, the exclusion of special items (relating principally to restructuring charges of €70 million and other special items) had a positive impact of \$\$465 million on adjusted net operating income.

Investments by the Downstream segment were  $\notin$  2,771 million in 2009, compared to  $\notin$  2,418 million in 2008.

ROACE for the Downstream segment was 6.6% in 2009 compared to 19.9% in 2008 due principally to the significant decrease in adjusted net operating income.

#### 2008 vs. 2007

Downstream segment sales (excluding sales to other segments) increased 14% to €135,524 million in 2008 compared to €119,212 million in 2007.

In 2008, refined product sales averaged 3,658 kb/d, down 3% from 3,774 kb/d in 2007. 2008 refinery throughput decreased slightly to 2,362 kb/d from 2,413 kb/d in 2007. The refinery utilization rate for 2008 based on crude throughput was 88% (91% based on crude and other feedstock) compared to 87% (89% based on crude and other feedstock) in 2007. In 2008, six refineries were affected by turnarounds compared to

ten in 2007. The level of refinery turnarounds in 2009 is expected to be comparable to the 2008 level.

For 2008, adjusted net operating income for the Downstream segment increased 1% to €2,569 million compared to €2,535 million in 2007. This result mainly reflects the generally satisfactory environment, with gains in Europe (O.55 billion) in 2008 offset by losses in U.S. refining (-O.2 billion) stemming from the negative environment and from hurricanes, as well as benefits recorded from increased productivity and supply optimization, particularly during the fourth quarter of 2008. However, net operating income was negatively affected by a 70% decrease in income from equity affiliates to €77 million in 2008 from €268 million in 2007, mainly due to losses incurred through TOTAL's participation in Wepec, its Chinese refining affiliate.

The adjustment for the inventory valuation effect had a positive impact on Downstream adjusted net operating income of  $\[mathbf{eq}1,971\]$  million in 2008 compared to a negative impact of  $\[mathbf{eq}1,998\]$  million in 2007. In 2008, the exclusion of special items (relating principally to restructuring charges of  $\[mathbf{eq}70\]$  million and other special items) had a positive impact of  $\[mathbf{eq}73\]$  million on adjusted net operating income. The exclusion of special items in 2007 had a negative impact of  $\[mathbf{eq}7\]$  million, with capital gains of  $\[mathbf{eq}10\]$  million more than offsetting restructuring charges, asset impairments and other special items.

ROACE for the Downstream segment was 19.9% in 2008 compared to 20.6% in 2007 due principally to increased investment in 2008.

In 2008, Downstream net operating income decreased to €525 million (for 2007, €3,626 million) from operating income of €826 million (for 2007, €4,824 million), with the difference resulting primarily from taxes on net operating income of €143 million (for 2007, €1,482 million) and from the loss from equity affiliates and other items of €158 million (for 2007, income of €284 million).

Investments by the Downstream segment were  $\in$  2,418 million in 2008 compared to  $\notin$  ,875 million in 2007.

## Chemicals

(Me)	2009	2008	2007
Non-Group sales	14,726	20,150	19,805
Operating income <sup>(a)</sup>	553	(58)	1,424
Equity in income (loss) of affiliates and other items	(58)	(34)	(11)
Tax on net operating income	(92)	76	(426)
Net operating income <sup>(a)</sup>	403	(16)	987
Adjustments affecting net operating income	(131)	684	(140)
Adjusted net operating income <sup>(b)</sup>	272	668	847
Investments	631	1,074	911
Divestments	47	53	83
ROACE	4%	9%	12%

(a) For the definition of operating income and net operating income, see Note 2 to the Consolidated Financial Statements.

(b) Adjusted for special items and the inventory valuation effect. See Notes 2 and 4 to the Consolidated Financial Statements.

#### 2009 vs. 2008

Chemicals segment sales (excluding sales to other segments) were €14,726 million in 2009, a decrease of 27% from €20,150 million in 2008.

In 2009, net operating income for the Chemicals segment was €403 million (for 2008, a loss of €16 million) from an operating income of €553 million (for 2008, an operating loss of €38 million), with the difference between net operating income and operating income resulting primarily from losses from equity affiliates and other items of €58 million (for 2008, €34 million) and taxes on net operating income of €92 million (for 2008, a tax gain of €76 million).

The Chemicals segment's adjusted net operating income in 2009 was  $\notin$ 272 million as compared to  $\notin$ 668 million in 2008, a decrease of 59% that was essentially due to the significantly weaker market conditions for the Base chemicals activity and, to a lesser degree, lower sales and results from the Specialties activity.

Adjusted net operating income for the Chemicals segment excludes any aftertax inventory valuation effect and special items. The exclusion of the inventory valuation effect had a negative impact on Chemicals adjusted net operating income of €254 million in 2009, compared to a positive impact of €504 million in 2008. In 2009, the exclusion of special items (comprised primarily of asset impairments and other elements) had a positive impact on Chemicals adjusted net operating income of €123 million. In 2008, the exclusion of special items (relating principally to restructuring costs, asset impairment and other elements) had a positive impact of €180 million on adjusted net operating income. Investments by the Chemicals segment decreased to €631 million in 2009 compared to €1,074 million in 2008.

ROACE for the Chemicals segment was 3.8% in 2008 compared to 9.2% in 2008 due principally to the significant decrease in adjusted net operating income.

#### 2008 vs. 2007

Chemicals segment sales (excluding sales to other segments) increased by 2% to  $\pounds 0,150$  million in 2008 from  $\pounds 19,805$  million in 2007.

Adjusted net operating income for the Chemicals segment decreased by 21% to €68 million in 2008 from €47 million in 2007, due to the negative market environment faced by the Chemicals segment. In the first half of 2008, the Chemicals segment was challenged by the rapid increase in oil prices, while in the second half of the year, despite benefiting from a rebound in margins, it suffered from falling demand linked to the worldwide economic downturn.

The adjustment for the inventory valuation effect had a positive impact of  $\notin$ 504 million on adjusted net operating income for the Chemicals segment in 2008, compared to a negative impact of  $\notin$ 201 million in 2007. In 2008, the exclusion of special items (relating principally to restructuring costs, asset impairment and other elements) had a positive impact of  $\notin$ 180 million on adjusted net operating income. In 2007, the exclusion of special items (comprised of restructuring charges, asset impairments and other elements) had a positive impact net operating income.

ROACE for the Chemicals segment was 9.2% in 2008 compared to 12.1% in 2007 due principally to a decrease in adjusted net operating income.

In 2008, net operating income amounted to a loss of €16 million (for 2007, a gain of €987 million) from an operating loss of €58 million (for 2007, operating income of €1,424 million), with the difference resulting primarily from losses from equity affiliates and other items of €34 million (for 2007, €11 million), and gains on taxes on

# Liquidity And Capital Resources

(M€) 2009 2008 2007 Cash flow from operating activities 12,360 18,669 17,686 Including (increase) decrease in working capital (3,316)2,571 (1, 476)Cash flow used in investing activities (10,268) (11,055) (10,166) Total expenditures (13,349) (13,640) (11,722)Total divestments 3,081 2.585 1.556 Cash flow used in financing activities (3,342) (2.868)(793)Net increase (decrease) in cash and cash equivalents 6,821 4,178 (776)Effect of exchange rates (488)(683)117 Cash and cash equivalents at the beginning of the period 12 321 5 988 2 4 9 3 5,988 Cash and cash equivalents at the end of the period 11,662 12,321

TOTAL's cash requirements for working capital, share buybacks, capital expenditures and acquisitions 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.

The largest part (approximately 90%) of TOTAL's capital expenditures is made up of additions to intangible assets and property, plant and equipment, with the remainder attributable to equity-method affiliates and to acquisitions of subsidiaries. In the Upstream segment, as described in more detail under "Supplemental Oil and Gas Information (Unaudited) — Costs incurred in oil and gas property acquisition, exploration and development activities", capital expenditures are principally development costs (approximately 80% mainly for construction of new production facilities), exploration expenditures (successful or unsuccessful, approximately 10%) and acquisitions of proved and unproved properties (approximately 5%). In the Downstream segment, about 65% of capital expenditures are related to refining activities (essentially 35% for existing units including maintenance and major turnarounds and 65% for new construction), the balance being used in marketing/retail activities and for information systems. In the Chemicals segment, capital expenditures relate to all activities, and are split between Base Chemicals (approximately 65%) and Specialties (approximately

35%). For detailed information on expenditures by business segment, please refer to the discussion of TOTAL's results for each segment above.

net operating income of €76 million (for 2007, a loss of €426 million).

compared to @11 million in 2007.

Investments by the Chemicals segment increased to €1,074 million in 2008

Cash flow from operating activities was €12,360 million in 2009 compared to €18,669 million in 2008 and €17,686 million in 2007. The €6,309 million decrease in cash flow from operating activities from 2008 to 2009 was due in part to lower net income (Group share), which decreased by €2,143 million over the same period. The cash flow from operating activities was also affected by the effect of changes in oil and oil products prices on the Group's working capital requirement. As IFRS rules account for inventories of petroleum products according to the FIFO method, an increase in oil and oil products prices at the end of the relevant period compared to the beginning of the same period generates, all other factors remaining equal, an increase in inventories and accounts receivable net of an increase in accounts payable, resulting in an increase in working capital requirements. Similarly, a decrease in oil and oil products prices generates a decrease in working capital requirements. Whereas in 2008 the Group's working capital requirement had decreased by €2,571 million due primarily to the decrease in oil and oil products prices particularly in the fourth quarter of the year, in 2009 the Group's working capital requirement increased by €3,316 million mainly as a result of rising oil and oil products prices over the course of the year.

Cash flow used in investing activities was €10,268 million in 2009, compared to €11,055 million in 2008 and €10,166 million in 2007.

Total expenditures were €13,349 million in 2009, down 2% from €13,640 million in 2008, after having increased 16% from €11,722 million in 2007. During 2009, 74% of the expenditures were made by the Upstream segment (as compared to 73% in 2008 and 76% in 2007), 21% by the Downstream segment (as compared to 18% in 2008 and 16% in 2007) and 5% by the Chemicals segment (as compared to 8% in 2008 and 2007). The main source of funding for these expenditures has been cash from operating activities.

Divestments, based on selling price and net of cash sold, were €3,081 million in 2009 compared to €2,585 million in 2008 and €1,556 million in 2007. In 2009, the Group's principal divestments were asset sales of €2,663 million, consisting mainly of Sanofi-Aventis shares. In 2008, the Group's principal divestments were asset sales of €1,451 million, consisting mainly of Sanofi-Aventis shares, and reimbursements for carried investments in Yemen, Venezuela and Nigeria. In 2007, the Group sold certain Upstream assets in Canada, the UK and Norway and Downstream assets in the UK. The Group also sold 0.4% of the share capital of Sanofi-Aventis in the fourth quarter of 2007 for €316 million.

Cash flow used in financing activities was €2,868 million in 2009, compared to €793 million in 2008 and €3,342 million in 2007. The increase in cash flow used in financing activities compared to 2008 is due primarily to a decrease in current borrowings in 2009 compared to an increase in 2008, partially offset by a higher issuance of non-current financial debt in 2009.

TOTAL's non-current financial debt was €19,437 million at year-end 2009 compared to €16,191 million at year-end 2008 and €14,876 million at year-end 2007. 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 20 to the Consolidated Financial Statements. 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". Cash and cash equivalents were €11,662 million at year-end 2009 compared to €12,321 million at year-end 2008 and €5,988 million at year-end 2007.

Shareholders' equity was €53,539 million at December 31, 2009, compared to €49,950 million at year-end 2008 and €45,700 million at year-end 2007. Changes in shareholders' equity in 2009 were primarily due to the addition of net income, which was only partially offset by the payment of dividends and translation adjustments. During 2009, TOTAL did not repurchase any of its own shares. Changes in shareholders' equity in 2008 were primarily due to the addition of net income, which was only partially offset by the payment of dividends, translation adjustments and share buybacks. During 2008, TOTAL repurchased 27.6 million of its own shares for €1,339 million. Changes in shareholders' equity in 2007 were primarily due to the addition of net income, which was only partially offset by the payment of adjustments and share buybacks. During 2008, TOTAL repurchased 27.6 million of its own shares for €1,339 million. Changes in shareholders' equity in 2007 were primarily due to the addition of net income, which was only partially offset by the payment of dividends, translation adjustments and share buybacks. During 2007, TOTAL repurchased 32.4 million of its own shares for €1,787 million.

As of December 31, 2009, TOTAL's net-debt-to-equity ratio, which is the sum of current borrowings, other current financial liabilities and non-current financial debt, net of current financial assets, hedging instruments on non-current financial debt and cash and cash equivalents, divided by the sum of shareholders' equity and minority interests after expected dividends payable, was 27%, compared to 23% and 27% at year-ends 2008 and 2007, respectively. Over the 2007-2009 period, TOTAL used its net cash flow (cash flow from operating activities less investments plus divestments) to maintain this ratio in its target range of around 25% to 30%, primarily by managing net debt (financial short-term debt plus non-current debt less cash and cash equivalents), while net income increased shareholders' equity and repurchases of shares performed in 2007 and 2008 decreased shareholders' equity. As of December 31, 2009, TOTAL S.A. had \$9,322 million of long-term confirmed lines of credit, of which \$9,289 million were unused.

In 2010, based on the Group's capital expenditures budget and after payment of dividends, the Company expects to maintain its net debt-to-equity ratio in the targeted range of around 25% to 30%.

# Guarantees and Other Off-balance Sheet Arrangements

As part of certain project financing arrangements, Total S.A. has provided guarantees for a maximum aggregate amount of €1.3 billion in connection with the financing of the Yemen LNG project, presented under "Guarantees given against borrowings" in Note 23 to the Consolidated Financial Statements. In turn, certain partners involved in this project have given commitments that could, in the case of Total S.A.'s guarantees being called for the maximum amount, reduce the Group's exposure by up to €0.4 billion, recorded under "Other commitments received" in the

same Note. These guarantees and other information on the Company's commitments and contingencies are presented in Note 23 to the Consolidated Financial Statements. 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, currently have or are reasonably likely in the future to have a material effect on the Group's financial condition, changes in financial condition, revenues or expenses, results of operation, liquidity, capital expenditure or capital resources.

# **Contractual Obligations**

	Less			More	
	than	1-3	3-5	than	
Payment due by period (M€)	1 year	years	years	5 years	Total
Non-current debt obligations <sup>(a)</sup>	_	6,860	5,583	5,709	18,152
Current portion of non-current debt obligations <sup>(b)</sup>	2,111	_	_	—	2,111
Finance lease obligations <sup>(c)</sup>	22	75	71	114	282
Asset retirement obligations <sup>(d)</sup>	235	453	519	4,262	5,469
Operating lease obligations <sup>(c)</sup>	523	675	447	894	2,539
Purchase obligations <sup>(e)</sup>	4,542	4,320	5,599	35,347	49,808
Total	7,433	12,383	12,219	46,326	78,361

(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. The figure in this table is net of the non-current portion of issue swaps and swaps hedging bonds, and excludes non-current finance lease obligations of €260 million.

(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 figure in this table is net of the current portion of issue swaps and swaps hedging bonds and excludes the current portion of finance lease obligations of €22 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, 2009, less the financial expense due on finance lease obligations for €53 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 Upstream, and contracts for capital investment projects in Downstream. 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 23 to the Consolidated Financial Statements. The Group has other obligations in connection with pension plans which are described in Note 18 to the Consolidated Financial Statements. 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 19 to the Consolidated Financial Statements, 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.

# Research and Development

In 2009, Research & Development ("R&D") expenses amounted to €650 million, compared to €612 million in 2008 and €594 million in 2007. The process initiated in 2004 to increase R&D budgets continued in 2009. In addition, the Group implemented in 2009 a financial device to contribute to the development of start-ups that specialize in the development of innovative technologies in the field of energy.

In 2009, 4,016 employees were dedicated to R&D, compared to 4,285 in 2008 and 4,216 in 2007.

There are six major axes for research and development at TOTAL:

- developing knowledge, tools and technological mastery to discover and operate technologically complex oil and gas resources to meet global demand for energy;
- developing and industrializing solar, biomass and carbon capture and storage technologies to contribute to the evolution of the global energy mix:
- understanding and measuring the impacts of the Group's operations and products on ecosystems (water, soil, air, biodiversity) to strengthen environmental safety, as part of the regulation in place, and reduce their environmental footprint to achieve sustainability in the Group's operations;
- developing practical, innovative and competitive materials that meet the market's specific needs, contribute to the emergence of new features and systems, enable current materials to be replaced by materials achieving higher performance, address the challenges of improved energy efficiency, lower environmental impact and toxicity and achieve better management of product life cycle;

- developing, industrializing and improving conversion processes of oil, coal and biomass resources to adapt to changes in resources and markets, improve reliability and safety, achieve better energy efficiency, reduce the environmental footprint and maintain economic margins on the long term; and
- mastering and using innovative technologies such as biotechnologies, nanotechnologies, high-performance computing, information and communications technologies and new analytic techniques.

These issues are addressed synergistically within a portfolio of projects. Different aspects may be looked at independently by different divisions.

The Group intends to increase R&D at all the business units through crossfunctional themes and technologies. Attention is paid to synergies of R&D efforts between business units.

The Group has twenty-two R&D sites worldwide and has developed approximately 600 partnerships with other industrial groups, academic or special research institutes. TOTAL also has a permanently renewed network of scientific advisors worldwide that monitor and advise on matters of interest to the Group's R&D activities. Long-term partnerships with universities and academic laboratories, deemed strategic in Europe, the United States, Japan and China, as well as innovating small businesses are part of the Group's approach.

Each business unit is developing an active intellectual property activity, aimed at protecting its developments, allowing its activity without constraints as well as facilitating its partnerships. In 2009, close to 250 new patents applications were issued by the Group.

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

# **Directors and Senior Management**

## **Composition of the Board of Directors**

Directors are appointed by the shareholders for a 3-year term (Article 11 of the Company's bylaws).

In case of the resignation or death of a director between two shareholders' meetings, the Board may temporarily appoint a replacement director. This appointment must be ratified by the next shareholders' meeting. The terms of office of the members of the Board are staggered to more evenly space the renewal of appointments.

The Board of Directors appoints the Chairman of the Board of Directors from among its members. The Board of Directors also appoints the Chief Executive Officer who may or may not be a member of the Board.



As of December 31, 2009, the Board of Directors had fifteen members. Of these, one director had been elected by the shareholders to represent employee shareholders.

The following individuals were members of the Board of Directors of TOTAL S.A. in 2009.<sup>(1)</sup>

#### **Thierry Desmarest**

#### 64 years old.

A graduate of the *École Polytechnique* and a Mining Engineer, Mr. Desmarest served as Director of Mines and Geology in New Caledonia, then as technical advisor on the staffs of the Minister of Industry and the Minister of Economy. He joined TOTAL in 1981, where he held various management positions, then served as President of Exploration & Production until 1995. He served as Chairman and Chief Executive Officer of TOTAL from May 1995 until February 2007, and continues to serve as Chairman of the Board of TOTAL.

Director of TOTAL S.A. since 1995 and until 2010 (last renewal: May 11, 2007).

Holds 380,576 shares.

#### Principal other directorships

- Director of Sanofi-Aventis.\*
- Director of Air Liquide.\*
- Director of Renault SA.\*
  Director of Renault SAS.
- Director of Bombardier Inc. (Canada).\*

Christophe de Margerie

#### 58 years old.

Mr. de Margerie joined the Group after graduating from the *École Supérieure de Commerce* in Paris in 1974. He served in several positions in the Group's Finance Department and Exploration & Production division. He became president of Total Middle East in 1995 before joining the Group's executive committee as the President of the Exploration & Production division in May 1999. He then became Senior Executive Vice President of Exploration & Production of the new TotalFinaElf group in 2000. In January 2002 he became President of the Exploration & Production division of TOTAL. He was appointed a member of the Board of Directors by the Shareholders' Meeting held on May 12, 2006 and became Chief Executive Officer of TOTAL on February 14, 2007.

Director of TOTAL S.A. since 2006 and until 2012 (last renewal: May 15, 2009).

Holds 85,230 TOTAL shares and 43,714 shares of the TOTAL ACTIONNARIAT FRANCE collective investment fund.

#### Principal other directorships

- Chairman and Chief Executive Officer of Elf Aquitaine.\*
- Member of the Supervisory Board of Vivendi.\*

## Patrick Artus

#### 58 years old.

A graduate from the École Polytechnique, the École Nationale de la Statistique et de l'Administration de l'Économie (ENSEA) and the Institut d'Études Politiques de Paris, Mr. Artus began his career at the INSEE (French National Institute for Statistics and Economic Studies) where his work included economic forecasting and modelling. He then worked at the Economics Department of the OECD (1980), later becoming the Head of Research at the ENSAE from 1982 to 1985. He was scientific adviser at the research department of the Banque de France, before joining the Natixis Group as the head of the research department. He is a professor at the *École Polytechnique* and associate professor at the University of Paris I, Sorbonne. He is also a member of the council of economic advisors to the French Prime Minister and of the French National Economic Commission. He has authored many articles and books.

Director of TOTAL S.A. since May 5, 2009 and until 2012.

Holds 1,000 shares.

#### Principal other directorships

Director of IPSOS.

\* Company names marked with an asterisk are publicly listed companies.

1. Information as of December 31, 2009.

#### Patricia Barbizet

#### 54 years old.

A graduate of the École Supérieure de Commerce of Paris in 1976, Mrs. Barbizet started her career in the Renault Group as the Treasurer of Renault Véhicules Industriels and Chief Financial Officer of Renault Crédit International. She joined the Pinault group in 1989 as the Chief Financial Officer and then served as the Chief Executive Officer of Financière Pinault until 2009. Since 1992, she has been the Director and Chief Executive Officer of Artémis. Since 2005, she has been the Vice Chairman of the PPR Board of Directors and Chairman of Christie's.

#### **Daniel Boeuf**

61 years old.

A graduate of the École Supérieure des Sciences Économiques et *Commerciales* (ESSEC), Mr. Boeuf joined the Group in October 1973 and served in several sales positions before holding various operational positions in Refining & Marketing entities, until, in his last operational position, he was responsible for training and skills management in specialties within the Refining & Marketing division. An elected member of the

#### **Daniel Bouton**

59 years old.

Inspector General of Finance, Mr. Bouton has held various positions within the French Ministry of Economy. He served as Budget Director at the Ministry of Finance from 1988 to 1990. He joined Société Générale in 1991, where he was appointed Chief Executive Officer in 1993, then Chairman and Chief Executive Officer in November 1997. He has been serving as the Chairman of the

Director of TOTAL S.A. since May 18, 2008 and until 2011.

Holds 1,000 shares.

#### Principal other directorships

- Vice Chairman of PPR\* Board.
- Chief Executive Officer and Director of Artémis.
- Director of Tawa Plc.\*
- Director of Air France-KLM.\*
- Director of Bouygues.\* Director of TF1.

Supervisory Board of the TOTAL ACTIONNARIAT FRANCE collective investment fund from 1999 to 2009, he served as the Chairman of its Supervisory Board from 2003 to 2006.

Director of TOTAL S.A. since 2004 (last renewal: May 11, 2007; end of office: December 31, 2009, pursuant to Article 11 of the Company's bylaws).

Holds 4,396 TOTAL shares and 4,394 shares of the TOTAL ACTIONNARIAT FRANCE collective investment fund.

Société Générale group since May 12, 2008, and has been the honorary President since May 6, 2009.

Director of TOTAL S.A. since 1997 and until 2012 (last renewal: May 15, 2009).

Holds 3,200 shares.

Principal other directorships

Director of Veolia Environnement.\*

Company names marked with an asterisk are publicly listed companies.

#### **Bertrand Collomb**

#### 67 years old.

A graduate of the École Polytechnique and a Mining Engineer, Mr. Collomb held a number of positions within the Ministry of Industry and other staff positions from 1966 to 1975. He joined the Lafarge group in 1975, where he served in various management positions. He served as Chairman and Chief Executive Officer of Lafarge from 1989 to 2003, then as Chairman of the Lafarge Board of Directors from 2003 to 2007 and has been the honorary President since 2007.

He is also President of the Institut des Hautes Études pour la Science et la Technologie (IHEST) and the Institut Français des Relations Internationales (IFRI).

#### Paul Desmarais Jr.<sup>(1)</sup>

#### 55 years old.

A graduate of McGill University in Montreal and INSEAD in Fontainebleau, Mr. Desmarais was elected Vice Chairman (1984) then Chairman of the Board (1990) of Corporation Financière Power, a company he helped to found. Since 1996, he has served as Chairman of the Board and Co-Chief Executive Officer of Power Corporation of Canada.

Director of TOTAL S.A. since 2002 and until 2011 (last renewal: May 16, 2008).

Holds 2,000 ADRs (corresponding to 2,000 shares).

Director of TOTAL S.A. since 2000 and until 2012 (last renewal: May 15, 2009).

Holds 4,712 shares.

## Principal other directorships

- Director of Lafarge.\*
- Director of DuPont\* (United States).
- Director of Atco\* (Canada).

#### Principal other directorships

- Chairman of the Board, Co-Chief Executive Officer and Member of the Executive Committee of Power Corporation of Canada.
- Member of the Board, Co-Chief Executive Officer and Chairman of the Executive Committee of Corporation Financière Power\* (Canada).
- Vice Chairman of the Board of Directors and Acting Managing Director of Pargesa Holding S.A.\* (Switzerland).
- Member of the Board of Directors and Executive Committee of Great-West Lifeco Inc.\* (Canada).
- Member of the Board of Directors and Executive Committee of Groupe Bruxelles Lambert S.A.\* (Belgium).
- Director of GDF Suez\* (France).
- Director of Lafarge.\*
- Director of IGM Financial Inc.\* (Canada).

**Bertrand Jacquillat** 

#### 65 years old.

A graduate of École des Hautes Études Commerciales (HEC), Institut d'Études Politiques de Paris and Harvard Business School, Mr. Jacquillat holds a PhD in management. He has been a university professor (in both France and the United States) since 1969, and is a professor at the Institut d'Études Politiques in Paris, Vice President of the Cercle des Economistes and member of the Economic Analysis Board to the Prime Minister. He is the founding chairman of Associés en Finance.

Director of TOTAL S.A. since 1996 and until 2011 (last renewal: May 16, 2008).

Holds 3,600 shares.

#### Principal other directorships

- Chairman and Chief Executive Officer of Associés en Finance.
- Member of the Supervisory Board of Klépierre.\* Member of the Supervisory Board of Presses Universitaires de France (PUF).

Mr. Desmarais Jr. is a director of Groupe Bruxelles Lambert, which acting in concert with Compagnie Nationale à Portefeuille, to the Company's knowledge, owns 1. 5.4% of the Company's shares and 5.5% of the voting rights. Mr. Demarais Jr. disclaims beneficial ownership of such shares.



Company names marked with an asterisk are publicly listed companies.

#### Antoine Jeancourt-Galignani

#### 72 years old.

Inspector of Finance, Mr. Jeancourt-Galignani held various positions within the Ministry of Finance before serving as Deputy Managing Director of Crédit Agricole from 1973 to 1979. He became Chief Executive Officer of Indosuez bank in 1979 before serving as its Chairman from 1988 to 1994. He then served as Chairman of Assurances Générales de France (AGF) from 1994 to 2001, before serving as Chairman of Gecina from 2001 to 2005, where he served as a director until 2009.

#### Anne Lauvergeon<sup>(1)</sup>

#### 50 years old.

Chief Mining Engineer and a graduate of the *École Normale Supérieure* with a doctorate in physical sciences, Mrs. Lauvergeon held various positions in industry before becoming Deputy Chief of Staff in the Office of the President of the Republic in 1990. She joined Lazard Frères et Cie as Managing Partner in 1995. From 1997 to 1999 she was Executive Vice President and member of the Executive Committee of Alcatel, in charge of industrial partnerships.

Mrs. Anne Lauvergeon has served as Chairman of the Management Board of AREVA since July 2001 and

#### Lord Levene of Portsoken

#### 68 years old.

Lord Levene served in various positions within the Ministry of Defense, the office of the Secretary of State for the Environment, the office of the Prime Minister and the Ministry of Trade in the United Kingdom from 1984 to 1995. He then served as senior adviser at Morgan Stanley from 1996 to 1998 before becoming the Chairman of Bankers Trust International from 1998 to 2002. He was Lord Mayor of London from 1998 to 1999. He is currently Chairman of Lloyd's.

Director of TOTAL S.A. since 1994 (last renewal: May 12, 2006; end of office: May 15, 2009).

#### Principal other directorships

- Chairman of the Supervisory Board of Euro Disney SCA.\*
- Director of Kaufman & Broad S.A.\*
   Member of the Supervisory Beard of Odde et Cie
- Member of the Supervisory Board of Oddo et Cie.

Chairman and Chief Executive Officer of Areva NC (formerly Cogema) since June 1999.

Director of TOTAL S.A. since 2000 and until 2012 (last renewal: May 15, 2009).

Holds 2,000 shares.

#### Principal other directorships

- Chairperson of the Management Board of Areva.\*(1)
- Chairperson and CEO of Areva NC.
  Director of GDF Suez.\*
- Director of Vodafone Group Plc.\*

Director of TOTAL S.A. since 2005 and until 2011 (last renewal: May 16, 2008).

Holds 2,000 shares.

# Principal other directorships

- Chairman of Lloyd's.
- Chairman of International Financial Services.
- Chairman of General Dynamics UK Ltd.
- Director of Haymarket Group Ltd.
- Director of China Construction Bank.\*

<sup>\*</sup> Company names marked with an asterisk are publicly listed companies.

<sup>1.</sup> Mrs. Lauvergeon is Chairperson of the Management Board of Areva, which, to the Company's knowledge, owns 0.0% of the Company's shares and 0.0% of the voting rights. Mrs. Lauvergeon disclaims beneficial ownership of such shares.

#### **Claude Mandil**

#### 67 years old.

A graduate of the *École Polytechnique* and a General Mining Engineer, Mr. Mandil served as a Mining Engineer in the Lorraine and Bretagne provinces. He then served as a Project Manager at the *Délégation de l'Aménagement du Territoire et de l'Action Régionale* (City and Department planning/DATAR) and as the Interdepartmental Head of Industry and Research and regional delegate of ANVAR. From 1981 to 1982, he served as the technical advisor on the staff of the Prime Minister, in charge of the industry, energy and research sectors. He was appointed Chief Executive Officer, then Chairman and Chief Executive Officer of the *Institut de Développement Industriel* (Industry Development Institute) until 1988. He was Chief Executive Officer of

#### Michel Pébereau<sup>(1)</sup>

#### 67 years old.

Honorary Inspector General of Finance, Mr. Pébereau held various positions in the Ministry of Economy and Finance, before serving, from 1982 to 1993, as Chief Executive Officer and then as Chairman and CEO of Crédit Commercial de France (CCF). He was Chairman and Chief Executive Officer of BNP then BNP Paribas from 1993 to 2003, and is currently Chairman of the Board of BNP Paribas. He has also been the Chairman of European Financial Round Table (EFRT) since 2009.

Director of TOTAL S.A. since 2000 and until 2012 (last renewal: May 15, 2009).

#### Thierry de Rudder<sup>(2)</sup>

#### 60 years old.

A graduate of the *Université de Genève* in mathematics, the *Université Libre de Bruxelles* and Wharton (MBA), Mr. de Rudder served in various positions at Citibank from 1975 to 1986 before joining Groupe Bruxelles Lambert, where he was appointed Acting Managing Director.

Director of TOTAL S.A. since 1999 and until 2010 (last renewal: May 11, 2007).

Bureau de Recherches Géologiques et Minières (BRGM) from 1988 to 1990. From 1990 to 1998, Mr. Mandil was Chief Executive Officer for Energy and Commodities at the French Industry Ministry and the first representative for France at the Management Board of the Energy International Agency (EIA) Executive Committee. He served as the Chairman of the EIA in 1997 and 1998. In 1998, he was appointed Deputy Chief Executive Officer of Gaz de France and, in April 2000, Chairman of the *Institut Français du Pétrole* (French Institute of Oil). From 2003 to 2007, he was the Executive Director of the EIA.

Director of TOTAL S.A. since May 16, 2008 and until 2011.

Holds 1,000 shares.

Principal other directorships

Director of Institut Veolia Environnement.

Holds 2,356 shares.

#### Principal other directorships

- Chairman of the Board of Directors of BNP Paribas.\*
- Director of Lafarge.\*
- Director of Saint-Gobain.\*
- Member of the Supervisory Board of AXA.\*
- Director of EADS N.V.\*
- Director of Pargesa Holding S.A.\* (Switzerland).
- Member of the Supervisory Board of Banque marocaine pour le Commerce et l'Industrie.\*
- Non-voting member (*Censeur*) of the Supervisory Board of Galeries Lafayette.

Holds 3,956 shares.

#### Principal other directorships

- Director of Imerys.\*
- Director of GDF Suez.\*
- Director of Lafarge.\*
- Director of Compagnie Nationale à Portefeuille.\*
- Director of Suez-Tractebel.
- Acting Managing Director of Groupe Bruxelles Lambert.\*

Mr. de Rudder is acting managing director of Groupe Bruxelles Lambert which, acting in concert with Compagnie Nationale à Portefeuille and to the Company's knowledge, owns 5.4% of the Company's shares and 5.5% of the voting rights. Mr. de Rudder disclaims beneficial ownership of such shares.



<sup>\*</sup> Company names marked with an asterisk are publicly listed companies.

Mr. Pébéreau is Chairman of BNP Paribas, which, to the Company's knowledge, owns 0.2% of the Company's shares and 0.2% of the voting rights. Mr. Pébereau is also a director of Pargesa Holding SA, part of Group Bruxelles Lambert, which acting in concert with Compagnie Nationale à Portefeuille, to the Company's knowledge, owns 5.4% of the Company's shares and 5.5% of the voting rights. Mr. Pébereau disclaims beneficial ownership of such shares.

#### Serge Tchuruk

#### 72 years old.

A graduate of the *École Polytechnique* and an *Ingénieur de l'armement*, Mr. Tchuruk held various management positions with Mobil Corporation, then with Rhône-Poulenc, where he was named Chief Executive Officer in 1983. He served as Chairman and CEO of CDF-Chimie/Orkem from 1986 to 1990, then as Chairman and CEO of TOTAL from 1990 to 1995. In 1995, he became Chairman and Chief Executive Officer of Alcatel. From

#### **Pierre Vaillaud**

#### 74 years old.

A graduate of the *École Polytechnique*, a Mining Engineer and a graduate of the *École Nationale Supérieure du Pétrole et des Moteurs*, Mr. Vaillaud worked as an engineer with Technip and Atochem before joining TOTAL. He served as Chief Executive Officer of TOTAL from 1989 to 1992, before becoming Chairman and Chief

### Other information

At its meeting on September 15, 2009, the Board of Directors appointed Charles Paris de Bollardière Secretary of the Board. He succeeds Thierry Reveau de Cyrières.

The current members of the Board of Directors of the Company have informed the Company that they have not been convicted, have not been associated with a bankruptcy, receivership or liquidation, and have not been incriminated or publicly sanctioned or disqualified, as stipulated in item 14.1 of Annex I of EC Regulation 809/2004 of April 29, 2004.

### **Director independence**

At its meeting on February 10, 2010, the Board of Directors, acting on a proposal from the Nominating & Governance Committee, reviewed the independence of the Company's directors as of December 31, 2009. Also based on the Committee's proposal, the Board considered that, pursuant to the AFEP-MEDEF Code, a director is independent when "he or she has no relationship, of any nature, with the company, its group, or the management of either, that may compromise the exercise of his or her freedom of judgement".

Mrs. Barbizet, Messrs. Artus, Bouton, Collomb, Desmarais, Jacquillat, Mandil, Pébereau, de Rudder,

2006 to 2008, he was appointed Chairman of the Board of Alcatel-Lucent.

Director of TOTAL S.A. since 1989 and until 2010 (last renewal: May 11, 2007).

Holds 61,060 shares.

#### Principal other directorships

Director of Weather Investment SPA.

Executive Officer of Technip from 1992 to 1999, and of Elf Aquitaine from 1999 to 2000.

Director of TOTAL S.A. since 2000 (last renewal: May 12, 2006; end of office: May 15, 2009).

Principal other directorships

Member of the Supervisory Board of Oddo et Cie.

Tchuruk and Lord Levene of Portsoken were deemed to be independent directors.

These directors meet the criteria set forth in the AFEP-MEDEF Code, with the exception of one individual who has been a director for longer than twelve years. For a company that has long-term investments and activities, a longer term of office gives experience and authority, and thereby reinforces the independence of directors. The Board concluded that Mr. Tchuruk, the only director concerned by this criterion, should be considered as independent.

Concerning "material" relationships, as a client, supplier, investment or finance banker, between a director and the Company, the Board deemed that the level of activity between Group companies and the bank at which one of its Directors is an officer, which is less than 0.1% of its net banking income and less than 5% of the Group's overall assets, represents neither a material portion of the overall activity of such bank nor a material portion of the Group's external financing. The Board concluded that Mr. Pébereau should be considered as independent.

73% of the directors are independent.

The Board also noted the absence of potential conflicts of interests between the Company and its directors.

## Management

## **General Management**

At its meeting on February 13, 2007, the Board of Directors, based on the recommendation of the then existing Nominating & Compensation Committee <sup>(1)</sup>, resolved to have separate individuals serve in the positions of Chairman of the Board and of Chief Executive Officer of the Company to ensure continuity during changes to the Group's management.

The management form selected shall remain in effect until a decision to the contrary is made by the Board of Directors.

## The Executive Committee

The Executive Committee, under the responsibility of the Chief Executive Officer, is the primary decision-making body of the Group. It implements the strategy formulated by the Board of Directors and authorizes related investments, subject to the approval by the Board of Directors for investments exceeding 3% of the Group's equity.

The following individuals were serving as members of the Executive Committee as of December 31, 2009:

- Christophe de Margerie, Chairman of the Executive Commitee (Chief Executive Officer);
- François Cornélis, Vice Chairman of the Executive Committee (President of the Chemicals segment);
- Michel Bénézit (President of the Refining & Marketing division);
   Yves-Louis Darricarrère (President of the Exploration & Production
- division);
- Jean-Jacques Guilbaud (Chief Administrative Officer); and
   Patrick de La Chevardière (Chief Financial Officer).

### The Management Committee

The Group Management Committee facilitates coordination among the divisions and monitors the operating results and activity reports of these divisions.

In addition to the members of the Executive Committee, the following eighteen individuals from various non-operating departments and operating divisions

served as members of the Management Committee as of December 31, 2009:

#### Corporate

- René Chappaz, Vice President, Executive Career Management.
- Yves-Marie Dalibard, Vice President, Corporate Communications.
- Peter Herbel, General Counsel.
- Jean-Marc Jaubert, Senior Vice President, Industrial Safety.
- Manoelle Lepoutre, Executive Vice President, Sustainable Development and the Environment.
- Jean-François Minster, Senior Vice President, Scientific Development.
- Jean-Jacques Mosconi, Vice President, Strategic Planning.
- François Viaud, Senior Vice President, Human Resources.

#### Upstream

- Marc Blaizot, Senior Vice President, Geosciences, Exploration & Production.
- Philippe Boisseau, President, Gas & Power.
- Jacques Marraud des Grottes, Senior Vice President, Africa, Exploration & Production.
- Patrick Pouyanné, Senior Vice President, Strategy, Business Development and R&D, Exploration & Production.

#### Downstream

- Pierre Barbé, Senior Vice President, Trading & Shipping.
- Alain Champeaux, Senior Vice President, Overseas.
- Eric de Menten, Senior Vice President, Marketing Europe, Refining & Marketing.
- Bertrand Deroubaix, General Secretrary, Refining & Marketing.
- André Tricoire, Senior Vice President, Refining, Refining & Marketing.

#### Chemicals

• Françoise Leroy, General Secretary, Chemicals.

In addition, Jérôme Schmitt serves as the Group's Treasurer.

<sup>1.</sup> In February 2007, the then existing Nominating & Compensation Committee was separated into the existing Nominating & Governance Committee and the Compensation Committee (see "Item 6. Corporate Governance").

# Compensation

## **Board Compensation**

The amount paid to the members of the Board of Directors as directors' fees was €0.97 million in 2009 in accordance with the decision of the Shareholders' Meeting held on May 11, 2007. There were fifteen directors as of December 31, 2009, compared to sixteen directors as of December 31, 2008.

Compensation was paid to the members of the Board of Directors in 2009 based on the following principles, which remained unchanged from 2008:

- a fixed amount of €20,000 was paid to each director (paid prorata temporis in case of a change during the period), apart from the Chairman of the Audit Committee who was paid €30,000 and the other Audit Committee members who were paid €25,000;
- each director was paid €5,000 for each meeting of the Board of Directors, of the Audit Committee, of the Compensation Committee or of the Nominating & Governance Committee attended, such amount being increased to €7,000 for those directors who reside outside of France; and
- neither the Chairman of the Board, nor the Chief Executive Officer received directors' fees as directors of TOTAL S.A. or any other company of the Group.

See the table "Directors' Fees and Other Compensation Received by Directors" below for additional compensation information.

### Policy for determining the compensation and other benefits of the Chairman and the Chief Executive Officer

Based on a proposal by the Compensation Committee, the Board adopted the following policy for determining the compensation and other benefits of the Chairman and of the Chief Executive Officer:

 Compensation and benefits for the Chairman and the Chief Executive Officer are set by the Board of Directors after considering proposals from the Compensation Committee. Such compensation shall be reasonable and fair, in a context that values both teamwork and motivation within the Company.

Compensation for the Chairman and the Chief Executive Officer is related to market practice, work performed, results achieved and responsibilities held.

- Compensation for the Chairman and the Chief Executive Officer includes both a fixed portion and a variable portion, each of which is reviewed annually.
- The amount of variable compensation may not exceed a stated percentage of fixed compensation.

Variable compensation is determined based on pre-defined quantitative and qualitative criteria. Quantitative criteria are limited in number, objective, measurable and adapted to the Group's strategy.

Variable compensation is designed to reward short-term performance and progress towards medium-term objectives. The qualitative criteria for variable compensation are designed to allow exceptional circumstances to be taken into account, when appropriate.

- The Group does not have any specific pension plan for the Chairman and the Chief Executive Officer. They are eligible for retirement benefits and pensions available to other employees of the Group under conditions determined by the Board.
- Stock options are designed to align the long-term interests of the Chairman and the Chief Executive Officer with those of the shareholders.

Awards of stock options are considered in light of the amount of the total compensation paid to the Chairman and the Chief Executive Officer. The exercise of stock options to which the Chairman and the Chief Executive Officer are entitled is subject to a performance condition.

The exercise price for stock options awarded is not discounted compared to the market price, at the time of the grant, for the underlying share.

Stock options are awarded at regular intervals to prevent any opportunistic behavior.

The Board has put in place restrictions on the transfer of a portion of shares issued upon the exercise of options.

- After three years in office, the Chairman and Chief Executive Officer are required to hold at least the number of Company shares set by the Board.
- The Chairman and Chief Executive Officer do not receive restricted share grants.

## **Compensation of the Chairman**

The total gross compensation paid to Mr. Desmarest for fiscal 2009 was set by the Board of Directors, based upon the proposal of the Compensation Committee. This compensation is composed of a fixed base salary of €1,100,000 and a variable portion.

The variable portion is calculated by taking into account the Group's return on equity, the Group's earnings compared to those of other major international oil companies, as well as the Chairman's personal contribution to the Group's strategy, corporate governance and performance. The variable portion can reach a maximum amount of 100% of the fixed base

salary. The objectives related to personal contribution were considered to be mostly fulfilled, and taking into account the comparison of TOTAL's earnings with the major international oil companies that are its competitors, the variable portion paid to the Chairman in 2010 for his contribution in 2009 amounted to €871,852.

The total gross compensation paid to the Chairman for fiscal year 2009 amounted to  $\notin$ 1,971,852.

Mr. Thierry Desmarest's total gross compensation for fiscal 2008, as Chairman of the Board of Directors, amounted to €2,069,430, composed of a fixed base salary of €1,100,000 and a variable portion of €969,430 paid in 2009.

Mr. Desmarest does not receive any in-kind benefits.

See the tables "Summary of Compensation, Stock Options and Restricted Shares Granted to the Chairman and the Chief Executive Officer" and "Compensation of the Chairman and the Chief Executive Officer" below for additional compensation information.

## **Compensation of the Chief Executive Officer**

The total gross compensation paid to Mr. de Margerie for fiscal 2009 was set by the Board of Directors, based upon the proposal of the Compensation Committee. This compensation is composed of a fixed base salary of eq 1,310,000 and a variable portion.

The variable portion is calculated by taking into account the Group's return on equity, the Group's earnings compared to those of other major international oil companies, as well as the Chief Executive Officer's personal contribution to the Group's strategy, evaluated on the basis of objective operational criteria related to the Group's business segments. The variable portion can reach a maximum amount of 140% of the fixed base salary, which may be increased up to 165% for exceptional performance. The objectives related to personal contribution were considered to be mostly fulfilled, and taking into account the comparison of TOTAL's earnings with the major international oil companies that are its competitors, the variable portion paid to the Chief Executive Officer in 2010 for his contribution in 2009 amounted to  $\mathfrak{el}$ ,356,991.

The total gross compensation paid to the Chief Executive Officer for fiscal year 2009 amounted to 2,666,991.

Mr. Christophe de Margerie's total gross compensation for fiscal 2008 amounted to €2,802,875, composed of a fixed base salary of €1,250,000 and a variable portion of €1,552,875 paid in 2009. Mr. Christophe de Margerie has the use of a company car.

See the tables "Summary of Compensation, Stock Options and Restricted Shares Granted to the Chairman and the Chief Executive Officer" and "Compensation of the Chairman and the Chief Executive Officer" below for additional compensation information.

### **Executive Officer Compensation**

In 2009, the aggregate amount paid directly or indirectly by the French and foreign affiliates of the Company as compensation to the executive officers of TOTAL in office as of December 31, 2009 (members of the Management Committee and the Treasurer; twenty-five individuals) as a group was €17.1 million, including the million paid to the six members of the Executive Committee. Variable compensation accounted for 44.5% of the aggregate amount of €17.1 million paid to executive officers.

#### Pensions and other commitments

- 1) The Chairman and the Chief Executive Officer, pursuant to applicable law, are eligible for the French social security benefits, ARRCO (French Association for Complementary Pension Schemes) and AGIRC (French executive pension scheme federation) complementary pensions, RECOSUP (French Collective Supplementary Pension Scheme) defined benefit pension plans, and the supplementary pension plan created by the Company. This supplementary pension plan, which is not limited to the Chairman and the Chief Executive Officer, is detailed below.
- 2) The Chairman and the Chief Executive Officer are eligible for a supplementary pension plan open to all employees of the Group whose annual compensation is greater than the annual French social security threshold multiplied by eight.

This supplementary pension plan is financed and managed by TOTAL S.A. to award a pension that is based on the period of employment (up to a limit of twenty years) and the portion of annual gross compensation (including fixed and variable portions) that exceeds by at least eight times the annual French social security threshold. This pension is indexed to the ARRCO index.

As of December 31, 2009, the Group's supplementary pension obligations related to the Chairman are the equivalent of an annual pension of 26.3% of the Chairman's 2009 compensation.

For the Chief Executive Officer, the Group's pension obligations are, as of December 31, 2009, the equivalent of an annual pension of 18.8% of his 2009 compensation.

- 3) The Company also funds a life insurance policy which guarantees a payment, upon death, equal to two years' compensation (both fixed and variable), increased to three years upon accidental death, as well as, in case of disability, a payment proportional to the degree of disability.
- 4) The Chairman and the Chief Executive Officer are also entitled to retirement benefits equal to those available to eligible members of the Group under the French National Collective Bargaining Agreement for the Petroleum. This benefit amounts to 25% of the annual compensation (including fixed and variable portions) of the 12-month period preceding the retirement of the Chairman and the Chief Executive Officer.
- 5) If the Chairman or the Chief Executive Officer's employment is terminated or his term of office is not renewed by the Company, he is eligible for severance benefits equal to two times his gross annual compensation. The calculation will be based on the gross compensation (including both fixed and variable) paid in the 12-month period preceding the termination or the non-renewal of his term of office.

The severance benefits to be paid upon a change of control or a change of strategy of the Company are cancelled in the case of gross negligence or wilful misconduct or if the Chairman or the Chief Executive Officer leaves the Company of his own volition, accepts new responsibilities within the Group, or may claim full retirement benefits within a short time period.

Since Mr. Desmarest is eligible to claim his full retirement benefits, these provisions are only relevant to Mr. de Margerie.

6) The commitments related to the supplementary pension plan, retirement benefits and severance benefits upon termination of employment or term of office are subject to the procedure for regulated agreements set forth in article L. 225-38 of the French Commercial Code.

 Pursuant to the provisions of the French law of August 21, 2007, which modifies article L. 225-42-1 of the French Commercial Code, the commitments described in items 4 and 5 above are subject to performance conditions.

These performance conditions are deemed to be met if at least two of the three following criteria are satisfied:

- The average ROE (Return On Equity) over the three years immediately preceding the year in which the officer retires is at least 12%.
- The average ROACE (Return On Average Capital Employed) over the three years immediately preceding the year in which the officer retires is at least 10%.
- The Company's oil and gas production growth over the three years immediately preceding the year in which the officer retires is greater than or equal to the average production growth of ExxonMobil, Shell, BP and Chevron.
- In addition, the Company has the following pension commitments, (described in paragraph 2, above) as defined under French law, to Messrs. Tchuruk and Vaillaud:
  - The Company has funded an annual supplementary pension for Mr. Tchuruk related to his previous employment by the Group of approximately€€74,379 (December 31, 2009 value) indexed to the ARRCO index.
  - The Company has funded a supplementary pension for Mr. Vaillaud related to his previous employment by the Group of approximately €53,431 indexed to the ARRCO index.
- At year end 2009, the total amount of the Group's pension commitments related to the directors of the Group is equal to €28.1 million.

Summary table as of February 28, 2010	Employment contract	Benefits or advantages due or likely to be due upon termination or change of office	Benefits related to a non- compete agreement	Benefits or advantages due or likely to be due after termination or change of office
Thierry Desmarest Chairman of the Board of Directors Member of the Board since May 1995 <sup>(a)</sup> Expiry of current term of office: May 21, 2010 Shareholders' Meeting	NO	NO	NO	YES (retirement benefit) <sup>(b)</sup> (supplementary pension plan also applicable to some Group employees)
Christophe de Margerie Chief Executive Officer Member of the Board since February 2007 Expiry of current term of office: The Shareholders' Meeting called in 2012 to approve the financial statements for the year ending December 31, 2011	NO	YES (termination benefit) <b>(c)</b>	NO	YES (retirement benefit)(c) (supplementary pension plan also applicable to some Group employees)

(a) Chairman and Chief Executive Officer until February 13, 2007, and Chairman of the Board of Directors since February 14, 2007.

(b) Payment subject to a performance condition in accordance with the decision of the Board of Directors on February 11, 2009.

(c) Payment subject to a performance condition in accordance with the decision of the Board of Directors on February 11, 2009, and confirmed by the Board of Directors on May 15, 2009.

## Stock options and restricted share grants policy

### **General policy**

Stock options and restricted share grants concern only TOTAL shares. No options for or restricted grants of shares of any of the Group's listed subsidiaries are awarded.

All plans are approved by the Board of Directors, based on recommendations by the Compensation Committee. For each plan, the Compensation Committee recommends a list of the beneficiaries and the number of options or restricted shares granted to each beneficiary. The Board of Directors then gives final approval for this list.

Stock options have a term of eight years, with an exercise price set at the average of the opening share prices during the twenty trading days prior to the award date, without any discount being applied. For the option plans established after 2002, options may only be exercised after an initial 2-year period and the shares issued upon exercise may not be transferred prior to the termination of an additional 2-year holding period. For the 2007, 2008 and 2009 share subscription option plans, the transfer or conversion to bearer shares of shares issued from the exercise of stock options, for the beneficiaries of an employment contract with a non-French subsidiary on the date of the award, can take place after the termination of the initial 2-year period.

Restricted share grants become final after a 2-year vesting period, subject to a continued employment condition and a performance condition based on the ROE of the Group. This performance condition is defined in advance by the Board of Directors on recommendations by the Compensation Committee. At the end of this vesting period, and subject to the conditions set, the restricted share grants become final. However, these shares may not be transferred prior to the end of an additional 2-year mandatory holding period.

For the 2009 restricted share grant, the Board of Directors required that, for each beneficiary of more than 100 shares, half of the shares in excess of this number will be finally granted subject to a performance condition. This condition is based on the average ROE of the Group as published by TOTAL. The average ROE is calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2009 and 2010. The acquisition rate:

- is equal to zero if the average ROE is less than or equal to 7%;
- varies on a straight-line basis between 0% and 100% if the average ROE is more than 7% and less than 18%; and
- is equal to 100% if the average ROE is more than or equal to 18%.

For the 2007 and 2008 Plans, the performance condition stated that the restricted shares finally granted was

based on the ROE of the Group related to the fiscal year preceding the year of the final grant. The acquisition rate:

- is equal to zero if the ROE is less than or equal to 10%;
- varies on a straight-line basis between 0% and 80% if the ROE is more than 10% or less than 18%;
- varies on a straight-line basis between 80% and 100% if the ROE is more than or equal to 18% or less than 30%; and
- is equal to 100% if the ROE is more than or equal to 30%.

The grant of these options or restricted shares is used to complement, based upon individual performance assessments at the time of each plan, the Groupwide policy of developing employee shareholding (including savings plans, and capital increases reserved for employees) which allows employees to be more closely associated with the financial and share price performance of TOTAL.

# Grants to the Chairman, the Chief Executive Officer and Executive Officers

Pursuant to the provisions of French law No. 2006-1770 of December 30, 2006, the Board of Directors decided that, for the 2007, 2008 and 2009 share subscription option plans, the Chairman of the Board and the Chief Executive Officer will have to hold a number of TOTAL shares representing 50% of the capital gains, net of tax and related contributions, resulting from the exercise of stock options under these plans. Once the Chairman and the Chief Executive Officer hold a number of shares (including shares or interests in collective investment funds invested in Company securities) corresponding to more than five times their current gross annual fixed salary, this holding requirement will be reduced to 10%. If in the future this ratio is no longer met, the previous 50% holding requirement will once again apply.

The Chairman of the Board of Directors was not granted any share subscription options under the 2008 and 2009 plans.

In addition, the Chairman of the Board of Directors and the Chief Executive Officer were not granted any restricted shares under the 2006, 2007, 2008 and 2009 plans.

As part of the 2009 share subscription option plan, the Board of Directors required that, for the Chief Executive Officer, the number of share subscription options finally granted will be subject to two performance conditions:

• For 50% of the share subscription options granted, the first performance condition states that the number of options finally granted is based on the average ROE of the Group as published by TOTAL. The average ROE is calculated based on the

Group's consolidated balance sheet and statement of income for fiscal years 2009 and 2010. The acquisition rate is equal to zero if the average ROE is less than or equal to 7%, varies on a straight-line basis between 0% and 100% if the average ROE is more than 7% and less than 18%; and is equal to 100% if the average ROE is more than or equal to 18%.

 For 50% of the share subscription options granted, the second performance condition states that the number of options finally granted is related to the average ROACE of the Group as published by TOTAL. The average ROACE is calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2009 and 2010. The acquisition rate is equal to zero if the average ROACE is less than or equal to 6%, varies on a straight-line basis between 0% and 100% if the average ROACE is more than 6% and less than 15%, and is equal to 100% if the average ROACE is more than or equal to 15%.

In addition, as part of the 2009 share subscription option plan, the Board of Directors required that for each beneficiary other than the CEO of more than 25,000 options, one third of the options granted in excess of this number will be finally granted subject to a performance condition. This condition is based on the average ROE of the Group as published by TOTAL. The average ROE is calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2009 and 2010. The acquisition rate:

- is equal to zero if the average ROE is less than or equal to 7%;
- varies on a straight-line basis between 0% and 100% if the average ROE is more than 7% and less than 18%; and
- is equal to 100% if the average ROE is more than or equal to 18%.

As part of the 2007 and 2008 share subscription option plans, the Board required that, for each beneficiary of more than 25,000 options, one third of the options granted in excess of this number be subject to a performance condition. This performance condition states that the final acquisition rate is based on the ROE of the Group. The ROE is calculated based on the consolidated accounts published by TOTAL and related to the fiscal year preceding the final grant. The acquisition rate:

- is equal to zero if the ROE is less than or equal to 10%;
- varies on a straight-line basis between 0% and 80% if the ROE is more than 10% or less than 18%;
- varies on a straight-line basis between 80% and 100% if the ROE is more than or equal to 18% or less than 30%; and
- is equal to 100% if the ROE is more than or equal to 30%.
- 88

# SUMMARY OF COMPENSATION, STOCK OPTIONS AND RESTRICTED SHARES GRANTED TO THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER

For the year ended December 31, (€)	2009	2008
Thierry Desmarest		
Chairman of the Board of Directors		
Compensation <sup>(a)</sup>	1,971,852	2,069,430
Value of options granted <sup>(b)</sup>	— · · · ·	· · · —
Value of restricted shares granted <sup>(c)</sup>	_	_
Total	1,971,852	2,069,430
Christophe de Margerie		
Chief Executive Officer		
Compensation <sup>(a)</sup>	2.673.771	2,808,395
Value of options granted <sup>(d)</sup>	1,676,000	998,000
Value of restricted shares granted <sup>(c)</sup>	·····	_
Total	4.349.771	3,806,395

(a) Compensation detailed in the table "-- Compensation of the Chairman and the Chief Executive Officer".

(b) The Chairman of the Board was not granted any share subscription options as part of the 2008 and 2009 plans.

 (c) The Chairman and Chief Executive Officer were not granted any restricted shares as part of the 2008 and 2009 plans.
 (d) Options granted in 2009 are detailed in the table "
 Stock options granted in 2009 to the Chairman and the Chief Executive Officer". The value of options granted was calculated on the day they were granted using the Black-Scholes model based on the assumptions used for the consolidated accounts (see Note 25 to the Consolidated Financial Statement).

## COMPENSATION OF THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER

	For the year	For the year ended 2009		ended 2008
(€)	Amount due for 2009	Amount paid in 2009 <sup>(a)</sup>	Amount due for 2008	Amount paid in 2008 <sup>(a)</sup>
Thierry Desmarest Chairman of the Board of Directors				
Fixed compensation Variable compensation <sup>(b)</sup> Extraordinary compensation Directors' fees	1,100,000 871,852 	1,100,000 969,430 —	1,100,000 969,430 —	1,100,000 1,112,199 
In-kind benefits Total	1.971,852	2,069,430	2,069,430	2,212,199
Christophe de Margerie Chief Executive Officer	1,971,092	2,009,430	2,009,430	2,212,133
Fixed compensation Variable compensation <sup>(c)</sup> Extraordinary compensation	1,310,000 1,356,991 —	1,310,000 1,552,875 —	1,250,000 1,552,875 —	1,250,000 1,496,335 —
Directors' fees In-kind benefits <sup>(d)</sup>	6,780	6,780	5,520	5,520
Total	2,673,771	2,869,655	2,808,395	2,751,855

(a) Variable portion paid for prior fiscal year.

(b) The variable portion for the Chairman is calculated by taking into account the Group's return on equity during the relevant fiscal year, the Group's earnings compared to those of other major international oil companies, as well as the Chairman's personal contribution to the Group strategy, corporate governance and performance. The variable portion can reach a maximum amount of 100% of the fixed base salary. The objectives related to personal contribution were considered to be mostly met in 2009.

(c) The variable portion for the Chief Executive Officer is calculated by taking into account the Group's return on equity during the relevant fiscal year, the Group's earnings compared to those of other major international oil companies as well as the Chief Executive Officer's personal contribution based on operational target criteria. The variable portion can reach a maximum amount of 140% of the fixed base salary, which may be increased up to 165% for exceptional performance. The objectives related to personal contribution were considered to be mostly met in 2009.

(d) Mr. de Margerie has the use of a company car.

# DIRECTORS' FEES AND OTHER COMPENSATION RECEIVED BY DIRECTORS

Total compensation (including in-kind benefits) paid to each director in the year indicated (Article L. 225-102-1 of the French Commercial Code, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs):

(€)	2009	2008
Thierry Desmarest	(a)	(a)
Christophe de Margerie	(a)	(a)
Patrick Artus	27,656 <sup>(b)</sup>	_
Patricia Barbizet	94,192 <sup>(c)</sup>	39,651 <sup>(d)</sup>
Daniel Boeuf	272,143 <sup>(e)</sup>	173,910 <sup>(e)</sup>
Daniel Bouton	60,000	40,000
Bertrand Collomb	75,000	55,000
Paul Desmarais Jr.	48,000	48,000
Bertrand Jacquillat	95,000	90,000
Antoine Jeancourt-Galignani	46,013 <sup>(f)(g)</sup>	95,000
Anne Lauvergeon	45,000	45,000
Peter Levene of Portsoken	69,000	41,000
Claude Mandil	55,000	27,568 <sup>(d)</sup>
Michel Pébereau	70,000	70,000
Thierry de Rudder	116,000	116,000
Serge Tchuruk	154,379 <sup>(h)</sup>	143,427 <sup>(h)</sup>
Pierre Vaillaud	80,773 <sup>(f)(i)</sup>	186,873 <sup>(i)</sup>

(a) For the Chairman of the Board of Directors and the Chief Executive Officer, see summary tables "-- Summary of compensation, stock options and restricted shares granted to the Chairman and the Chief Executive Officer" and "— Compensation of the Chairman and the Chief Executive Officer". Thierry Desmarest and Christophe de Margerie received no directors' fees for their service on the Company's Board of Directors.

(b) Appointed as a director on May 15, 2009.
(c) Chairperson of the Audit Committee since July 28, 2009.
(d) Appointed as a director on May 16, 2008.

(a) Including the compensation received from Total Raffinage Marketing (a subsidiary of TOTAL S.A.), representing €123,910.48 in 2008 and €212,143 in 2009. (f) Director until May 15, 2009.

(g) Chairman of the Audit Committee until May 15, 2009.

(h) Including pension payments related to previous employment by the Group, which amounted to  $\in$ 73,427 in 2008 and  $\in$ 74,379 in 2009.

(i) Including pension payments related to previous employment by the Group, which amounted to €141,873 in 2008 and €53,431 in 2009.

Over the past two years, the directors currently in office have not received any compensation or in-kind benefits from companies controlled by TOTAL S.A., except for Mr. Daniel Boeuf, who is an employee of Total Raffinage Marketing. The compensation indicated in the table above (except for that of the Chairman, the Chief Executive Officer and Messrs. Boeuf, Tchuruk and Vaillaud) consists solely of directors' fees (gross amount) paid during the relevant period. None of the Directors of TOTAL S.A. have service contracts which provide for benefits upon termination of employment.

# STOCK OPTIONS GRANTED IN 2009 TO THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER

	Date of plan	Type of options	Value of options (€) (a)	Number of options granted during fiscal year <sup>(b)</sup>	Exercise price (€)	Exercise period
Thierry Desmarest	2009 Plan	Subscription options	_	_	—	_
Chairman of the Board of Directors	09/15/2009					
Total			_	_		
Christophe de Margerie	2009 Plan	Subscription options	1,676,000	200,000	39.90	09/16/2010
Chief Executive Officer	09/15/2009					09/15/2017
Total			1,676,000	200,000		

(a) The value of options granted was calculated on the day they were granted using the Black-Scholes model based on the assumptions used for the consolidated accounts (see Note 25 to the Consolidated Financial Statement).

(b) As part of the share subscription option plan awarded on September 15, 2009, the Board of Directors required that, for the Chief Executive Officer, the number of share subscription options finally granted after a 2-year vesting period will be subject to performance conditions.

# STOCK OPTIONS EXERCISED IN 2009 BY THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER

	Date of plan	Number of options exercised during fiscal year	Exercise price (€)
Thierry Desmarest	2002 Plan	45,000	39.03
Chairman of the Board of Directors	07/09/2002		
Total		45,000	
Christophe de Margerie	_	_	_
Chief Executive Officer	—	—	
Total		_	

# RESTRICTED SHARE GRANTS AWARDED IN 2009 TO THE CHAIRMAN, THE CHIEF EXECUTIVE OFFICER OR ANY DIRECTOR (CONDITIONAL AWARD)

	Date of plan	Number of shares granted during fiscal year	Value of shares granted (€)	Acquisition date	Availability date	Performance condition
Thierry Desmarest	2009 Plan	_	_	_	_	
Chairman of the Board of Directors	09/15/2009					
Christophe de Margerie	2009 Plan 09/15/2009	—	—	—	—	_
Chief Executive Officer	09/13/2009					
Daniel Boeuf	2009 Plan	_	_	_	_	_
Director representing the employee shareholders	09/15/2009					
Total		_	_			

# **RESTRICTED SHARES FINALLY GRANTED IN 2009 TO THE CHAIRMAN, THE** CHIEF EXECUTIVE OFFICER OR ANY DIRECTOR

	Date of plan	Number of shares finally granted during fiscal year <sup>(a)</sup>	Acquisition condition
Thierry Desmarest	2007 Plan	—	_
Chairman of the Board of Directors	07/17/2007		
Christophe de Margerie	2007 Plan	—	_
Chief Executive Officer	07/17/2007		
Daniel Boeuf	2007 Plan	432	(b)
Director representing the employee shareholders	07/17/2007		
Total		432	

(a) Shares finally granted to the beneficiaries after a 2-year vesting period, i.e. on July 18, 2009.
 (b) The acquisition rate, connected to the performance condition, was 100%. Moreover, the transfer of the restricted shares finally granted will only be permitted after the end of a 2-year mandatory holding period, i.e. from July 18, 2011.

## **TOTAL stock options plans**

The following table gives a breakdown of stock options awarded by category of beneficiaries (executive officers, senior managers and other employees) for the plans in effect during 2009.

		Number of	Number of options	Deveentere	Average number of options per
2001 Plan <sup>(b)(c)</sup> :		beneficiaries	awarded <sup>(a)</sup>	Percentage	beneficiary <sup>(a)</sup>
Purchase options	Executive Officers				
	(d)	21	295,350	11.0%	14.064
Decision of the Board on July 10, 2001	Senior managers	281	648,950	24.1%	2,309
Exercise price: €168.20; discount: 0.0%	Other employees	3,318	1,749,075	64.9%	527
Exercise price as of May 24, 2006: €41.47 <sup>(a)</sup>	1 2	,			
	Total	3,620	2,693,375	100%	744
2002 Plan <sup>(e)(c)</sup> :					
Purchase options	Executive Officers				
	(d)	28	333,600	11.6%	11,914
Decision of the Board on July 9, 2002 Exercise price:	Senior managers	299	732,500	25.5%	2,450
158.30; discount: 0.0% Exercise price as of May 24, 2006: €39.03 <sup>(a)</sup>	Other employees	3,537	1,804,750	62.9%	510
	Total	3,864	2,870,850	100%	743
2003 Plan <sup>(e)(c)</sup> :					
Subscription options	Executive Officers				
	(d)	28	356,500	12.2%	12,732
Decision of the Board on July 16, 2003 Exercise price:	Senior managers	319	749,206	25.5%	2,349
€133.20; discount: 0.0% Exercise price as of May 24, 2006: €32.84 <sup>(a)</sup>	Other employees	3,603	1,829,600	62.3%	508
	Total	3,950	2,935,306	100%	743
2004 Plan <sup>(e)</sup> :					
Subscription options	Executive Officers				
	(d)	30	423,500	12.6%	14,117
Decision of the Board on July 20, 2004 Exercise price:	Senior managers	319	902,400	26.8%	2,829
€159.40; discount: 0.0% Exercise price as of May 24, 2006: €39.30 <sup>(a)</sup>	Other employees	3,997	2,039,730	60.6%	510
	Total	4,346	3,365,630	100%	774
2005 Plan <sup>(e)</sup> :					
Subscription options	Executive Officers				
	(d)	30	370,040	24.3%	12,335
Decision of the Board on July 19, 2005 Exercise price:	Senior managers	330	574,140	37.6%	1,740
€198.90; discount: 0.0% Exercise price as of May 24, 2006: €49.04 <sup>(a)</sup>	Other employees	2,361	581,940	38.1%	246
	Total	2,721	1,526,120	100%	561
2006 Plan <sup>(e)</sup> :					
Subscription options	Executive Officers				
	(d)	28	1,447,000	25.3%	51,679
Decision of the Board on July 18, 2006 Exercise price:	Senior managers	304	2,120,640	37.0%	6,976
€50.60; discount: 0.0%	Other employees	2,253	2,159,600	37.7%	959
	Total	2,585	5,727,240	100%	2,216
2007 Plan <sup>(e)(f)(g)</sup> :					
Subscription options	Executive Officers	27	1,329,360	22.8%	49,236
Decision of the Board on July 17, 2007 Exercise price:	(-)	298	2.162.270	37.1%	49,230
€60.10; discount: 0.0%	Senior managers Other employees	2,401	, - , -	40.1%	973
eo. 10, discount. 0.0%	Total	2,401 2,726	2,335,600 <b>5,827,230</b>	40.1% <b>100%</b>	2,138
2008 Plan <sup>(e)(f)</sup> :					
Subscription options	Executive Officers				
	Executive Officers	26	1,227,500	27.6%	47,212
	Senior managers	298	1,988,420	44.7%	6,673
Decision of the Board on September 9, 2008, and					0,010
Decision of the Board on September 9, 2008, and awarded on October 9, 2008 Exercise price: €42.90; discount: 0.0%	Other employees	1,690	1,233,890	27.7%	730

		Number of beneficiaries	Number of options awarded <sup>(a)</sup>	Percentage	Average number of options per beneficiary <sup>(a)</sup>
2009 Plan <sup>(e)(f)</sup> : Subscription options Decision of the Board on September 15, 2009 Exercise	Executive Officers	26	1,201,500	27.4%	46,211
price: €39.90; discount: 0.0%	Senior managers Other employees <b>Total</b>	284 1,742 <b>2,052</b>	1,825,540 1,360,460 <b>4,387,500</b>	41.6% 31.0% <b>100%</b>	6,428 781 <b>2,138</b>

(a) To take into account the spin-off of Arkema, pursuant to Articles 174-9, 174-12 and 174-13 of Decree number 67-236 of March 23, 1967, effective at that time and as of the date of the shareholders' meeting on May 12, 2006, at its meeting of March 14, 2006, the Board of Directors resolved to adjust the rights of holders of TOTAL stock options. For each plan and each holder, the exercise prices for TOTAL stock options were multiplied by 0.986147 and the number of unexercised stock options was multiplied by 1.014048 (and then rounded up), effective as of May 24, 2006. In addition, to take into account the four-for-one stock split approved by the Shareholders' Meeting on May 12, 2006, the exercise price for stock options was divided by four and the number of unexercised stock options was multiplied by four. The presentation in this table of the number of options initially awarded has not been adjusted to reflect the four-for-one stock split.

(b) Options are exercisable after January 1, 2005, subject to a continued employment condition, and expire eight years after the date of the Board meeting awarding the options and expire eight years after this date. The underlying shares may not be transferred during the 4-year period from the date of the Board meeting awarding the options. The continued employment condition of the employment contract will also terminate the grantee's right to exercise the options.

(c) Certain employees of the Elf Aquitaine group in 1998 also benefited in 2000, 2001, 2002 and 2003 from the vesting of Elf Aquitaine options awarded in 1998 subject to performance conditions related to the Elf Aquitaine group from 1998 to 2002. These Elf Aquitaine plans expired on March 31, 2005.

(d) Members of the Management Committee and the Treasurer as of the date of the Board meeting awarding the options. The Chairman of the Board has no longer been a member of the Management Committee since February 14, 2007. The Chairman of the Board of Directors was granted 110,000 options in 2007 and no options in 2008 and 2009.

(e) Options are exercisable, subject to a continued employment condition, after a 2-year vesting period from the date of the Board meeting awarding the options (except for the 2008 plan) and expire eight years after this date. The underlying shares may not be transferred during the 4-year period from the date of the Board meeting awarding the options. The continued employment condition states that the termination of the employment contract will also terminate the grantee's right to exercise the options.

(f) The 4-year transfer restriction period does not apply to employees of non-French subsidiaries as of the date of the grant, who may transfer the underlying shares after a 2-year period form the date of the grant.

(g) For the 2007 plan, the options acquisition rate, connected to the performance condition, was 100%.

# **TOTAL STOCK OPTIONS AS OF DECEMBER 31, 2009**

Type of options	2001 Plan Purchase options	2002 Plan Purchase options	2003 Plan Subscription options	2004 Plan Subscription options	2005 Plan Subscription options	2006 Plan Subscription options	2007 Plan Subscription options	2008 Plan Subscription options	2009 Plan Subscription options	Total
Date of the										
Shareholders'	May 17,	May 17,	May 17,	May 14,	May 14,	May 14,	May 11,	May 11,	May 11,	
Meeting	2001	2001	2001	2004	2004	2004	2007	2007	2007	
Date of the award									September	
(a)	July 10,	July 9,	July 16,	July 20,	July 19,	July 18,	July 17,	October 9,	15,	
<b>T</b> . ( . ]	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Total number of										
options										
granted, including <sup>(b)</sup> :	10 772 500	11,483,400	11,741,224	13,462,520	6 104 490	5,727,240	5,937,230	4,449,810	4 297 500	74,066,904
• directors <sup>(c)</sup>	<b>10,773,500</b> 300.000	240.000	240.000	240.000	<b>6,104,480</b> 240,720	400.720	310.840	200,660	<b>4,387,500</b> 200.000	2,372,940
• T. Desmarest	300,000	240,000	240,000	240,000	240,720	240,000	110,000	200,000	200,000	1,610,000
C. de Margerie	,	240,000 n/a	240,000 n/a	240,000 n/a	240,000 n/a	160.000	200.000	200.000	200,000	760.000
<ul> <li>D. Boeuf</li> </ul>	n/a	n/a	n/a		720	720	840	660	200,000	2,940
Additional award	16,000			24,000	134,400				_	174,400
Adjustments	10,000			24,000	104,400					
related to the										
spin-off of										
Arkema <sup>(d)</sup>	113,704	165,672	163,180	196,448	90,280	_	_	_	_	729,284
Date as of which		,		1	1				September	
the options may	January 1,	July 10,	July 17,	July 21,	July 20,	July 19,	July 18,	October 10,	16,	
be exercised	2005	2004	2005	2006	2007	2008	2009	2010	2011	
Expiration date									September	
	July 10,	July 9,	July 16,	July 20,	July 19,	July 18,	July 17,	October 9,	15,	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Exercise price (€) <sup>(e)</sup>	41.47	39.03	32.84	39.30	49.04	50.60	60.10	42.90	39.90	
Cumulative number of options exercised as of December 31, 2009 Cumulative number of options cancelled as of December 31, 2009	6,156,019	5,615,101	4,996,833	908,976	38,497	8,620	-	-		
2009	4,747,185	98,710	95,942	278,283	105,223	72,934	65,565	8,180	10,610	
Number of options:										
• outstanding as of January 1, 2009	4,691,426	6,450,857	7,501,348	12,767,177	6,191,704	5,651,056	5,885,445	4,443,810		53,582,823
• granted in 2009 <sup>(†)</sup>									4,387,620	4,387,620
cancelled in 2009	(4,650,446)	(7,920)	( , ,		(6,264)	(5,370)	(13,780)	(2,180)	(10,610)	
• exercised in 2009	(40,980)	(507,676)	(681,699)	(253,081)	_	—	—	—	_	(1,483,436)
<ul> <li>outstanding as</li> </ul>										
of										
December 31, 2009		E 025 064	6 044 600	10 405 700	6 40E 440	E 645 600	E 074 665	4 4 4 4 600	4 277 040	E4 764 000
2009	_	5,935,261	6,811,629	12,495,709	6,185,440	5,645,686	5,871,665	4,441,630	4,377,010	51,764,030

(a) The date of the award is the date of the Board meeting awarding the options, except for the share subscription option plan of October 9, 2008, decided by the Board on September 9, 2008.

(b) The number of options awarded before May 23, 2006, has been multiplied by four to take into account the four-for-one stock split approved by the Shareholders' Meeting on May 12, 2006.

(c) Options awarded to directors at the time of award.

(d) Adjustments approved by the Board on its meeting on March 14, 2006 pursuant to Articles 174-9, 174-12 and 174-13 of Decree No. 67-236 dated March 23, 1967 in effect at the time of the Board meeting as well as at the time of the Shareholders' Meeting on May 12, 2006, related to the spin-off of Arkema. These adjustments have been made on May 22, 2006 with an effective date of May 24, 2006.

(e) Exercise price as of May 24, 2006. To take into account the four-for-one stock split that took place on May 18, 2006, the exercise price of stock options from plans then effective has been divided by four. In addition, to take into account the spin-off of Arkema, the exercise price of stock options was multiplied by an adjustment ratio of 0.986147, effective as of May 24, 2006. Exercise prices price to May 24, 2006, are shown in Note 25 to the Consolidated Financial Statements.

(f) For the 2007 plan, the options acquisition rate, connected to the performance condition, was 100%.

If all the outstanding stock options as of December 31, 2009 were exercised, the corresponding shares would represent 2.16%<sup>(1)</sup> of the Company's potential share capital as of such date.

1. Out of a total potential share capital of 2,394,251,653 shares.

# TOTAL STOCK OPTIONS AWARDED TO EXECUTIVE OFFICERS (MANAGEMENT COMMITTEE AND **TREASURER) AS OF DECEMBER 31, 2009**

Type of options	2001 Plan Purchase options	2002 Plan Purchase options	2003 Plan Subscription options	2004 Plan Subscription options	2005 Plan Subscription options	2006 Plan Subscription options	Subscription	2008 Plan Subscription options	2009 Plan Subscription options	Total
Expiration date Exercise price	July 10, 2009	July 9, 2010	July 16, 2011	July 20, 2012	July 19, 2013	July 18, 2014	July 17 2015	October 9, 2016	September 15, 2017	
(€) <sup>(a)</sup>	41.47	39.03	32.84	39.30	49.04	50.60	60.10	42.90	39.90	
Options granted by the Board (b)	492,000	560,200	635,704	796,800	689,680	823,720	1,000,840	1,101,200	1,169,800	7,269,944
Adjustments related to the spin- off of	0.054	7.500	0.400		0.000					00 700
Arkema <sup>(c)</sup> Options outstanding as of January 1,	3,254	7,568	8,120	11,248	9,608					39,798
2009 Options awarded	182,268	243,232	338,337	795,048	699,416	823,720	1,000,840	1,101,200	_	5,184,061
in 2009 <sup>(d)</sup> Options exercised	_	_	_	_	_	_	_	_	1,169,800	1,169,800
in 2009 Options outstanding as of December 3		_	(47,000)	(90,000)	_	_	_	_	_	(137,000)
2009	·	243,232	291,337	705,048	699,416	823,720	1,000,840	1,101,200	1,169,800	6,034,593

(a) Exercise price as of May 24, 2006. To take into account the four-for-one stock split that took place on May 18, 2006, the exercise price of stock options from plans then (b) Exercise price as been divided by four. In addition to take into account the spin-off of Arkema, the exercise price of stock options was multiplied by an adjustment ratio of 0.986147, effective as of May 24, 2006. Exercise prices prior to May 24, 2006, are shown in Note 25 to the Consolidated Financial Statements.
 (b) The number of options awarded before May 23, 2006, has been multiplied by four to take into account the four-for-one stock split approved by the Shareholders'

Meeting on May 12, 2006. (c) Adjustments approved by the Board on its meeting on March 14, 2006 pursuant to Articles 174-9, 174-12 and 174-13 of Decree No. 67-236 dated March 23, 1967 in

effect at the time of the Board meeting and at the time of the Shareholders' Meeting on May 12, 2006, related to the spin-off of Arkema. These adjustments have been made on May 22, 2006 with an effective date of May 24, 2006.

(d) The number of options awarded in 2009 to executive officers, having this title as of December 31, 2009, does not match the amount shown in the table "- TOTAL stock options as of December 31, 2009", due to changes among the executive officers after the date the Board decided the share option plan.

As part of the 2007, 2008 and 2009 share subscription option plans, the Board of Directors required that for each beneficiary of more than 25,000 options, one third of the options granted in excess of this number be subject to a performance condition. For the 2007 plan, the options acquisition rate, connected to the performance condition, was 100%.

In addition, Mr. Daniel Boeuf, the director representing employee shareholders, has not exercised any option in 2009 and has not been awarded any share subscription option by the 2009 plan.

# TOTAL STOCK OPTIONS AWARDED TO MR. THIERRY DESMAREST, CHAIRMAN OF THE BOARD OF TOTAL S.A.

Type of options	2001 Plan Purchase options		2003 Plan Subscription options	2004 Plan Subscription options	2005 Plan Subscription options	2006 Plan Subscription options	2007 Plan Subscription options	2008 Plan Subscription options	2009 Plan Subscription options	Total
Expiration date	July 10, 2009	July 9, 2010	July 16, 2011	July 20, 2012	July 19, 2013	July 18, 2014	July 17, 2015	October 9, 2016	September 15, 2017	
Exercise price (€) <sup>(a)</sup>	41.47	39.03	32.84	39.30	49.04	50.60	60.10	42.90	39.90	
Options granted by the Board <sup>(b)</sup>	300,000	240,000	240,000	240,000	240,000	240,000	110,000	_	_	1,610,000
Adjustments related to the spin-off of Arkema <sup>(c)</sup>	2,532	3,372	2,476	3,372	3,372	_	_	_	-	15, 124
Options outstanding as of January 1, 2009 Options awarded in	_	70,372	_	243,372	243,372	240,000	110,000	_	_	907,116
2009	_	_	_	_	_	_	_	_	_	_
Options exercised in 2009 Options outstanding as	_	(45,000)	_	—	—	_	—	—	—	(45,000)
of December 31, 2009	—	25,372	—	243,372	243,372	240,000	110,000	—	—	862,116

(a) Exercise price as of May 24, 2006. To take into account the four-for-one stock split that took place on May 18, 2006, the exercise price of stock options from plans then effective has been divided by four. In addition, to take into account the spin-off of Arkema, the exercise price of stock options was multiplied by an adjustment ratio of 0.986147, effective as of May 24, 2006. Exercise prices prior to May 24, 2006, are shown in Note 25 to the Consolidated Financial Statements.
 (b) The number of options awarded before May 23, 2006, has been multiplied by four to take into account the four-for-one stock split approved by the Shareholders'

Meeting on May 12, 2006.

(c) Adjustments approved by the Board on its meeting on March 14, 2006 pursuant to Articles 174-9, 174-12 and 174-13 of Decree No. 67-236 dated March 23, 1967 in effect at the time of the Board meeting and at the time of the Shareholders' Meeting on May 12, 2006, related to the spin-off of Arkema. These adjustments have been made on May 22, 2006 with an effective date of May 24, 2006.

As part of the 2007 plan, the Board has conditioned the award of these options to the Chairman of the Board on the fulfillment of a performance condition. For the 2007 plan, the options acquisition rate, connected to the performance condition, was 100%.

The Chairman of the Board of Directors' outstanding options as of December 31, 2009, represent 0.036%<sup>(1)</sup> of the Company's potential share capital as of such date.

1. Out of a total potential share capital of 2,394,251,653 shares.

# TOTAL STOCK OPTIONS AWARDED TO MR. CHRISTOPHE DE MARGERIE, CHIEF EXECUTIVE OFFICER OF TOTAL S.A.

Type of options	2001 Plan Purchase options	2002 Plan Purchase options	2003 Plan Subscription options		Subscription		2007 Plan Subscription options	2008 Plan Subscription options	2009 Plan Subscription options	Total
Expiration date	July 10, 2009	July 9, 2010	July 16, 2011	July 20, 2012	July 19, 2013	July 18, 2014	July 17, 2015	October 9, 2016	September 15, 2017	
Exercise price (€)	41.47	39.03	32.84	39.30	49.04	50.60	60.10	42.90	39.90	
Options granted by the Board (b) Adjustments	88,000	112,000	112,000	128,000	130,000	160,000	200,000	200,000	200,000	1,330,000
related to the spin-off of Arkema <sup>(c)</sup>	1,240	1,576	1,576	1,800	1,828	_	_	_		8,020
Options outstanding as of January 1,										
2009	89,240	113,576	113,576	129,800	131,828	160,000	200,000	200,000	—	1,138,020
Options awarded in 2009 Options exercised	_	_	_	_	_	_	_	_	200,000	200,000
in 2009 Options outstanding as of	_	_	_	_	_	_	_	_	_	_
December 31, 2009	_	113,576	113,576	129,800	131,828	160,000	200,000	200,000	200,000	1,248,780

(a) Exercise price as of May 24, 2006. To take into account the four-for-one stock split that took place on May 18, 2006, the exercise price of stock options from plans then effective has been divided by four. In addition, to take into account the spin-off of Arkema, the exercise price of stock options was multiplied by an adjustment ratio of 0.986147, effective as of May 24, 2006. Exercise prices prior to May 24, 2006, are shown in Note 25 to the Consolidated Financial Statements.

(b) The number of options awarded before May 23, 2006, has been multiplied by four to take into account the four-for-one stock split approved by the Shareholders' Meeting on May 12, 2006.

(c) Adjustments approved by the Board on its meeting on March 14, 2006 pursuant to Articles 174-9, 174-12 and 174-13 of Decree No. 67-236 dated March 23, 1967 in effect at the time of the Board meeting and at the time of the Shareholders' Meeting on May 12, 2006, related to the spin-off of Arkema. These adjustments have been made on May 22, 2006 with an effective date of May 24, 2006.

As part of the 2007, 2008 and 2009 plans, the Board has conditioned the award of these options to the Chief Executive Officer on the fulfillment of performance conditions. For the 2007 plan, the options acquisition rate, connected to the performance condition, was 100%.

The Chief Executive Officer' outstanding options as of December 31, 2009 represent 0.052%<sup>(1)</sup> of the Company's potential share capital as of such date.

1. Out of a total potential share capital of 2,394,251,653 shares.

# STOCK OPTIONS AWARDED TO THE TEN EMPLOYEES (OTHER THAN DIRECTORS) RECEIVING THE LARGEST AWARDS / STOCK OPTIONS EXERCISED BY THE TEN EMPLOYEES (OTHER THAN DIRECTORS) EXERCISING THE LARGEST NUMBER OF OPTIONS

	Total number of options awarded/options exercised	Exercise price (€)	Date of the award <sup>(a)</sup>	Expiration date
Options awarded in 2009 to the ten employees of TOTAL S.A., or any company in the Group, receiving the largest number of options	659,000	39.90	09/15/2009	09/15/2017
Options exercised in 2009 by the ten	10,000	41.47	07/10/2001	07/10/2009
employees of TOTAL S.A., or any	52,100	39.03	07/09/2002	07/09/2010
company in the Group, exercising	115,431	32.84	07/16/2003	07/16/2011
the largest number of options <sup>(b)</sup>	102,172	39.30	07/20/2004	07/20/2012
	279,703	36.66 <sup>(c)</sup>		

(a) The date of the award is the date of the Board meeting awarding the options.

(b) Exercise price as of May 24, 2006. To take into account the four-for-one stock split that took place on May 18, 2006, the exercise price of stock options from plans then effective has been divided by four. In addition, to take into account the spin-off of Arkema, the exercise price of stock options was multiplied by an adjustment ratio of 0.986147, effective as of May 24, 2006. Exercise prices prior to May 24, 2006, are shown in Note 25 to the Consolidated Financial Statements.

(c) Weighted-average price.

# **TOTAL restricted share grants**

The following table gives a breakdown of restricted share grants by category of grantee (executive officers, senior managers and other employees).

		Number of beneficiaries	Number of restricted shares granted <sup>(a)</sup>	Percentage	Average number of restricted shares per beneficiary
2005 Plan <sup>(b)</sup>	Executive officers(c)	29	13,692	2.4%	472
Decision of the Board on July 19, 2005	Senior managers	330	74,512	13.1%	226
	Other employees <sup>(d)</sup>	6,956	481,926	84.5%	69
	Total	7,315	570,130	100%	78
2006 Plan <sup>(b)</sup>	Executive officers(c)	26	49,200	2.2%	1,892
Decision of the Board on July 18, 2006	Senior managers	304	273,832	12.0%	901
	Other employees <sup>(d)</sup>	7,509	1,952,332	85.8%	260
	Total	7,839	2,275,364	100%	290
2007 Plan <sup>(b)</sup>	Executive officers(c)	26	48,928	2.1%	1,882
Decision of the Board on July 17, 2007	Senior managers	297	272,128	11.5%	916
	Other employees <sup>(d)</sup>	8,291	2,045,309	86.4%	247
	Total	8,614	2,366,365	100%	275
2008 Plan	Executive officers <sup>(c)</sup>	25	49,100	1.8%	1,964
Decision of the Board on September 9, 2008,	Senior managers	300	348,156	12.5%	1,161
and awarded on October 9, 2008	Other employees <sup>(d)</sup>	9,028	2,394,712	85.8%	265
	Total	9,353	2,791,968	100%	299
2009 Plan	Executive officers(c)	25	48,700	1.6%	1,948
Decision of the Board on September 15, 2009	Senior managers	284	329,912	11.1%	1,162
•	Other employees <sup>(d)</sup>	9,693	2,593,406	87.3%	268
	Total	10,002	2,972,018	100%	297

(a) The number of restricted shares granted shown in this table has not been recalculated to take into account the four-for-one stock split approved by the Shareholders' Meeting on May 12, 2006.

(b) For the 2005, 2006 and 2007 plans, the acquisition rates of the shares granted, related to the performance conditions, were 100%.

(c) Members of the Management Committee and the Treasurer as of the date of the Board meeting granting the restricted shares. The Chairman of the Board and the Chief Executive Officer were not granted any restricted shares.

(d) Mr. Daniel Boeuf, employee of Total Raffinage Marketing, a subsidiary of TOTAL S.A. and the director of TOTAL S.A. representing employee shareholders, was granted 416 restricted shares in 2005, 416 restricted shares in 2006, 432 restricted shares in 2007 and 588 shares in 2008. Mr Boeuf was not granted any restricted shares in 2009.

The shares, previously bought back by the Company on the market, are finally granted to their beneficiaries after a 2-year vesting period from the date of the grant. This final grant is subject to continued employment and condition performances. Moreover, the transfer of the restricted shares will not be permitted until the end of a 2-year mandatory holding period.

## **RESTRICTED SHARE PLANS AS OF DECEMBER 31, 2009**

	2005				
	Plan <sup>(a)</sup>	2006 Plan	2007 Plan	2008 Plan	2009 Plan
Date of the Shareholders' Meeting	05/17/2005	05/17/2005	05/17/2005	05/16/2008	05/16/2008
Date of grant <sup>(b)</sup>	07/19/2005	07/18/2006	07/17/2007	10/09/2008	09/15/2009
Closing price on the date of the award <sup>(c)</sup>	€52.13	€50.40	€61.62	€35.945	€41.615
Average repurchase price per share paid by the Company	€51.62	€51.91	€61.49	€41.63	€38.54
Total number of restricted shares granted, including to	2,280,520	2,275,364	2,366,365	2,791,968	2,972,018
<ul> <li>directors<sup>(d)</sup></li> </ul>	416	416	432	588	0
<ul> <li>ten employees with largest grants<sup>(e)</sup></li> </ul>	20,000	20,000	20,000	20,000	20,000
Start of the vesting period:	07/19/2005	07/18/2006	07/17/2007	10/09/2008	09/15/2009
Date of final grant, subject to specific condition (end of the vesting period)	07/20/2007	07/19/2008	07/18/2009	10/10/2010	09/16/2011
Transfer possible from (end of the mandatory holding period)	07/20/2009	07/19/2010	07/18/2011	10/10/2012	09/16/2013
Number of restricted shares:					
Outstanding as of January 1, 2009	_	_	2,333,217	2,772,748	
Granted in 2009	_	_	· · · · -	· · · · -	2,972,018
Cancelled in 2009	1,928 <sup>(h)</sup>	2,922 <sup>(h)</sup>	(12,418)	(9,672)	(5,982)
<ul> <li>Finally granted in 2009<sup>(f) (g)</sup></li> </ul>	(1,928) <sup>(h)</sup>	(2,922) <sup>(h)</sup>	(2,320,799)	(600)	—
Outstanding as of December 31, 2009		_		2,762,476	2,966,036

(a) The number of restricted shares granted has been multiplied by four to take into account the four-for-one stock split approved by TOTAL Shareholders' Meeting on May 12, 2006.

(b) The date of the award is the date of the Board meeting awarding the restricted share grant, except for the restricted shares awarded on October 9, 2008, decided by the Board on September 9, 2008.

(c) To take into account the four-for-one stock split in May 18, 2006, the closing price for TOTAL shares on July 19, 2005, (€208.50) has been divided by four.

(d) The Chairman of the Board of Directors was not granted any restricted shares under the 2005, 2006, 2007, 2008 and 2009 plans. Furthermore, Mr. de Margerie, director of TOTAL S.A. since May 12, 2006, and Chief Executive Officer of TOTAL S.A. since February 14, 2007, was not granted any restricted shares under the 2006, 2007, 2008 and 2009 plans. The Chief Executive Officer was finally granted on July 20, 2007, the 2,000 restricted shares he had been granted by the 2005 plan since he was not a director of TOTAL S.A as of the date of the grant. Furthermore, Mr. Boeuf, the director of TOTAL S.A. representing employee. shareholders, was finally granted on July 18, 2009, the 432 shares he had been granted by the 2007 plan and was not granted any restricted shares by the 2009 plan. (e) Employees of TOTAL S.A., or of any Group company, who were not directors of TOTAL S.A. as of the date of grant.

(f) For the 2008 plan, final grants following the death of the beneficiary.

(g) For the 2007 plan, the acquisition rate, related to the performance condition, was 100%.

(h) Restricted shares finally granted for which the entitlement right had been cancelled erroneously.

In case of a final award of the outstanding restricted shares as of December 31, 2009, the corresponding shares would represent 0.24%<sup>(1)</sup> of the Company's potential share capital as of such date.

1. Out of a total potential share capital of 2,394,251,653 shares.

## TOTAL RESTRICTED SHARES FINALLY GRANTED, FOLLOWING THE DECISION BY THE BOARD MEETING OF SEPTEMBER 15, 2009, TO THE TEN EMPLOYEES (OTHER THAN DIRECTORS) RECEIVING THE LARGEST NUMBER OF GRANTS / TOTAL RESTRICTED SHARE GRANTS FINALLY GRANTED FOLLOWING THE RESTRICTED SHARE PLAN APPROVED BY THE BOARD MEETING ON JULY 17, 2007, TO THE TEN EMPLOYEES (OTHER THAN DIRECTORS) RECEIVING THE LARGEST NUMBER OF SHARES

	Restricted share grants / Shares finally granted	Date of the award	Date of the final grant	End of the holding period
TOTAL restricted share grants decided by the Board meeting on September 15, 2009 to the ten employees (other than directors) receiving the largest amount of grants <sup>(a)</sup>	20,000	09/15/2009	09/16/2011	09/16/2013
TOTAL restricted share grants finally granted in 2009 following the restricted share plan approved by the Board meeting on July 17, 2007, to the ten employees (other than directors) receiving the largest amount of shares	20,000	07/17/2007	07/18/2009	07/18/2011

(a) Grant approved by the Board on September 15, 2009. Grants of these restricted shares will become final, subject to a performance condition, after a 2-year vesting period, i.e. on September 16, 2011. Moreover, the transfer of the restricted shares will not be permitted until the end of a 2-year mandatory holding period, i.e. on September 16, 2013.

(b) Grant approved by the Board on July 17, 2007. Grants of these restricted shares will become final, subject to a performance condition, after a 2-year vesting period, i.e. on July 18, 2009. The acquisition rate of the shares granted, connected to the performance condition, was 100%. Moreover, the transfer of the restricted shares will not be permitted until the end of a 2-year mandatory holding period, i.e. from July 18, 2011.

### Elf Aquitaine share subscription options

## ELF AQUITAINE STOCK OPTIONS OF EXECUTIVE OFFICERS (MEMBERS OF THE MANAGEMENT COMMITTEE AND THE TREASURER) AS OF DECEMBER 31, 2009

Certain executive officers of TOTAL as of December 31, 2009, who were previously with the Elf Aquitaine group hold Elf Aquitaine options that, upon exercise, benefited from exchange rights for TOTAL shares based upon the exchange ratio used in the public tender offer of TOTAL for Elf Aquitaine in 1999.

This exchange ratio was adjusted on May 22, 2006, as described in Note 25 to the Consolidated Financial Statements.

As of December 31, 2009, the exchange guarantee is no longer in effect and Elf Aquitaine share subscription option plans have expired. Therefore, no Elf Aquitaine shares are covered by the exchange guarantee as of December 31, 2009.

	1999 Plan n°
Elf Aquitaine share subscription plan	1
Exercise price per Elf Aquitaine share (€) <sup>(a)</sup>	114.76
Expiration date	03/30/2009
Options awarded	14,880
Adjustments related to the spin-off of S.D.A. <sup>(b)</sup>	42
Options outstanding as of January 1, 2009	1,406
Options exercised in 2009	1,406
Options outstanding as of December 31, 2009	_
Corresponding number of TOTAL shares, as of December 31, 2009, likely to be created pursuant to the exchange guarantee	_

(a) Exercise price as of May 24, 2006. To take into account the spin-off of S.D.A. (Société de Développement Arkema) by Elf Aquitaine, the exercise price for Elf Aquitaine share subscription options was multiplied the exercise price was multiplied by an adjustment ratio of 0.992769, effective as of May 24, 2006. Exercise prices prior to May 24, 2006, are shown in Note 25 to the Consolidated Financial Statements.

(b) Adjustments approved by the Board of Elf Aquitaine on March 10, 2006, pursuant to Articles 174-9, 174-12 and 174-13 of Decree No. 67-236 dated March 23, 1967, in effect at the time of this meeting and at the time of the Shareholders' Meeting of Elf Aquitaine on May 10, 2006, related to the spin-off of S.D.A. These adjustments have been made on May 22, 2006 with an effective date of May 24, 2006.

## Corporate Governance

For several years, TOTAL has been actively examining corporate governance matters. At its meeting on November 4, 2008, the Board of Directors confirmed its decision to use the Corporate Governance Code for Listed Companies published in 2008 by the principal French business confederations, the Association Française des Entreprises Privées (AFEP) and the Mouvement des Entreprises de France (MEDEF) ("AFEP-MEDEF Code") as its reference for corporate governance matters.

The Company's corporate governance practices differ from the recommendations contained in the AFEP-MEDEF Code on the following limited matters:

- The AFEP-MEDEF Code recommends that a director no longer be considered as independent upon the expiry of the term of office during which the length of his service on the board reaches twelve years. The Board has not followed this recommendation in regards to one of its members considering the long-term nature of its investments and operation as well as the experience and authority of which this director is in possession, which reinforce his independence and contribute to the Board's work.
- The Chairman of the Board of Directors chairs the Nominating & Governance Committee of the Board. The Board of Directors and this Committee consider that the participation of the Chairman on the Nominating & Governance Committee enables the Committee to benefit from his experience and his knowledge of the Company's activities, environment and executive teams, which is particularly useful to inform the Committee's deliberations concerning the appointment of executives and directors. The fact that the Chairman of the Board, who does not exercise executive duties, chairs the committee permits close collaboration between the Board and the Committee, the latter being responsible for the review of the Board's workings and corporate governance matters. This committee is comprised of a majority of independent directors and the Chairman and the Chief Executive Officer do not attend deliberations concerning their own situation.

Pursuant to the AFEP-MEDEF Code, on February 11, 2009, the Board of Directors noted that, effective from the same day, the employment contracts of its Chairman and its Chief Executive Officer had been terminated.

Since 2004, the Board of Directors has had a financial code of ethics that, in the overall context of the Group's Code of Conduct, sets forth specific rules for its

Chairman, Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer and the financial and accounting officers for its principal activities. The Board has made the Audit Committee responsible for implementing and ensuring compliance with this code.

In 2005, the Board approved the procedure for alerting the Audit Committee of complaints or concerns regarding accounting, internal accounting controls or auditing matters.

### Rules of procedure of the Board of Directors

At its meeting on February 13, 2007, the Board of Directors adopted rules of procedure to replace the Directors' Charter and to take into account the separation of the positions of Chairman of the Board and Chief Executive Officer implemented at the same meeting.

The Board's rules of procedure specify the obligations of each director and set forth the mission and working procedures of the Board of Directors. They also define the respective responsibilities and authority of the Chairman and of the Chief Executive Officer. It is reviewed on a regular basis to match the changes in rules and practices related to governance.

The principal matters covered by the rules of procedure are summarized below. An unabridged version of these rules and procedures is available on the Company's website.

Each director undertakes to maintain the independence of his analysis, judgment, decision-making and actions as well as not to be unduly influenced. When a director participates in and votes at Board meetings, he is required to represent the interest of the shareholders and the Company as a whole. Directors must actively participate in the affairs of the Board, specifically on the basis of information communicated to them by the Company.

Directors undertake to devote the amount of time required to consider the information they are given and otherwise prepare for meetings of the Board and of the committees on which they sit. Directors may request any additional information that they feel is necessary or useful from the Chairman or the Chief Executive Officer. A director, if he considers it necessary, may request training on the Company's specificities, businesses and activities. Directors participate in all Board meetings and all committees or Shareholders' Meetings, unless they have previously contacted the Chairman to inform him of scheduling conflicts.

Each director must inform the Board of conflicts of interest that may arise, including the nature and terms of any proposed transactions that could give rise to such situations. If he is opposed to a project brought before the Board, he is required to clearly express his opposition. He is required to own at least 1,000 company shares in registered form (with the exception of the director representing employee shareholders, for whom the requirements are more flexible) and comply strictly with provisions regarding the use of material non-public information. The requirement to hold a minimum of 1,000 company shares while in office is accepted by each director as a restriction on his ability to freely dispose of these shares.

In addition to stipulating that any shares and ADRs of TOTAL S.A. and its publicly traded subsidiaries held by directors are to be held in registered form, the rules of procedure prohibit buying on margin or short selling those same securities. They also prohibit trading shares of TOTAL S.A. on the dates of the Company's periodic earnings announcements, as well as the 15 calendar days preceding such dates.

The *Board of Directors' mission* is to determine the strategic direction of the Group and supervise the implementation of this vision.

With the exception of the powers and authority expressly reserved for shareholders and within the limits of the Company's legal purpose, the Board may address any issue related to the operation of the Company and take any decision concerning the matters falling within its purview.

Within this framework, the Board's duties and responsibilities include, but are not limited to, the following:

- appointing the Chairman and the Chief Executive Officer and supervising the handling of their responsibilities;
- defining the Company's strategic orientation and, more generally, that of the Group;
- approving investments or divestments under study by the Group that concern amounts greater than 3% of shareholders' equity, whether or not the project is part of the announced strategy;
- reviewing information on significant events related to the Company's affairs, in particular for investments or divestments that are greater than 1% of shareholders' equity;
- monitoring the quality of information supplied to shareholders and the financial markets through the financial statements that it approves and the annual reports, or when major transactions are conducted;
- convening and setting the agenda for Shareholders' Meetings;

- preparing, for each year, a list of the directors it deems to be independent under generally recognized corporate governance criteria, in particular those defined in the AFEP-MEDEF Code; and
- conducting audits and investigations as it may deem appropriate.

The Board, with the assistance of its specialized committees where appropriate, ensures that:

- authority within the Company has been properly delegated before it is exercised, and that the various entities of the Company respect the authority, duties and responsibilities they have been given;
- no individual is authorized to contract on behalf of the Company or to commit to pay, or to make payments, on behalf of the Company, without proper supervision and control;
- the internal control function operates properly and that the statutory auditors are able to conduct their audits under appropriate circumstances; and
- the committees it has created duly perform their responsibilities.

The Board of Directors is regularly informed, through the Audit Committee, of the Group's financial position, cash position and obligations.

**Board of Directors' activity:** The Board of Directors meets at least four times a year and as often as circumstances may require.

Directors are generally given written notice eight days prior to Board meetings. Documents to be considered for decisions to be made at Board meetings are, when possible, sent with the notice of meetings, or otherwise delivered to the directors. The minutes of the previous meeting are expressly approved at each Board meeting.

Directors may participate in meetings either by being present, by being represented by another director or via video conference (in compliance with the technical requirements set by applicable regulations).

The Board may establish specialized committees, whether permanent or *ad hoc*, as required by applicable legislation or as it may deem appropriate. The Board allocates directors' fees and may allocate additional directors' fees to directors who participate in specialized committees, within the total amount established by the shareholders. The Chairman and the Chief Executive Officer are not awarded directors' fees for their work on the Board and Committees.

The Board of Directors, based on the recommendation of its Chairman, appoints a Secretary. Every member of

the Board of Directors can refer to the Secretary and benefit from his assistance. The Secretary is responsible for the working procedures of the Board of Directors. The Board shall review such procedures periodically.

The Board conducts, at regular intervals not to exceed three years, an assessment of its practices. It also conducts an annual discussion of its methods.

**Responsibility and authority of the Chairman:** The Chairman represents the Board, and, except under exceptional circumstances, is the sole member authorized to act and speak on behalf of the Board. He is responsible for organizing and presiding over the Board's activities and monitors corporate bodies to ensure that they are functioning effectively and respecting corporate governance principles. He is responsible, with the Group's management, for maintaining relations between the Board and the Company's shareholders. He monitors the quality of the information disclosed by the Company. In close cooperation with the Group's management, he may represent the Group in high level discussions with government authorities and the Group's important partners, on both a national and international level. He is regularly informed by the Chief Executive Officer of events and situations that are important for the Group and may request that the Chief Executive Officer provide any useful information for the Board or its committees. He may also work with the statutory auditors to prepare matters before the Board or the Audit Committee.

Authority of the Chief Executive Officer: The Chief Executive Officer is responsible for the general management of the Company. He chairs the Group's Executive Committee and Management Committee. Subject to the Company's corporate governance rules (see above: "the Board of Directors' mission"), he has the full extent of authority to act on behalf of the Company in all instances, with the exception of actions that are, by law, reserved to the Board of Directors to Shareholders' meetings. He is responsible for periodic reporting of the Group's results and outlook to shareholders and the financial community. He reports on significant Group activities to the Board.

#### **Committees of the Board of Directors**

The Board of Directors has three specialized committees: the Audit Committee; the Compensation Committee; and the Nominating & Governance Committee.

#### **Audit Committee**

The Audit Committee's role is to assist the Board of Directors in ensuring effective internal control and oversight over financial reporting to shareholders and the financial markets.

The Audit Committee's duties include:

- recommending the appointment of statutory auditors and their compensation, ensuring their independence and monitoring their
- compensation, ensuring their independence and monitoring their work;
  establishing the rules for the use of statutory auditors for non-audit services and verifying their implementation;
- supervising the audit by the statutory auditors of the Company's financial statements and consolidated financial statements;
- examining the accounting policies used to prepare the financial statements, examining the parent company's annual financial statements and the consolidated annual, semi-annual, and quarterly financial statements prior to their examination by the Board, after regularly monitoring the financial situation, cash position and obligations of the Company;
- supervising the implementation of internal control and risk management procedures and their effective application, with the assistance of the internal audit department;
- supervising procedures for preparing financial information;
- monitoring the implementation and activities of the disclosure committee, including reviewing the conclusions of this committee;
- reviewing the annual work program of internal and external auditors;
- receiving information periodically on completed audits and examining annual internal audit reports and other reports (statutory auditors, annual reports, etc.);
- reviewing the choice of appropriate accounting principles and methods;
- reviewing the Group's policy for the use of derivative instruments;
- reviewing, if requested by the Board, major transactions contemplated by the Group;
- reviewing significant litigation annually;
- implementing, and monitoring compliance with, the financial code of ethics;
- proposing to the Board, for implementation, a procedure for complaints or concerns of employees, shareholders and others, related to accounting, internal accounting controls or auditing matters, and monitoring the implementation of this procedure; and
- reviewing the procedure for booking the Group's proved reserves.

#### Audit Committee membership and practices

The Committee is made up of at least three directors designated by the Board of Directors. Members must be independent directors.

In selecting the members of the Committee, the Board pays particular attention to their independence and their financial and accounting qualifications. Members of the Committee may not be executive officers of the Company or one of its subsidiaries, nor own more than 10% of the Company's shares, whether directly or indirectly, individually or acting together with another party.

Members of the Audit Committee may not receive from the Company and its subsidiaries, whether directly or indirectly, any compensation other than:

- directors' fees paid for their services as directors or as members of the Audit Committee or, if applicable, another committee of the Board; and
- compensation and pension benefits related to prior employment by the Company, or another Group company, which are not dependent upon future work or activities.

The Committee appoints its own Chairman. The Chairman appoints the Committee secretary who may be the Chief Financial Officer. The Committee meets at least four times a year to examine the consolidated annual and quarterly financial statements.

The Audit Committee may meet with the Chairman of the Board, the Chief Executive Officer, and, if applicable, any acting Managing Director of the Company and perform inspections and consult with managers of operating or non-operating departments, as may be useful in performing its duties.

The Committee consults with the statutory auditors and examines their work, and may do so without management being present. If it deems it necessary to accomplish its duties, the Committee may request from the Board the resources to engage external consultants.

The Committee submits written reports to the Board of Directors regarding its work.

In 2009, the Committee's members were Mrs. Patricia Barbizet and Messrs. Bertrand Jacquillat and Thierry de Rudder as well as, until May 15, 2009, Mr. Antoine Jeancourt-Galignani. All of the members of the Committee are independent directors and have recognized experience in the financial and accounting fields, as illustrated in their summary biographies above.

The Committee was chaired by Mr. Antoine Jeancourt-Galignani, who was determined to be the Audit Committee financial expert by the Board at its meeting on September 5, 2006. Mrs. Patricia Barbizet was appointed by the Committee at its meeting on July 28, 2009, to succeed Mr. Antoine Jeancourt-Galignani for the Committee chairmanship. The Board of Directors, at its meeting on July 30, 2009, decided to appoint

Mr. Bertrand Jacquillat to serve as the Audit Committee financial expert based on a recommendation by the Audit Committee.

#### **Compensation Committee**

In February 2007, the Compensation Committee was separated from the then existing Nominating & Compensation Committee. The principal objectives of the Compensation Committee are to:

- examine the executive compensation policies implemented by the Group and the compensation of members of the Executive Committee; and
- evaluate the performance and recommend the compensation of the Chairman of the Board and of the Chief Executive Officer.

Its duties include the following:

- examining the criteria and objectives proposed by management for executive compensation and advising on this subject;
- presenting recommendations and proposals to the Board concerning:
  - compensation, pension and insurance plans, in-kind benefits and other compensation, including severance benefits, for the Chairman and the Chief Executive Officer of the Company, and
  - (ii) awards of stock options and restricted share grants to the Chairman and the Chief Executive Officer; and
- examining stock option plans, restricted share grants, equity-based plans and pension and insurance plans.

### **Compensation Committee membership and practices**

The Committee is made up of at least three directors designated by the Board of Directors.

A majority of the members must be independent directors. Members of the Compensation Committee may not receive from the Company and its subsidiaries, either directly or indirectly, any compensation other than:

- directors' fees paid for their services as directors or as members of the committee, or, if applicable, as members of another committee of the Company's Board; and
- compensation and pension benefits related to prior employment by the Company which are not dependant upon future work or activities.

The Committee appoints its chairman and its secretary. The secretary is a Company senior executive.

The Committee meets at least twice a year.

The Committee invites the Chairman and the Chief Executive Officer of the Company to present their recommendations.

Neither the Chairman nor the Chief Executive Officer may be present during deliberations regarding his own situation.

While maintaining the appropriate level of confidentiality for its discussions, the Committee may request that the Chief Executive Officer provide it with the assistance of any senior executive of the Company whose skills and qualifications could facilitate the handling of an agenda item.

If it deems it necessary to accomplish its duties, the Committee may request from the Board the resources to engage external consultants.

The Committee reports on its activities to the Board of Directors.

In 2009, the Committee's members were Messrs. Bertrand Collomb, Michel Pébereau and Serge Tchuruk, each an independent director.

Mr. Michel Pébereau chairs the Committee.

#### **Nominating & Governance Committee**

In February 2007, the Nominating & Governance Committee was separated from the then existing Nominating & Compensation Committee. The principal objectives of the Nominating & Governance Committee are to:

- recommend to the Board of Directors the persons that are qualified to be appointed as directors, Chairman or Chief Executive Officer;
- prepare the Company's corporate governance rules and supervise their implementation; and
- examine any questions referred to it by the Board or the Chairman of the Board, in particular questions related to ethics.

Its duties include the following:

- presenting recommendations to the Board for its membership and the membership of its committees;
- proposing annually to the Board the list of directors who may be considered as "independent directors" of the Company;

- assisting the Board in the selection and evaluation of the Chairman of the Board and the Chief Executive Officer and examining the preparation of their possible successors, in cooperation with the Compensation Committee:
- preparing a list of individuals who might be considered for election as Directors and those who might be named to serve on Board committees;
- proposing methods for the Board to evaluate its performance;
- proposing the procedure for allocating directors' fees;
  developing and recommending to the Board the corporate governance
- principles applicable to the Company; and
  examining ethical issues at the request of the Board or its Chairman.

# Nominating & Governance Committee membership and practices

The Committee is made up of at least three directors designated by the Board of Directors.

A majority of the members must be independent directors.

Members of the Nominating & Governance Committee, other than the Chairman of the Board and the Chief Executive Officer, may not receive from the Company and its subsidiaries any compensation other than:

- directors' fees paid for their services as directors or as members of the committee, or, if applicable, as members of another committee of the Company's Board; and
- compensation and pension benefits related to prior employment by the Company which are not dependant upon future work or activities.

The Committee appoints its chairman and its secretary. The secretary is a Company senior executive.

The Committee meets at least twice a year.

The Committee may invite the Chairman of the Board or the Chief Executive Officer of the Company, as applicable, to present recommendations.

Neither the Chairman nor the Chief Executive Officer may be present during deliberations regarding his own situation.

While maintaining the appropriate level of confidentiality for its discussions, the Committee may request that the Chief Executive Officer provide it with the assistance of any senior executive of the Company whose skills and qualifications could facilitate the handling of an agenda item.

If it deems it necessary to accomplish its duties, the Committee may request from the Board the resources to engage external consultants.

The Committee reports on its activities to the Board of Directors.

In 2009, the Committee's members were Messrs. Bertrand Collomb, Thierry Desmarest, Michel Pébereau and Serge Tchuruk. Each, with the exception of the Chairman of the Board, is an independent director.

Mr. Thierry Desmarest chairs the Committee.

### **Board of Directors practices**

At its meeting on February 10, 2010, the Board of Directors discussed the results of its self-evaluation carried out with the assistance of a consulting agency, which demonstrated that the Board's working procedures and the quality of the information provided met the Directors's expectations.

Pursuant to the recommendation of the Nominating & Governance Committee, at its meeting on February 10, 2010, the Board approved the suggestions for improvement that were proposed, which were mainly related to the organization of a day for strategic thinking.

## Employees and Share Ownership

### **Employees**

The tables below set forth the number of employees, by division and geographic location, of the Group (fully-consolidated subsidiaries) as of the end of the periods indicated:

	Upstream	Downstream	Chemicals	Corporate	Total
2009	16,628	33,760	44,667	1,332	96,387
2008	16,005	34,040	45,545	1,369	96,959
2007	15,182	34,185	45,797	1,278	96,442
		France	Rest of Europe	Rest of world	Total
2009		36,407	26,299	33,681	96,387
2008		37.101	27.495	32.363	96,959

TOTAL believes that the relationship between its management and labor unions is, in general, satisfactory.

## Arrangements for involving employees in the Company's share capital

Pursuant to agreements signed on March 15, 2002, as amended, the Group created a "Total Group Savings Plan" (PEGT), a "Partnership for Voluntary Wage Savings Plan" (PPESV, later becoming PERCO) and a "Complementary Company Savings Plan" (PEC) for employees of the Group's French companies. These plans allow investments in a number of mutual funds including one invested in Company shares ("TOTAL ACTIONNARIAT FRANCE"). A "Shareholder Group Savings Plan" (PEG-A) has also been in place since November 19, 1999, to facilitate capital increases reserved for employees of the Group's French and foreign subsidiaries covered by these plans.

### **Company savings plans**

The various Company savings plans (PEGT, PEC) give the employees of the Group's French companies

belonging to these savings plans access to several collective investment funds (*Fonds communs de placement*), including a Fund invested in shares of the Company ("TOTAL ACTIONNARIAT FRANCE").

The capital increases reserved for employees are conducted under PEG-A through the "TOTAL ACTIONNARIAT FRANCE" fund for employees of the Group's French subsidiaries and through the "TOTAL ACTIONNARIAT INTERNATIONAL CAPITALISATION" fund for the employees of foreign subsidiaries. In addition, U.S. employees participate in these operations through ADRs and Italian employees may participate by directly subscribing to new shares at the Group Caisse Autonome in Belgium.

### Incentive agreements

Performance indicators used under the June 26, 2009, profit-sharing agreements for employees of ten Group companies, when permitted by local law, link amounts available for profit sharing to the performance (ROE) of the Group as a whole.

### **Employee shareholding**

The total number of TOTAL shares held by employees as of December 31, 2009, is as follows:

TOTAL ACTIONNARIAT FRANCE	71,010,179
TOTAL ACTIONNARIAT INTERNATIONAL	,,
	40.007.440
CAPITALISATION	16,267,110
ELF PRIVATISATION No.1	1,208,239
Shares held by U.S. employees	735,391
Group Caisse Autonome (Belgium)	310,169
TOTAL shares from the exercise of the Company's stock	
options and held as registered shares within a Company	
Savings Plan (PEE) <sup>(a)</sup>	3,207,451
Total shares held by employee shareholder funds	92,738,539

(a) Company savings plans.

As of December 31, 2009, Group employees held, on the basis of the definition of employee shareholding contained in Article L. 225-102 of the French Commercial Code, 92,738,539 TOTAL shares, representing 3.95% of the Company's share capital and 7.48% of the voting rights that could be exercised at a Shareholders' Meeting on that date.

### Capital increase reserved for employees

At the Shareholders' Meeting held on May 11, 2007, the shareholders delegated to the Board of Directors the authority to increase the share capital of the Company in one or more transactions and within a maximum period of twenty-six months from the date of the meeting, by an amount not exceeding 1.5% of the share capital outstanding on the date of the meeting of the Board of Directors at which a decision to proceed with an issuance is made, reserving subscriptions for such issuance to the Group employees participating in a company savings plan. It was specified that the amount of any such capital increase reserved for Group employees would be counted against the aggregate maximum nominal amount of share capital increases authorized by the Shareholders' Meeting held on May 11, 2007 for issuing new ordinary shares or other securities granting immediate or future access to the Company's share capital with pre-emptive subscription rights (par value & billion). This delegation of authority has cancelled and replaced, for the unused part, the one granted by the Shareholders' Meeting on the source and replaced.

Pursuant to this delegation of authority, the Board of Directors decided on November 6, 2007, to proceed with a capital increase of a maximum of 12 million shares with a subscription price of €44.40 per share reserved for TOTAL employees, bearing dividends as of January 1, 2007. In accordance with Article 14 of the French Financial Markets Authority (*Autorité des marchés financiers*, AMF) instruction No. 2005-11 as of December 13, 2005, regarding the information to be disclosed in case of a capital increase operation, TOTAL S.A. released on January 16, 2008, on its website and filed with the AMF a press release which specified the terms of the offering. The offering was opened to the employees of TOTAL S.A. and to the employees of its French and foreign subsidiaries in which TOTAL S.A. holds directly or indirectly 50% at least of the capital, who are participants in the TOTAL Group Savings Plan (PEG-A) and for which local regulatory approval was obtained. The offering was also open to former employees of TOTAL S.A. and its French subsidiaries who have retired and still have holdings in TOTAL employee savings plans. Subscription was open from March 10, 2008, through March 28, 2008, and 4,870,386 new TOTAL shares were issued in 2008.

The management of each of the three employee collective investment funds (*Fonds Commun de Placement d'Entreprise*) mentioned above is controlled by a dedicated supervisory board, two thirds of its members representing holders of fund units and one third representing the Company. This board is responsible for: reviewing the collective investment funds' management report and annual financial statements as well as the financial, administrative and accounting management; exercising voting rights attached to portfolio securities; deciding contribution of securities in case of a public tender offer; deciding mergers, spin-offs or liquidation; and granting its approval prior to changes in the rules and procedures of the collective investment fund in the conditions provided for by the rules and procedures.

These rules and procedures also stipulate a simple majority vote for decisions, except for decisions requiring a qualified majority vote of two thirds plus one related to a change in a fund's rules and procedures, its conversion or its disposal, and decisions related to contribution of securities of the Elf Privatisation collective investment fund in case of a public tender offer.

For employees holding shares outside of the employee collective investment funds mentioned in the chart above, voting rights are exercised individually.

### Shares held by Directors and Executive Officers

As of December 31, 2009, based upon information from the members of the Board and the share registrar, the members of the Board and the Group Executive Officers (Management Committee and Treasurer) held a total of less than 0.5% of the share capital:

- Members of the Board of Directors (including the Chairman and the Chief Executive Officer): 558,086 shares;
- Chairman of the Board of Directors: 380,576 shares;
   Chief Executive Officer: 85,220 shares and 42,744 shares;
- Chief Executive Officer: 85,230 shares and 43,714 shares of the TOTAL ACTIONNARIAT FRANCE collective investment plan;

 Management Committee (including the Chief Executive Officer) and Treasurer: 542,935 shares.

By decision of the Board of Directors:

- The Chairman and Chief Executive Officer are required to hold a number of shares of the Company equal in value to two years of the fixed portion of their annual compensation.
- Members of the Executive Committee are required to hold a number of shares of the Company equal in

### Summary of transactions in the Company's securities

value to two years of the fixed portion of their annual compensation. These shares have to be acquired within three years from the appointment to the Executive Committee.

The number of TOTAL shares to be considered includes:

- directly held shares, whether or not they are subject to transfer restrictions; and
- shares in collective investment funds (FCPE) invested in TOTAL shares.

The following table presents transactions, of which the Company has been informed, in the Company's shares or related financial instruments carried out in 2009 by the individuals concerned under paragraphs a) through c) of Article L. 621-18-2 of the French Monetary and Financial Code.

### Year 2009

		Acquisition	Subscription	Transfer	Exchange	Exercise of stock options
Thierry Desmarest <sup>(a)</sup>	TOTAL shares			50,000		45,000
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>					-
Christophe de Margerie <sup>(a)</sup>	TOTAL shares					
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>	4,215.92				
Michel Bénézit <sup>(a)</sup>	TOTAL shares		30,000	17,000		
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>	292.48	189.85	5,310.47		
François Cornélis <sup>(a)</sup>	TOTAL shares			90,000		90,000
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>	1,086.47				
Yves-Louis Darricarrère <sup>(a)</sup>	TOTAL shares			4,200		
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>	4.04				
Jean-Jacques Guilbaud <sup>(a)</sup>	TOTAL shares					
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>	322.97	287.90			
Bertrand Jacquillat <sup>(a)</sup>	TOTAL shares	700				
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>					
Patrick de La Chevardière <sup>(a)</sup>	TOTAL shares					
	Shares in collective investment plans (FCPE), and other related financial instruments <sup>(b)</sup>	150.86	190.88			

(a) Including the related individuals in the meaning of the provisions of the Article R. 621-43-1 of the French Monetary and Financial Code. (b) Collective investment funds (FCPE) primarily investing in Company shares.

### ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

#### Major shareholders

### Holdings of principal shareholders

The principal shareholders of TOTAL as of December 31, 2009, 2008 and 2007 are set forth in the table below:

		2009		2008		20	07
As of December 31,	% of share capital	% of voting rights	% of theoretical voting rights <sup>(a)</sup>	% of share capital	% of voting rights	% of share capital	% of voting rights
Groupe Bruxelles Lambert <sup>(b)(c)</sup>	4.0	4.0	3.7	4.0	4.0	3.9	4.0
Compagnie Nationale à Portefeuille <sup>(b)(c)</sup>	1.4	1.4	1.3	1.4	1.4	1.4	1.4
Areva <sup>(b)</sup>	0.0	0.0	0.0	0.3	0.6	0.3	0.6
BNP Paribas <sup>(b)</sup>	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Group employees <sup>(b)(d)</sup>	3.9	7.5	6.8	3.8	7.4	3.6	7.0
Other registered shareholders (non-Group)	1.4	2.4	2.2	1.2	2.1	1.2	2.1
Treasury shares	4.9	_	8.5	6.0	_	6.3	_
of which TOTAL S.A.	0.6	—	0.6	1.8	_	2.1	_
of which Total Nucléaire	0.1		0.2	0.1	_	0.1	_
of which subsidiaries of Elf Aquitaine	4.2		7.7	4.1	—	4.1	_
Other bearer shareholders	84.2	84.5	77.3	83.1	84.3	83.1	84.6
of which holders of ADS <sup>(e)</sup>	7.5	7.6	6.9	8.2	8.3	8.5	8.6

(a) Pursuant to article 223-11 of the AMF General Regulation, the number of theoretical voting rights is calculated on the basis of all outstanding shares to which voting rights are attached, including treasury shares that are deprived of voting rights.

(b) Shareholders with an executive officer (or a representative of employees) serving as a director of TOTAL S.A.

(c) Groupe Bruxelles Lambert is a company controlled jointly by the Desmarais family and Frère-Bourgeois S.A., and for the latter mainly through its direct and indirect interest in Compagnie Nationale à Portefeuille.

(d) Based on the definition of employee shareholding pursuant to Article L. 225-102 of the French Commercial Code.

(e) American Depositary Shares listed on the New York Stock Exchange.

As of December 31, 2009, the holdings of the principal shareholders were calculated on the basis of 2,348,422,884 shares, representing 2,339,384,550 voting rights exercisable at Shareholders' Meetings or 2,555,123,008 theoretical voting rights<sup>(1)</sup> including:

- 200,662,536 voting rights attached to the 100,331,268 TOTAL shares held by TOTAL S.A. subsidiaries that cannot be exercised at Shareholders' Meetings; and
- 15,075,922 voting rights attached to the 15,075,922 TOTAL shares held by TOTAL S.A. deprived of voting rights.

For prior years, the principal shareholders' interests were established on the basis of 2,371,808,074 shares, to which were attached 2,339,251,395 voting rights that could be exercised at Shareholders' Meetings as of December 31, 2008, and of 2,395,532,097 shares to which were attached 2,353,106,888 voting rights that

could be exercised at Shareholders' Meetings as of December 31, 2007.

As of February 28, 2010, there were 175,744,188 ADSs outstanding in the United States, representing approximately 7.5% of the total outstanding shares.

The Company is not directly or indirectly owned or controlled by another corporation, by any foreign government or by any other natural or legal person. The Company does not know of any arrangements that may, at a subsequent date, result in a change of control of TOTAL.

#### Identification of the holders of bearer shares

In accordance with Article 9 of its bylaws, the Company is authorized, to the extent permitted under applicable

<sup>1.</sup> Pursuant to Article 223-11 of the AMF General Regulation, the number of voting rights is calculated on the basis of all outstanding shares, including those shares held by the Group that are deprived of voting rights.

law, to identify the holders of securities that grant immediate or future voting rights at the Company's Shareholders' Meetings.

### Legal thresholds

In addition to the legal obligation to inform the Company and the French Financial Markets Authority (*Autorité des marchés financiers*) within four business days when thresholds representing 5%, 10%, 15%, 20%, 25%, 33<sup>1</sup>/3%, 50%, 66<sup>2</sup>/3%, 90% or 95% of the share capital or voting rights<sup>(1)</sup> are crossed (Article L. 233-7 of the French Commercial Code), any individual or entity who directly or indirectly acquires a percentage of the share capital, voting rights or rights giving future access to the share capital of the Company which is equal to or greater than 1%, or a multiple of this percentage, is required to notify the Company within fifteen days by registered mail with return receipt requested, and declare the number of securities held.

In case the shares above these thresholds are not declared, any shares held in excess of the threshold and undeclared may be deprived of voting rights at future Shareholders' Meetings if, at that meeting, the failure to make a declaration is acknowledged and if one or more shareholders holding collectively at least 3% of the Company's share capital or voting rights so request at that meeting.

All individuals and entities are also required to notify the Company in due form and within the time limits stated above when their direct or indirect holdings fall below each of the aforementioned thresholds.

### Holdings above the legal thresholds

In accordance with Article L. 233-13 of the French Commercial Code, only one shareholder, Compagnie Nationale à Portefeuille (CNP) and Groupe Bruxelles Lambert (GBL), acting together, holds 5% or more of TOTAL's share capital at year-end 2009<sup>(1)</sup>.

In addition, two known shareholders held 5% or more of the voting rights exercisable at TOTAL Shareholders' Meetings at year-end 2009:

CNP jointly with GBL.

In the AMF notice No. 209C1156 dated September 2, 2009, CNP and GBL acting together declared that they held more than the threshold of 5% of the voting rights of TOTAL as of August 25, 2009, and held 127,149,464

TOTAL shares representing 127,745,604 voting rights, i.e. 5.42% of the share capital and 5.0009% of the theoretical voting rights<sup>(2)</sup> (on the basis of a share capital of a share capital of 2,347,601,812 shares representing 2,554,431,468 voting rights). To the Company's knowledge, CNP, jointly with GBL, held, as of December 31, 2009, 5.41% of the share capital representing 5.46% of the voting rights exercisable at Shareholders' Meetings and 5% of the theoretical voting rights<sup>(2)</sup>.

 The collective investment fund (Fonds commun de placement) "TOTAL ACTIONNARIAT FRANCE".

To the Company's knowledge, the collective investment fund (*Fonds commun de placement*) "TOTAL ACTIONNARIAT FRANCE" held, as of December 31, 2009, 302% of the share capital representing 5.76% of the voting rights exercisable at a Shareholders' Meeting and 5.28% of the theoretical voting rights<sup>(2)</sup>.

#### Shareholders agreements

TOTAL is not aware of any agreements among its shareholders.

#### **Treasury shares**

As of December 31, 2009, the Company held 115,407,190 TOTAL shares either directly or through its indirect subsidiaries, which represented 4.91% of the share capital, as of this date. By law, these shares are also deprived of voting rights.

### TOTAL shares held directly by the Company

The Company held 15,075,922 treasury shares as of December 31, 2009, representing 0.64% of the share capital as of that date.

### TOTAL shares held directly by Group companies

As of December 31, 2009, Total Nucléaire, a Group company wholly-owned indirectly by TOTAL held 2,023,672 TOTAL shares. As of December 31, 2009, Financière Valorgest, Sogapar and Fingestval, indirect subsidiaries of Elf Aquitaine, held respectively 22,203,704, 4,104,000 and 71,999,892 TOTAL shares, representing a total of 98,307,596 TOTAL shares. As of December 31, 2009, the Company held through its indirect subsidiaries 4.27% of the share capital.

<sup>1.</sup> Source: AMF notice No. 209C1156 dated September 2, 2009.

Pursuant to Article 223-11 of the AMF General Regulation, the number of theoretical voting rights is calculated on the basis of all outstanding shares, including those shares held by the Group that are deprived of voting rights.

### **Related Party Transactions**

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 24 to the Consolidated Financial Statements.

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

## Consolidated Statements and other supplemental information

See pages F-1 through F-90 and S-1 through S-16 for TOTAL's Consolidated Financial Statements and other supplemental information.

#### Legal or arbitration proceedings

While it is not feasible to predict the outcome of the pending claims, proceedings, and investigations described below with certainty, management is of the opinion that their ultimate disposition should not have a material adverse effect on the Company's financial position, cash flows, or results of operations.

#### **Grande Paroisse**

An explosion occurred at the Grande Paroisse industrial site in the city of Toulouse in France on September 21, 2001. Grande Paroisse, a former subsidiary of Atofina which became a subsidiary of Elf Aquitaine Fertilisants on December 31, 2004, as part of the reorganization of the Chemicals segment, was principally engaged in the production and sale of agricultural fertilizers. The explosion, which involved a stockpile of ammonium nitrate pellets, destroyed a portion of the site and caused the death of thirty-one people, including twentyone workers at the site, and injured many others. The explosion also caused significant damage to certain property in part of the city of Toulouse.

This plant has been closed and individual assistance packages have been provided for employees. The site has been rehabilitated.

On December 14, 2006, Grande Paroisse signed, under the supervision of the city of Toulouse, the deed whereby it donated the former site of the AZF plant to the greater agglomeration of Toulouse (CAGT) and the Caisse des dépôts et consignations and its subsidiary ICADE. Under this deed, TOTAL S.A. guaranteed the site restoration obligations of Grande Paroisse and granted a €10 million endowment to the InNaBioSanté research foundation as part of the setting up of a cancer research center at the site by the city of Toulouse.

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, 2007, and ending on March 31, 2010.

Regarding the cause of the explosion, the hypothesis that the explosion was caused by Grande Paroisse through the accidental mixing of hundreds of kilos of a chlorine compound at a storage site for ammonium nitrate was discredited over the course of the investigation. As a result, proceedings against ten of the eleven Grande Paroisse employees charged during the criminal investigation conducted by the Toulouse Regional Court (Tribunal de grande instance) were dismissed and this dismissal was upheld by the Court of Appeal of Toulouse. Nevertheless, the final experts' report filed on May 11, 2006 continued to focus on the hypothesis of a chemical accident, although this hypothesis was not confirmed during the attempt to reconstruct the accident at the site. After having articulated several hypotheses, the experts no longer maintain that the accident was caused by pouring a large quantity of a chlorine compound over ammonium nitrate. Instead, the experts have retained a scenario where a container of chlorine compound sweepings was poured between a layer of wet ammonium nitrate covering the floor and a quantity of dry agricultural nitrate at a location not far from the principal storage site. This is claimed to have caused an explosion which then spread into the main storage site. Grande Paroisse was investigated based on this new hypothesis in 2006. Grande Paroisse is contesting this explanation, which it believes to be based on elements that are not factually accurate.

The Court of Appeal of Toulouse denied all the requests for additional investigations that were submitted by Grande Paroisse, the former site manager and various plaintiffs after the end of the criminal investigation procedure. On July 9, 2007, the investigating judge brought charges against Grande Paroisse and the former plant manager before the criminal chamber of the Court of Appeal of Toulouse. In late 2008, TOTAL S.A. and Mr. Thierry Desmarest were summoned to appear in court pursuant to a request by a victims association. The trial for this case began on February 23, 2009, and lasted approximately four months.

On November 19, 2009, the Toulouse Criminal Court acquitted both the former Plant Manager and Grande Paroisse due to the lack of reliable evidence for the explosion. The Court also ruled that the summonses against TOTAL S.A. and Thierry Desmarest, Chairman and CEO at the time of the disaster, were inadmissible.

Due to the presumption of civil liability that applied to Grande Paroisse, the Court declared Grande Paroisse civilly liable for the damages caused by the explosion to the victims in its capacity as custodian and operator of the plant.

The Prosecutor's office, together with certain third parties, has appealed the Toulouse Criminal Court verdict. In order to preserve its rights, Grande Paroisse lodged a cross-appeal with respect to civil charges.

The appeal proceedings are expected to be ruled by the Court of Appeal of Toulouse during the first half of 2011.

A compensation mechanism for victims was set up immediately following the explosion and €2.29 billion in settlement were paid for the compensation of all claims and related expenses amounts. As of December 31, 2009, a €40 million reserve is recorded in the Group's Consolidated Balance Sheet.

### Antitrust investigations

 Following investigations into certain commercial practices in the chemicals industry in the United States, some subsidiaries of the Arkema <sup>(1)</sup> group are involved in several criminal investigations, today closed, and civil liability lawsuits for violations of antitrust laws in the United States. TOTAL S.A. has been named in certain of these suits as the parent company.

In Europe, the European Commission commenced investigations in 2000, 2003 and 2004 into alleged anti-competitive practices involving certain products sold by Arkema. In January 2005, under one of these investigations, the European Commission fined Arkema €13.5 million and jointly fined Arkema and Elf Aquitaine €45 million. On September 30, 2009, the Court of First Instance of the European Union denied the appeal from Arkema and Elf Aquitaine. An appeal has been filed to the Court of Justice of the European Communities in the allotted time.

The Commission notified Arkema, TOTAL S.A. and Elf Aquitaine of complaints concerning two other product lines in January and August 2005, respectively. Arkema has cooperated with the authorities in these procedures and investigations. In May 2006, the European Commission fined Arkema €78.7 million and €219.1 million as a result of, respectively, each of these two proceedings. Elf Aquitaine was held jointly and severally liable for, respectively, €65.1 million and €181.35 million of these fines while TOTAL S.A. was held jointly and severally liable, respectively, for €42 million and €140.4 million. TOTAL S.A., Arkema and Elf Aquitaine have appealed these decisions to the Court of First Instance of the European Union.

Arkema and Elf Aquitaine received a statement of objections from the European Commission in August 2007 concerning alleged anti-competitive practices related to another line of chemical products. As a result, Arkema and Elf Aquitaine have been jointly and severally fined in an amount of  $\notin$  22.7 million and individually in an amount of  $\notin$  62.43 million for Arkema and  $\notin$ 5.89 million for Elf Aquitaine. The companies concerned have appealed this decision to the relevant European court.

Arkema and Elf Aquitaine received a statement of objections from the European Commission in March 2009 concerning alleged anti-competitive practices related to another line of chemical products. The decision was rendered by the European Commission in November 2009. Arkema and Elf Aquitaine were jointly and severally fined in an amount of €11 million and individually in an amount of €9.92 million for Arkema and €7.71 million for Elf Aquitaine. The companies concerned will appeal this decision to the relevant European court.

No facts have been alleged that would implicate TOTAL S.A. or Elf Aquitaine in the practices questioned in these proceedings, and the fines received are based solely on their status as parent companies.

Arkema began implementing compliance procedures in 2001 that are designed to prevent its employees from violating antitrust provisions. However, it is not possible to exclude the possibility that the relevant authorities could commence additional proceedings involving Arkema, as well as TOTAL S.A. and Elf Aquitaine.

As part of the agreement relating to the spin-off of Arkema, TOTAL S.A. or certain other Group companies agreed to grant Arkema guarantees for certain risks related to antitrust proceedings arising from events prior to the spin-off.

These guarantees cover, for a period of ten years that began in 2006, 90% of amounts paid by Arkema related to (i) fines imposed by European authorities or European member-states for competition law violations, (ii) fines imposed by U.S. courts or antitrust authorities for federal antitrust violations or violations of the competition laws of U.S. states, (iii) damages awarded in civil proceedings related to the government proceedings mentioned above, and (iv) certain costs related to these proceedings.

The guarantee covering the risks related to anti-competition violations in Europe applies to amounts above a €176.5 million threshold.

<sup>1.</sup> Arkema is used in this section to designate those companies of the Arkema group whose ultimate parent company is Arkema S.A., which became an independent company after being spun off from TOTAL S.A. in May 2006.

If one or more individuals or legal entities, acting alone or together, directly or indirectly holds more than one-third of the voting rights of Arkema, or if Arkema transfers more than 50% of its assets (as calculated under the enterprise valuation method, as of the date of the transfer) to a third party or parties acting together, irrespective of the type or number of transfers, these guarantees will become void.

On the other hand, the agreements provide that Arkema will indemnify TOTAL S.A. or any Group company for 10% of any amount that TOTAL S.A. or any Group company are required to pay under any of the proceedings covered by these guarantees.

- The Group has recorded provisions amounting to €43 million in its consolidated financial statements as of December 31, 2009 to cover the risks mentioned above.
- Moreover, as a result of investigations started by the European Commission in October 2002 concerning certain Refining & Marketing subsidiaries of the Group, Total Nederland N.V. and TOTAL S.A. received a statement of objections in October 2004. These proceedings resulted, in September 2006, in Total Nederland N.V. being fined €20.25 million and in TOTAL S.A. as its parent company being held jointly responsible for €13.5 million of this amount, although no facts implicating TOTAL S.A. in the practices under investigation were alleged. TOTAL S.A. and Total Nederland N.V. have appealed this decision to the Court of First Instance of the European Union.

In addition, in May 2007, Total France (new corporate name: Total Raffinage & Marketing) and TOTAL S.A. received a statement of objections regarding alleged antitrust practices concerning another product line of the Refining & Marketing division. These proceedings resulted, in October 2008, in Total France being fined €128.2 million and in TOTAL S.A., as its parent company, being held jointly responsible although no facts implicating TOTAL S.A. in the practices under investigation were alleged. TOTAL S.A. and Total Raffinage & Marketing have appealed this decision to the Court of First Instance of the European Union.

Furthermore, in July 2009, the French antitrust Authority sent to TotalGaz and Total Raffinage Marketing a statement of objections regarding alleged antitrust practices concerning another product line of the Refining & Marketing division.

Given the discretionary powers granted to the European Commission for determining fines relating to antitrust regulations, it is not currently possible to determine with certainty the outcome of these investigations and proceedings. TOTAL S.A. and Elf

Aquitaine are contesting their liability and the method of determining these fines. Although it is not possible to predict the ultimate outcome of these proceedings, the Group believes that they will not have a material adverse effect on its financial situation or consolidated results.

#### Sinking of the Erika

Following the sinking in December 1999 of the Erika, a tanker that was transporting products belonging to one of the Group companies, the Tribunal de grande instance of Paris convicted TOTAL S.A. of marine pollution pursuant to a judgment issued on January 16, 2008, finding that TOTAL S.A. was negligent in its vetting procedure for vessel selection. TOTAL S.A. was fined €375,000. The court also ordered compensation to be paid to the victims of pollution from the Erika up to an aggregate amount of €192 million, declaring TOTAL S.A. jointly and severally liable for such payments together with the Erika's manager.

TOTAL believes that the finding of negligence and the related conviction for marine pollution are without substance as a matter of fact and as a matter of law. TOTAL also considers that this verdict is contrary to the intended aim of enhancing maritime transport safety.

TOTAL has appealed the verdict of January 16, 2008. In the meantime, it has nevertheless proposed to pay third parties who so request definitive compensation as determined by the court. As of today, forty-one third parties have been compensated for an aggregate amount of €171.5 million.

The appeal proceedings were heard by the Court of Appeal of Paris in late 2009.

By decision dated March 30, 2010, the Court of Appeal upheld the lower court judgment pursuant to which TOTAL S.A. was convicted of marine pollution and fined the Company €375,000. TOTAL S.A. is considering the possibility of filing an appeal in the French Supreme Court (*Cour de cassation*) in this respect.

On the other hand, the Court of Appeal ruled that TOTAL S.A. bears no civil liability according to the applicable international conventions.

TOTAL S.A. considers, according to the information currently available to it, that this case should have no significant impact on the Group's financial situation or consolidated results.

#### Buncefield

On December 11, 2005, several explosions, followed by a major fire, occurred at an oil storage depot at

Buncefield, north of London. This depot is operated by Hertfordshire Oil Storage Limited (HOSL), a company in which TOTAL's UK subsidiary holds 60% and another oil group holds 40%.

The explosion caused minor injuries to a number of people and caused property damage to the depot and the buildings and homes located nearby. The official Independent Investigation Board has indicated that the explosion was caused by the overflow of a tank at the depot. The Board's final report was released on December 11, 2008. The civil procedure for claims, which have not yet been settled, took place between October and December 2008. The Court's decision of March 20, 2009, declared TOTAL's UK subsidiary liable for the accident and solely liable for indemnifying the victims. The subsidiary appealed the decision. The appeal hearings were held in January 2010. The Court of Appeal, by a decision handed down on March 4, 2010, confirmed the prior judgment. TOTAL's UK subsidiary is looking into the possibility to file an appeal before the Supreme Court with respect to both the extent and sharing of the liabilities incurred.

The provision for the civil liability that appears in the Group's consolidated financial statements as of December 31, 2009, stands at €295 million after taking into account payments previously made.

The Group carries insurance for damage to its interests in these facilities, business interruption and civil liability claims from third parties. The residual amount to be received from insurers amounts to €211 million as of December 31, 2009.

The Group believes that, based on the information currently available, on a reasonable estimate of its financial liability and on provisions recognized, this accident should not have a significant impact on the Group's financial situation or consolidated results.

On December 1, 2008, the Health and Safety Executive (HSE) and the Environment Agency (EA) issued a Notice of prosecution against five companies, including TOTAL's UK subsidiary. In November 2009, TOTAL's UK subsidiary pleaded guilty to the charges brought by the prosecution and intends to raise a number of elements likely to mitigate the impact of the charges brought against it.

#### Myanmar

Under the Belgian "universal jurisdiction" laws of June 16, 1993 and February 10, 1999, a complaint was filed in Belgium on April 25, 2002, against the Company, its Chairman and the former president of its subsidiary in Myanmar. These laws were repealed by the Belgian law of August 5, 2003 on "serious violations of international human rights", which also provided a procedure for terminating certain proceedings that were underway. In this framework, the Belgian Cour de cassation terminated the proceedings against TOTAL in a decision dated June 29, 2005. The plaintiffs' request to withdraw this decision was rejected by the Cour de cassation on March 28, 2007.

Despite this decision, the Belgian Ministry of Justice asked the Belgian federal prosecutor to request that the investigating judge reopen the case. The Belgian federal prosecutor decided to submit the admissibility of this request to the Court of Appeal of Brussels. In its decision of March 5, 2008, the Court of Appeal confirmed the termination of the proceedings against TOTAL, its Chairman and the former president of its subsidiary, based on the principle of *res judicata* applying to the Cour de cassation's decision of June 29, 2005. The plaintiffs appealed the decision of March 5, 2008. On October 29, 2008, the Cour de cassation rejected the plaintiffs' appeal, thus ending definitively the proceedings.

TOTAL has always maintained that the accusations made against the Company and its management arising out of the activities of its subsidiary in Myanmar were without substance as a matter of fact and as a matter of law.

#### South Africa

In a threatened class action proceeding in the United States, TOTAL, together with approximately 100 other multinational companies, is the subject of accusations by certain South African citizens who alleged that their human rights were violated during the era of apartheid by the army, the police or militias, and who consider that these companies were accomplices in the actions by the South African authorities at the time.

The claims against the companies named in the class action, which were not officially brought against TOTAL, were dismissed by a federal judge in New York. The plaintiffs appealed this dismissal and, after a procedural hearing on November 3, 2008, decided to remove TOTAL from the list of companies against which it was bringing claims.

#### Iran

In 2003, the United States Securities and Exchange Commission (SEC) issued a non-public formal order directing a private investigation in the matter of certain oil companies (including, among others, TOTAL), in connection with the pursuit of business in Iran. In 2006, a judicial inquiry related to TOTAL was initiated in France. In 2007, the Company's Chief Executive Officer was placed under formal investigation in relation to this inquiry, as the former President of the Middle East department of the Group's Exploration & Production division.

The inquiry concerns an agreement concluded by the Group that relates to the South Pars gas field and allegations that certain payments were made under this agreement to Iranian officials in connection with contracts entered into between the Group and the National Iranian Oil Company (NIOC). The Company has not been notified of any significant developments in the proceedings since the formal investigation was launched. The Company believes that the negotiation and execution of the agreement did not violate any applicable laws or applicable international conventions. However, the Company cannot exclude the possibility that additional procedures may be initiated with respect to this matter.

### Italy

As part of an investigation led by the Prosecutor of the Republic of the Potenza court, Total Italia is the subject of an investigation related to certain calls for tenders that it made for the preparation and development of an oil field. On February 16, 2009, as a preliminary measure before the proceedings go before the court, the preliminary investigation judge of Potenza served notice to Total Italia of a decision that would suspend the concession for this field for one year. Total Italia has appealed the decision by the preliminary investigation judge before the Court of Appeal of Potenza. In a decision handed down on April 8, 2009, the Court reversed the suspension of the concession and appointed for one year, i.e. until February 16, 2010, a judicial administrator to supervise the operations related to the development of the concession, allowing the Tempa Rossa project to continue.

In January 2010, the Prosecutor of the Potenza Court filed for a notice to close the criminal investigation.

Since in January 1, 2010, Total Italia's exploration and production operations have been transferred to Total E&P Italia.

### **Oil-for-Food Program**

Several countries have commenced investigations concerning possible violations related to the United Nations (UN) "Oil-for-Food" program in Iraq.

Pursuant to a French criminal investigation, certain current or former Group employees were placed under formal criminal investigation for possible charges as accessories to the misappropriation of corporate assets and as accessories to the corruption of foreign public agents. The Chief Executive Officer of the Company, formerly president of the Group's Exploration & Production division, was also placed under formal investigation in October 2006. In 2007, the criminal investigation was closed and the case was transferred to the Prosecutor's office. In 2009, the Prosecutor's office recommended dismissing the case for all the Group's current and former employees and for the Chief Executive Officer.

In early 2010, despite the advice of the Prosecutor's office, a new investigating judge decided to place TOTAL S.A. under formal investigation with respect to bribery charges as well as complicity and influence peddling. This formal investigation has been pronounced eight years after the beginning of the investigation without any new evidence

being added to the affair.

The Company believes that its activities related to the "Oil-for-Food" program have been in compliance with this program, as organized by the UN in 1996. The Volker report released by the independent investigating committee set up by the UN had discarded any bribery grievance within the framework of the "Oil-For-Food" program.

### Blue Rapid and the Russian Olympic Committee

Blue Rapid, a Panamanian company, and the Russian Olympic Committee filed a claim for damages with the Paris Commercial Court against Elf Aquitaine concerning its withdrawal from an exploration and production project in Russia that was negotiated in the early 1990s.

Elf Aquitaine believes this claim to be unfounded.

On January 12, 2009, the Commercial Court of Paris rejected Blue Rapid's claim and found that the Russian Olympic Committee did not have standing in the matter. This decision has been appealed.

### **Dividend policy**

The Company has paid dividends on its share capital in each year since 1946. Future dividends will depend on the Company's earnings, financial condition and other factors. The payment and amount of dividends are subject to the recommendation of the Board of Directors and resolution by the Company's shareholders' at the annual shareholders' meeting.

For the 2009 fiscal year, the Board of Directors has proposed a dividend of  $\notin 2.28$  per share. This proposed dividend will be voted on by the shareholders' meeting to be held on May 21, 2010. An interim dividend of  $\notin 1.14$  per share was paid on November 18, 2009. If approved, the balance of  $\notin 1.14$  per share will be paid on June 1, 2010.

Dividends paid to holders of ADRs will be subject to a charge by the Depositary for any expenses incurred by the Depositary in the conversion of euro to dollars. See "Item 10. Additional Information — Taxation", for a summary of certain U.S. federal and French tax consequences to holders of shares and ADRs.

### Significant changes

For a description of significant changes that have occurred since the date of the Company's Consolidated

Financial Statements, see "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects", which include descriptions of certain recent 2010 activities.

### **ITEM 9. THE OFFER AND LISTING**

#### Markets

The principal trading market for the shares is the Euronext Paris exchange in France. The shares are also listed on Euronext Brussels and the London Stock Exchange.

#### Offer and listing details

### **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 three trading days after a transaction (T+3). 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. Under this system, the determination date for settlement on the following month occurs on the fifth trading day prior to the last trading day (inclusive) of each month

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 40 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 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 Index which consists of fifty global companies selected based on market capitalization, book value, assets, revenue and earnings.

Pursuant to the vote of the May 12, 2006, shareholders' meeting approving TOTAL's four-for-one stock split, each shareholder received on May 18, 2006, four new TOTAL shares, par value of €2.50 per share, in return for each old share with a par value of €10. 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. Data prior to May 18, 2006, reported in this table has been adjusted to reflect this stock split by dividing stock prices by four. The May 12, 2006, shareholders' meeting also approved the spin-off of Arkema and the allocation, as of May 18, 2006, of one Arkema share allocation right for each TOTAL share with a par value of €10, ten allocation rights entitling the holder to one Arkema share. Data prior to May 18, 2006, reported in the third and fourth columns of this table are adjusted in order to consider Arkema's share allocation right partition.

Price per share (€)	High	Low	High adjusted	Low adjusted
2005	57.28	39.50	56.54	38.99
2006	58.15	46.52	57.40	46.52
2007	63.40	48.33	_	_
2008	59.50	31.52	—	_
First Quarter	59.50	45.45	_	_
Second Quarter	58.25	46.35	_	_
Third Quarter	54.24	40.50	_	_
Fourth Quarter	44.55	31.52	_	_
2009	45.785	34.25	_	_
First Quarter	42.465	34.25	_	_
Second Quarter	42.455	34.72	_	_
Third Quarter	42.45	35.75	_	_
September	42.45	38.91	_	_
Fourth Quarter	45.785	39.005	—	—
October	43.11	39.005	_	_
November	43.495	40.50	_	_
December	45.785	41.50	—	_
2010 (through February 28)	46.735	40.05	_	_
January	46.735	41.215	_	_
February	43.165	40.05	_	_

### Trading on the New York Stock Exchange

ADRs have been listed on the New York Stock Exchange since October 25, 1991. The Bank of New York Mellon serves as depositary with respect to the ADRs traded on the New York Stock Exchange. The table below sets forth, for the periods indicated, the reported high and low prices quoted in dollars for the currently outstanding ADRs on the New York Stock Exchange. After the four-for-one stock split, which was approved by the shareholders' meeting on May 12, 2006, and effective on May 18, 2006, and after the split

of the ADRs by two on May 23, 2006, one ADR corresponds to one TOTAL share. Data prior to May 23, 2006, reported in this table has been adjusted to take into account this stock split by dividing ADR prices by two. The May 12, 2006, shareholders' meeting also approved the spin-off of Arkema and the allocation, as from May 18, 2006, of one Arkema share allocation right for each TOTAL share with a par value of €0, ten allocation rights entitling the holder to one Arkema share. Data prior to May 23, 2006, reported in the third and fourth columns of this table has been adjusted in order to reflect Arkema's share allocation right partition.

Price Per ADR (\$)	High	Low	High adjusted	Low adjusted
2005	68.97	51.87	67.86	51.03
2006	73.46	58.06	73.46	58.06
2007	87.34	63.89	_	_
2008	91.34	42.60	_	_
First Quarter	86.90	67.11	_	_
Second Quarter	91.34	73.09	_	_
Third Quarter	83.99	57.19	_	_
Fourth Quarter	60.90	42.60	_	_
2009	65.98	42.88	_	_
First Quarter	57.85	42.88	_	_
Second Quarter	59.93	45.02	_	_
Third Quarter	62.43	49.78	_	_
September	62.43	55.53	_	_
Fourth Quarter	65.98	57.05	_	_
October	64.65	57.05	_	_
November	64.50	59.37	_	_
December	65.98	60.62	—	_
2010 (through February 28)	67.52	54.01	_	_
January	67.52	57.38	_	_
February	59.60	54.01	_	_

### **ITEM 10. ADDITIONAL INFORMATION**

### Memorandum and Articles of Association

### **Register Information**

TOTAL S.A. is registered with the Nanterre Trade Register under the registration number 542 051 180.

### **Objects and Purposes**

The Company's purpose can be found in Article 3 of its bylaws (*statuts*). Generally, the Company may engage in all activities relating to: (i) the exploration and extraction of mining deposits and the performance of industrial refining, processing, and trading of these materials, as well as their derivatives and by-products; (ii) the production and distribution of all forms of energy; (iii) the chemicals, rubber and health industries; (iv) the transportation and shipping of hydrocarbons and other products or materials relating to the Company's business purpose; and (v) all financial, commercial, and industrial operations and operations relating to any fixed or unfixed assets and real estate, acquisitions of interests or holdings in any business or company that may relate to any of the above-mentioned purposes or to any similar or related purposes, of such nature as to promote the Company's extension or its development.

#### **Director Issues**

#### Compensation

Directors receive attendance fees, the maximum aggregate amount of which, determined by the shareholders acting at a shareholders' meeting, remains in effect until a new decision is made. The Board of Directors may apportion this amount among its members in whatever way it considers appropriate. In addition, the Board may also grant its Chairman compensation.

#### Retirement

The number of directors of TOTAL who are acting in their own capacity or as permanent representatives of a legal entity and are over seventy years old may not exceed one-third of the number of directors in office at the end of the fiscal year. If such number is exceeded, the oldest Board member is automatically deemed to have resigned. Directors who are the permanent representative of a legal person may not continue in office beyond their seventieth birthday.

Currently, the duties of the Chairman of the Board automatically cease on his sixty-fifth birthday at the latest. At their meeting of May 15, 2009, the

shareholders adopted an amendment of the bylaws pertaining to the rules relating to the nomination of the Chairman. The amendment allows the Board, as an exception to the currently applicable sixty-five year age limit, to appoint as Chairman of the Board for a period of up to two years a director who is more than sixty-five years old but less than seventy years old.

#### Shareholdings

Each director must own at least 1,000 shares of TOTAL during his or her term of office.

#### Election

Directors are elected for a term of three years. In 2003, TOTAL amended its Articles of Incorporation to provide for the election of one director to represent employee shareholders. This director was appointed for the first time at the shareholders' meeting held on May 14, 2004.

### **Description of Shares**

The following is a summary of the material rights of holders of fully paid shares and is based on the bylaws of the Company and French Company Law as codified in Volume II of the French Commercial Code (referred to herein as the "French Company Law"). For more complete information, please read the bylaws of TOTAL S.A., a copy of which has been filed as an exhibit to this Annual Report.

#### **Dividend rights**

The Company may make dividend distributions to its shareholders from net income in each fiscal year, after deduction of the overhead and other social charges, as well as of any amortization of the business assets and of any provisions for commercial and industrial contingencies, as reduced by any loss carried forward from prior years, and less any contributions to reserves or amounts that the shareholders decide to carry forward. These distributions are also subject to the requirements of French Company Law and the Company's bylaws.

Under French Company Law, the Company must allocate 5% of its net profits in each fiscal year to a legal reserve fund until the amount in that fund is equal to 10% of the nominal amount of its share capital.

The Company's bylaws provide that its shareholders may decide to allocate all or a part of any distributable profits among special or general reserves, to carry them forward to the next fiscal year as retained earnings, or to allocate them to the shareholders as dividends. The bylaws provide that the remainder of any distributable profits shall be distributed among the shareholders in the form of dividends, either in cash or in shares. Under French Company Law, the Company must distribute dividends to its shareholders pro rata, according to their shareholdings. Dividends are payable to holders of outstanding shares on the date fixed by the shareholders' meeting approving the distribution of dividends or, in the case of interim dividends, on the date fixed by the Company's Board of Directors at the meeting that approves the distribution of interim dividends. Under French Company Law, dividends not claimed within five years of the date of payment revert to the French State.

#### Voting rights

Each shareholder of the Company is entitled to the number of votes he or she possesses, or for which he or she holds proxies. According to French Company Law, voting rights may not be exercised in respect of fractional shares.

According to the Company's bylaws, each registered share that is fully paid and registered in the name of the same shareholder for a continuous period of at least two years is granted a double voting right after such two-year period. Upon capital increase by capitalization of reserves, profits or premiums on shares, a double voting right is granted to each registered share allocated to a shareholder relating to previously existing shares that already carry double voting rights. The double voting right is automatically canceled when the share is converted into a bearer share or when the share is transferred, unless the transfer is due to inheritance, division of community property between spouses, or a donation during the lifetime of the shareholder to the benefit of a spouse or relatives eligible to inherit.

French Company Law limits a shareholder's right to vote in the following circumstances:

- shares held by the Company or entities controlled by the Company, which cannot be voted;
- shares held by shareholders making a contribution in-kind to the Company, which cannot be voted with respect to resolutions relating to such in-kind contributions; and
- shares held by interested parties, which cannot be voted with respect to resolutions relating to such shareholders.

Under the Company's bylaws, the voting rights exercisable by a shareholder, directly, indirectly or by proxy, at any shareholders' meeting are limited to 10% of the total number of voting rights attached to the shares on the date of such shareholders' meeting. This 10% limitation may be increased by taking into account double voting rights held directly or indirectly by the shareholder or by proxy, provided that the voting rights exercisable by a shareholder at any shareholders' meeting may never exceed 20% of the total number of voting rights attached to the shares.

These limitations on voting lapse automatically if any individual or entity acting alone or in concert with an individual or entity holds at least two-thirds of the total number of shares as a result of a tender offer for 100% of the shares.

#### Liquidation rights

In the event the Company is liquidated, its assets remaining after payment of its debts, liquidation expenses and all of its other remaining obligations will first be distributed to repay the nominal value of the shares. After these payments have been made, any surplus will be distributed pro rata among the holders of shares based on the nominal value of their shareholdings.

#### Future capital calls

Shareholders are not liable to the Company for further capital calls on their shares.

#### Preferential subscription rights

Holders of shares have preferential rights to subscribe on a pro rata basis for additional shares issued for cash. Shareholders may waive their preferential rights, either individually or, under certain circumstances, as a group at an extraordinary shareholders' meeting. During the subscription period relating to a particular offering of shares, shareholders may transfer their preferential subscription rights that they have not previously waived.

#### Changes in share capital

Under French Company Law, the Company may increase its share capital only with the approval of its shareholders at an extraordinary shareholders' meeting (or with a delegation of authority from its shareholders). There are two methods to increase share capital: (i) by issuing additional shares, including the creation of a new class of securities and (ii) by increasing the nominal value of existing shares. The Company may issue additional shares for cash or for assets contributed in kind, upon the conversion of debt securities, or other securities giving access to its share capital, that it may have issued, by capitalization of its reserves, profits or issuance premiums or, subject to certain conditions, in satisfaction of its indebtedness.

Under French Company Law, the Company may decrease its share capital only with the approval of its shareholders at an extraordinary shareholders' meeting (or with a delegation of authority from its shareholders). There are two methods to reduce share capital: (i) by reducing the number of shares outstanding, and (ii) by decreasing the nominal value of existing shares. The conditions under which the share capital may be reduced will vary depending upon whether the reduction

is attributable to losses. The Company may reduce the number of outstanding shares either by an exchange of shares or by the repurchase and cancellation of its shares. Any decrease must meet the requirements of French Company Law, which states that all the holders of shares in each class of shares must be treated equally, unless the affected shareholders otherwise agree.

#### Form of shares

The Company has only one class of shares, par value €2.50 per share. Shares may be held in either bearer or registered form. Shares traded on Euronext Paris are cleared and settled through Euroclear France. The Company may use any lawful means to identify holders of shares, including a procedure known as *titres au porteur identifiable* according to which Euroclear France will, upon the Company's request, disclose to the Company the name, nationality, address and number of shares held by each shareholder in bearer form. The information may only be requested by the Company and may not be communicated to third parties.

#### Holding of shares

Under French Company Law concerning the "dematerialization" of securities, the ownership rights of shareholders are represented by book entries instead of share certificates (other than certificates representing French securities which are outstanding exclusively outside the territory of France and are not held by French residents). Registered shares are entered into an account maintained by the Company or by a representative that it has nominated, while shares in bearer form must be held in an account maintained by an accredited financial intermediary on the shareholder's behalf.

For all shares in registered form, the Company maintains a share account with Euroclear France which is administered by BNP Paribas Securities Services. In addition, the Company maintains accounts in the name of each registered shareholder either directly or, at a shareholder's request, through a shareholder's accredited intermediary, in separate accounts maintained by BNP Paribas Securities Services on behalf of the Company. Each shareholder's account shows the name and number of shares held and, in the case of shares registered through an accredited financial intermediary, the fact that they are so held. BNP Paribas Securities Services, as a matter of course, issues confirmations to each registered shareholder as to shares registered in a shareholder's account, but these confirmations do not constitute documents of title.

Shares held in bearer form are held and registered on the shareholder's behalf in an account maintained by an accredited financial intermediary and are credited to an

account at Euroclear France maintained by the intermediary. Each accredited financial intermediary maintains a record of shares held through it and will issue certificates of inscription for the shares that it holds. Transfers of shares held in bearer form only may be made through accredited financial intermediaries and Euroclear France.

#### Cancellation of treasury shares

After receiving authorization through a shareholders' meeting, the Board of Directors of the Company may cancel treasury shares owned by the Company in accordance with French Company Law up to a maximum of 10% of the share capital within any period of twenty-four months.

# Description of TOTAL Share Certificates

The TOTAL share certificates are issued by Euroclear France. French law allows Euroclear France to create certificates representing French securities provided that these certificates are intended to be outstanding exclusively outside the territory of France and cannot be held by residents of France. Furthermore, TOTAL share certificates may not be held by a foreign resident in France, either personally or in the form of a bank deposit, but the coupons and rights may be exercised in France.

Certificates for TOTAL shares are either in bearer form or registered in a securities trading account. Under Euroclear France regulations applicable to bearer stock certificates, TOTAL share certificates cannot be categorized as secondary securities, such as ADSs, issued by a foreign company to represent TOTAL shares.

TOTAL share certificates have the characteristics of a bearer security, meaning they are:

- negotiable outside France;
- transmitted by delivery; and
- fungible with TOTAL share certificates, which may be converted freely from bearer form to registration in an account.

All rights attached to TOTAL shares must be exercised directly by the bearer of the TOTAL share certificates.

#### **Other Issues**

#### Shareholders' meetings

French companies may hold either ordinary or extraordinary shareholders' meetings. Ordinary shareholders' meetings are required for matters that are

not specifically reserved by law to extraordinary shareholders' meetings: the election of the members of the Board of Directors, the appointment of statutory auditors, the approval of a management report prepared by the Board of Directors, the approval of the annual financial statements, the declaration of dividends and the issuance of bonds. Extraordinary shareholders' meetings are required for approval of amendments to a company's bylaws, modification of shareholders' rights, mergers, increases or decreases in share capital, including a waiver of preferential subscription rights, the creation of a new class of shares, the authorization of the issuance of investment certificates or securities convertible, exchangeable or redeemable into shares and for the sale or transfer of substantially all of a company's assets.

The Company's Board of Directors is required to convene an annual shareholders' meeting for approval of the annual financial statements. This meeting must be held within six months of the end of the fiscal year. However, the president of the *Tribunal de Commerce* of Nanterre, the local French commercial court, may grant an extension of this six-month period. The Company may convene other ordinary and extraordinary meetings at any time during the year. Meetings of shareholders may be convened by the Board of Directors or, if it fails to call a meeting, by the Company's statutory auditors or by a court-appointed agent. A shareholder or shareholders holding at least 5% of the share capital, the employee committee or another interested party under certain exceptional circumstances, may request that the court appoint an agent. The notice of meeting must state the agenda for the meeting.

French Company Law requires that a preliminary notice of a listed company's shareholders' meeting be published in the *Bulletin des annonces légales obligatoires* ("BALO") at least thirty-five days prior to the meeting (or fifteen days in the event the Company is subject to a tender offer and the Company calls a shareholders' meeting to approve measures, the implementation of which would be likely to cause such tender offer to fail). The preliminary notice must first be sent to the *Autorité des marchés financiers* ("AMF") with an indication of the date it is to be published in the BALO.

The preliminary notice must include the agenda of the meeting and the proposed resolutions that will be submitted to a shareholders' vote. Within ten days of publication, one or more shareholders holding a certain percentage of the Company's share capital determined on the basis of a formula related to capitalization may propose additional resolutions.

Notice of a shareholders' meeting is sent by mail at least fifteen days (or six days in the event of shareholders' meetings convened in the situation where the Company

was subject to a tender offer to approve measures, the implementation of which would be likely to cause such tender offer to fail) before the meeting to all holders of registered shares who have held their shares for more than one month. However, in the case where the original meeting was adjourned because a quorum was not met, this time period is reduced to six days (or four days in the event of shareholders' meetings convened in the situation where the Company were subject to a tender offer to approve measures, the implementation of which would be likely to cause such tender offer to fail).

Attendance and the exercise of voting rights at both ordinary and extraordinary shareholders' meetings are subject to certain conditions. Pursuant to French Company Law, participation at shareholders' meetings is subject to the condition that an entry of registration has been made, for the owner of registered shares, in the records maintained by the Company, or, for the owner of bearer shares, in the records of an authorized intermediary, in each case at 12:00 a.m. (Paris time) on the third trading day preceding the shareholders' meeting. For the owner of bearer shares the registration is evidenced by a certificate of participation (attestation de participation) issued by the authorized intermediary.

Subject to the above restrictions, all of the Company's shareholders have the right to participate in the Company's shareholders' meetings, either in person or by proxy. No shareholder may delegate voting authority to another person except the shareholder's spouse or another shareholder or, if the shareholder is not a resident of France, by a registered intermediary in conformity with applicable regulations. Shareholders may vote, either in person, by proxy, or by mail, and each is entitled to as many votes as he or she possesses or as many shares as he or she holds proxies for. If the shareholder is a legal entity, it may be represented by a legal representative. A shareholder may grant a proxy to the Company by returning a blank proxy form. In this last case, the chairman of the shareholders' meeting may vote the shares in favor of all resolutions proposed or agreed to by the Board of Directors and against all others. The Company will send proxy forms to shareholders upon request. In order to be counted, proxies must be received at least one day prior to the shareholders' meeting at the Company's registered office or at another address indicated in the notice convening the meeting. Under French Company Law, shares held by entities controlled directly or indirectly by the Company are not entitled to voting rights. There is no requirement that a shareholder have a minimum number of shares in order to be able to attend or be represented at shareholders meetinas

Under French Company Law, a quorum requires the presence, in person or by proxy, including those voting by mail, of shareholders having at least 20% of the shares entitled to vote in the case of (i) an ordinary

shareholders' meeting, (ii) an extraordinary meeting where shareholders are voting on a capital increase by capitalization of reserves, profits or share premium, or (iii) an extraordinary general meeting of shareholders convened in the situation where the Company is subject to a tender offer in order to approve an issuance of warrants allowing the subscription, at preferential conditions, of shares of the Company and the free allotment of such warrants to existing shareholders of the Company, the implementation of which would be likely to cause such tender offer to fail, or 25% of the shares entitled to vote in the case of any other extraordinary shareholders' meeting. If a quorum is not present at any meeting, the meeting is adjourned. There is no quorum requirement when an ordinary shareholders' meeting is reconvened, but the reconvened meeting may consider only questions which were on the agenda of the adjourned meeting. When an extraordinary shareholders' meeting is reconvened, the auorum required is 20% of the shares entitled to vote, except where the reconvened meeting. If a quorum is not present at a reconvened meeting requiring a quorum, then the meeting may be adjourned for a maximum of two months

At an ordinary shareholders' meeting, approval of any resolution requires the affirmative vote of a simple majority of the votes of the shareholders present or represented by proxy. The approval of any resolution at an extraordinary shareholders' meeting requires the affirmative vote of a two-thirds majority of the votes cast, except that (i) any resolution to approve a capital increase by capitalization of reserves profits, or share premium, or (ii) any resolution, in the situation where the Company is subject to a tender offer in order to approve an issuance of warrants allowing the subscription, at preferential conditions, of shares of the Company and the free allotment of such warrants to existing shareholders of the Company, the implementation of which would be likely to cause such tender offer to fail, only requires the affirmative vote of a simple majority of the votes cast. Notwithstanding these rules, a unanimous vote is required to increase shareholders' liabilities. Abstention from voting by those present or represented by proxy is counted as a vote against any resolution

As set forth in the Company's bylaws, shareholders' meetings are held at the Company's registered office or at any other location specified in the written notice.

#### Ownership of shares by non-French persons

There is no limitation on the right of non-resident or foreign shareholders to own securities of the Company, either under French Company Law or under the bylaws of the Company.

#### Requirement for holdings exceeding certain percentages

French Company Law provides that any individual or entity, acting alone or in concert with others, that holds, directly or indirectly, more than 5%, 10%, 15%, 20%, 25%, 33<sup>1</sup>/3%, 50%, 66<sup>2</sup>/3%, 90% or 95% of the outstanding shares or the voting rights<sup>(1)</sup> attached to the shares, or that increases or decreases its shareholding or voting rights by any of the above percentages must notify the Company by registered letter, with return receipt, within four business days of crossing that threshold, of the number of shares and voting rights it holds. An individual or entity must also notify the AMF, the self-regulatory organization that has general regulatory authority over the French stock exchanges and whose members include representatives of French stockbrokers, by registered letter, with return receipt, within four trading days of crossing that threshold. Any shareholder who fails to comply with these requirements will have its voting rights in excess of such thresholds suspended for a period of two years from the date such shareholder complies with the notification requirements and may have all or part of its voting rights suspended for up to five years by the commercial court at the request of the Company's Chairman, any of the Company's shareholders or the AMF. In addition, every shareholder who, directly or indirectly, acting alone or in concert with others, acquires ownership or control of shares representing 10%, 15%, 20% or 25% of the Company's share capital must notify the Company and the AMF of its intentions for the six months following such an acquisition. Failure to comply with this notification of intentions will result in the suspension of the voting rights attached to the shares exceeding the applicable threshold held by the shareholder for a period of two years from the date on which the shareholder has cured such default and, upon a decision of the commercial court part or all the shares held by such shareholder may be suspended for up to five years.

In addition, the Company's bylaws provide that any person, whether a natural person or a legal entity, who comes to hold, directly or indirectly, 1% or more, or any multiple of 1%, of the Company's share capital or voting rights or of securities that may include future voting rights or future access to share capital or voting rights, must notify the Company by registered letter with return receipt requested, within 15 calendar days of crossing such threshold. Failure to comply with these notification provisions will result in the suspension of the voting rights attached to the shares exceeding this 1% threshold held by the shareholder if requested at a shareholders' meeting by one or more shareholders holding shares representing at least 3% of the share capital.

Any individual or legal entity whose direct or indirect holding of shares falls below each of the levels mentioned must also notify the Company in the manner and within the time limits set forth above.

Subject to certain limited exemptions, any person, or persons acting in concert, owning in excess of 33 <sup>1</sup>/3% of the share capital or voting rights of the Company must initiate a public tender offer for the balance of the share capital, voting rights and securities giving access to such share capital or voting rights.

#### **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 31, 2008.

### **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.

#### **Taxation**

#### General

This section generally summarizes the material U.S. federal income tax and French tax consequences of owning and disposing of shares and 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 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;

<sup>1.</sup> For purposes of shareholding threshold declarations, pursuant to Article 223-11 of the General Regulation of the AMF, voting rights are calculated on the basis of all outstanding shares, whether or not these shares would have rights to vote at a shareholders' meeting.

- tax-exempt organizations;
- life insurance companies;
- persons liable for alternative minimum tax;
- persons that actually or constructively own 10% or more of the share capital or voting rights in TOTAL;
- 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 holds ordinary 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 ordinary shares or ADSs should consult their tax advisors as to the tax consequences of owning or disposing of ordinary shares or ADSs, as applicable.

In addition, the discussion of the material French tax consequences 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 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, 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 transferred to so called "Non Cooperative Countries and Territories" within the meaning of the new Section 230-0A of the French Tax Code.

Holders are urged to consult their own tax advisor 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 whether the holder is a U.S. Holder eligible for the benefits of the Treaty with its advisor.

### **Taxation of Dividends**

#### French taxes

The term "dividends" used in the following discussion means dividends within the meaning of applicable income tax treaties, or, where not defined by such treaties, within the meaning of the French domestic tax law as set forth in administrative guidelines dated February 25, 2005 (4 J-1-05) (the "Administrative Guidelines").

Dividends paid to non-residents of France are subject to French withholding tax at a rate of 25%. This withholding tax is reduced to 18% to dividends distributed to non-residents of France who are residents of certain States located within the European Economic Area.

However, the rate may be reduced pursuant to a tax treaty or similar agreement. 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 the ownership of shares or ADSs is not effectively attributable to a permanent establishment or to a fixed base in France and certain other requirements are satisfied.

U.S. Holders should consult their own tax advisors in order to determine the effect of the Treaty and the applicable procedures in respect of the Administrative Guidelines, in light of such particular circumstances.

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 the model attached to the Administrative Guidelines. The immediate application of the 15% withholding tax will be available only if the certificate of residence is sent to the U.S. financial institution managing their securities account before 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;

(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 each 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 as soon as possible, in all cases before 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 Internal Revenue Service, the abovementioned certificate of residence, and apply the 15% withholding tax rate to dividends it pays to such U.S. Holder.

U.S. Pension Funds and Other Tax-Exempt Entities created and operating in accordance with the provisions of Sections 401 (a), 403 (b), 457 or 501 (c) (3) of the U.S. Internal Revenue Code (IRC) are subject to the same general filing requirements except that, in addition, they have to supply a certificate issued by the U.S. Internal Revenue Service ("IRS") or any other document stating that they have been created and are operating in accordance with the provisions of the abovementioned Code Sections. This certificate must be produced together with the first request of application of the reduced rate, once together with the first request of immediate application of the 15% withholding tax and at French Tax Authorities specific request.

In the same way, regulated companies such as RIC, REIT or REMIC will have to send to the financial institution managing their securities account a certificate from the IRS indicating that they are classified as Regulated Companies (RIC, REIT or REMIC) within the provisions of the relevant sections of the IRC. In principle, this certification must be produced each year and before the dividend payment.

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 25% French withholding tax will be levied at the time the dividends are paid. Such U.S. Holder may, however, be entitled to a refund of the withholding tax in excess of the 15% rate under the "standard", 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/or 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 25% rate to the French tax authorities. However, it will not be paid before January 15 of the year following the year in which the dividend was paid.

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 U.S. Internal Revenue Service and the French *Centre des Impôts des Non-Residents* at 10 rue du Centre, 93463 Noisy le Grand, France.

These forms, together with instructions, will also be provided by the Depositary to all U.S. Holders of ADRs registered with the Depositary. The Depositary will 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 10% 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.

#### 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 a U.S. Holder

must include in gross income equals the amount paid by TOTAL to the extent of the current and accumulated earnings and profits of TOTAL (as determined for U.S. federal income tax purposes). The dividend will be income from foreign sources. Dividends paid to a noncorporate U.S. Holder in taxable years beginning before January 1, 2011 that constitute qualified dividend income will be taxable to the holder at a maximum tax rate of 15% provided that the shares or ADSs are held for more than 60 days during the 121-day period beginning 60 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 Section 243 of the Code. The dividend is taxable to the U.S. Holder when the holder, in the case of shares, or the Depositary, in the case of ADSs, receives the dividend, actually or constructively. To the extent that an amount received by a U.S. Holder exceeds the allocable share of TOTAL's current and accumulated earnings and profits, it will be applied first to reduce such holder's tax basis in shares or ADSs owned by such holder and then, to the extent it exceeds the holder's tax basis, it will constitute capital gain.

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 dollar/euro 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 from sources within the United States and will not be eligible for the special tax rate applicable to qualified dividend income.

Subject to certain conditions and limitations, French taxes withheld in accordance with the Treaty 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 maximum 15% tax rate. 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 an individual's United States 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 other types of income 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.

#### **Taxation of Disposition of Shares**

In general, a U.S. Holder who is eligible for the benefits of the Treaty will not be subject to French tax on any capital gain from the sale or exchange of the ADSs or redemption of the underlying shares unless those ADSs or shares 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 3% registration duty assessed on the higher of the purchase price and the market value of the shares (subject to a maximum of €5,000 per transfer) applies to certain transfers of shares in French companies. The duty does not apply to transfers of shares in TOTAL provided that the transfer is not evidenced by a written agreement, or that such written agreement is executed outside France.

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 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. Longterm capital gain of a non-corporate U.S. Holder that is recognized in taxable years beginning before January 1, 2011, is generally taxed at a maximum rate of 15%. The deductibility of capital losses is subject to limitation.

#### **Passive Foreign Investment Status**

TOTAL believes that the shares or ADSs will not be treated as stock of a passive foreign investment company, or PFIC, for United States federal income tax purposes, but this conclusion is a factual determination that is made annually and thus is subject to change. If TOTAL is treated as a PFIC, unless a U.S. Holder elects to be taxed annually on a mark-to-market basis with respect to the shares or ADSs, gain realized on the sale or other disposition of the shares or ADSs would in general not be treated as capital gain. Instead 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 which an interest charge in respect of the tax attributable to each such year would apply. 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 his or her holding period in the shares or ADSs. Dividends paid will not be eligible for the special 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 ADSs or shares 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, 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 ADSs or shares 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,

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

Please refer to Note 31 to the Consolidated Financial Statements included elsewhere herein for a qualitative and quantitative discussion of the Group's exposure to market risks. Please also refer to Notes 29 and 30 to the Consolidated Financial Statements included elsewhere herein 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 principally interest rate and currency swaps. The Group may also use, on a less frequent basis, futures, caps, floors and options contracts. These operations and their accounting treatment are detailed in Note 1 paragraph M and Notes 20, 28 and 29 to the Consolidated

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.

#### **Dividends and Paying Agents**

After BNP Paribas Securities Services performs centralizing procedures, dividends are paid through the accounts of financial intermediaries participating in Euroclear France's direct payment procedures. The Bank of New York Mellon acts as paying agent for dividends distributed to ADS holders.

#### **Documents on Display**

TOTAL files annual, periodic, and other reports and information with the Securities and Exchange Commission. You may read and copy 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 Web site at http://www.sec.gov and from certain commercial document retrieval services. You may also read and copy 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.

Financial Statements included elsewhere herein.

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 Downstream and Chemicals operations 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

The Bank of New York Mellon, as a depositary, collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Investors must pay:	For:
\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	<ul> <li>Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property, stocks splits or merger</li> <li>Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates</li> </ul>
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	<ul> <li>Distribution of securities distributed to holders of deposited securities that are distributed by the depositary to ADS registered holders</li> </ul>
Registration or transfer fees	<ul> <li>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</li> </ul>
Expenses of the depositary	<ul> <li>Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement)</li> <li>Converting foreign currency to U.S. dollars</li> </ul>
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	As necessary
Any charges incurred by the depositary or its agents for servicing the deposited securities	As necessary

The depositary has agreed to reimburse the Company for certain expenses incurred in connection with the establishment and maintenance of the ADS program. The depositary has agreed to reimburse the Company for its continuing annual stock exchange listing fees and annual meeting expenses. The depositary has also agreed to pay the standard out-of-pocket maintenance costs for the ADRs, which consist of 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. It has also agreed to reimburse the Company annually for certain investor relationship programs or special investor relations promotional activities. In certain instances, the depositary has agreed to provide additional payments to the Company based on certain applicable performance indicators relating to the ADR facility. There are limits on the amount of expenses for which the depositary will reimburse the Company, but the amount of reimbursement available to the Company is not necessarily tied to the amount of fees the depositary collects from investors.

In the year ended December 31, 2009, the Company received from the depositary a payment of \$586,590, consisting of an amount of \$222,243 with respect to continuing annual stock exchange listing fees and an amount of \$364,347 with respect to annual general meeting of shareholders related expenses in connection with the ADS program, standard out-of-pocket maintenance costs for the ADRs, expenses for investor relations promotional activities, and legal fees. From January 1 to March 15, 2010, the Company received from the depositary a payment of \$545,530 corresponding to standard out-of-pocket maintenance costs for the ADRs, expenses for investor relations promotional activities and legal fees.

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

None.

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

None.

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

#### **Disclosure Controls and Procedures**

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 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 U.S. 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,

### 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* issued by the Committee of Sponsoring Organizations of the

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 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 Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

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, 2009.

The effectiveness of internal control over financial reporting as of December 31, 2009, was audited by KPMG S.A. and Ernst & Young Audit, independent registered public accounting firms, as stated in their report beginning on page F-2 of this Annual Report.

### **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.

### **ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

Mr. Bertrand Jacquillat is the Audit Committee financial expert. Mr. Jacquillat is an independent member of the Board of Directors in accordance with the NYSE listing standards applicable to TOTAL, as are the other members of the Audit Committee.

### **ITEM 16B. CODE OF ETHICS**

At its meeting on February 18, 2004, the Board of Directors adopted a 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

During the fiscal years ended December 31, 2009 and 2008, fees for services provided by Ernst & Young Audit and KPMG were as follows:

(M€)	KPM Year Ended De	Ernst & Young Audit Year Ended December 31,		
	2009	2008	2009	2008
Audit Fees	16.0	15.9	17.7	17.7
Audit-Related Fees <sup>(a)</sup>	2.9	3.4	0.8	1.0
Tax Fees <sup>(b)</sup>	1.2	1.2	1.4	1.8
All Other Fees <sup>(c)</sup>	0.3	0.2	0.1	0.0
Total	20.4	20.7	20.0	20.5

(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.

### 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 preapproved 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 2009, 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.

### 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 Purchased	Average Price Paid Per Share (€)	Total Number Of Shares Purchased, As Part Of Publicly Announced Plans Or Programs <sup>(a)</sup>	Maximum Number Of Shares That May Yet Be Purchased Under The Plans Or Programs <sup>(b)</sup>
January 2009	—	—	_	94,103,139
February 2009	—	—	_	94,121,817
March 2009	—	—	—	94,156,488
April 2009	—	—	_	94,157,270
May 2009	—	—	_	94,186,799
June 2009	—	—	—	94,207,296
July 2009	—	_	_	118,852,285
August 2009	—	—	—	118,858,302
September 2009	—	—	_	118,890,718
October 2009	—	_	_	118,927,422
November 2009	—	—	_	119,044,527
December 2009	—	_	_	119,435,098
January 2010	—	—	_	119,798,107
February 2010	—	—	_	119,813,214

(a) The shareholders' meeting of May 15, 2009, cancelled and replaced the previous resolution from the shareholders' meeting of May 19, 2008, authorizing the Board of Directors to trade in the Company's own shares on the market for a period of 18 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.
 (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.

### **ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT**

Not applicable.

## **ITEM 16G. CORPORATE GOVERNANCE**

Summary of Significant Differences between French Corporate Governance Practices and the NYSE's Corporate Governance Standards

### Overview

The following paragraphs provide a brief, general summary of significant differences between the corporate governance standards followed by TOTAL under French law and guidelines, and those required by the listing standards of the New York Stock Exchange (the "NYSE") for U.S. companies that have common stock listed on the NYSE.

The principal sources of corporate governance standards in France are the French Commercial Code (Code de Commerce) and the French Financial and Monetary Code (Code monétaire et financier), both as amended inter alia in August 2003 by the French Financial Security Act (Loi de sécurité financière), as well as a number of general recommendations and guidelines on corporate governance, most notably the Corporate Governance Code for Listed Companies published in 2008 by the principal French business confederations, the Association Française des Entreprises Privées (AFEP) and the Mouvement des Entreprises de France (MEDEF) (the "AFEP-MEDEF Code"). 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. The French Financial Security Act 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).

### **Composition of Board of Directors; Independence**

The NYSE listing standards provide that the board of directors of a U.S. listed company must consist of a majority of independent directors and that certain committees must consist solely 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 indirectly. 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, unless the board establishes an audit committee, as described below, and the functions

135

of board chairman and chief executive officer are frequently performed by the same person. The AFEP- MEDEF Code recommends, however, that 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. The AFEP-MEDEF Code states that a director is independent when "he or she has no relationship of any nature with the company, its group or the management of either, that may compromise the exercise of his or her freedom of judgment." The Code also enumerates specific criteria for determining independence, which are on the whole consistent with the goals of the NYSE's rules although the specific tests under the two standards may vary on some points.

Based on the proposal of TOTAL's Nominating & Corporate Governance Committee, the Board of Directors of TOTAL examined the independence of the Company's directors on February 10, 2010, and considered that all of the directors of the Company are independent, with the exceptions of Mr. Desmarest, Chairman of the Board of Directors, Mr. de Margerie, Chief Executive Officer of the Company, and Mrs. Lauvergeon, Chairperson of the Management Board of the company where Mr. Desmarest was a member of the Supervisory Board at that time.<sup>(1)</sup>

### **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.

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

The AFEP-MEDEF Code recommends, however, that the board of directors set up, in addition to an audit committee, a nominating committee and a compensation committee, indicating that the nominating and compensation committees may form one committee. 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 nominating committee be independent directors.

TOTAL has established an Audit Committee, a Nominating & Corporate Governance Committee and a Compensation Committee, and considers all of the members of these committees to be independent with

<sup>1.</sup> Mr. Desmarest was a member of the Supervisory Board of Areva until March 4, 2010.

the exception of Mr. Desmarest, who chairs the Nominating & Corporate Governance Committee. For the membership of each committee, see "Item 6. Corporate Governance". Each of these committees has a charter that defines the scope of its activity.

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 requires the board of directors of companies listed in France either to establish an audit committee or to perform itself the functions of an audit committee. If the board appoints an audit committee, at least one member must be an independent director and must be competent in finance or accounting.

Pursuant to French law and the AFEP-MEDEF Code, the audit committee is responsible for, among other things, examining the company's risk exposure and material off-balance sheet commitments and the scope of consolidation, reviewing the financial statements, monitoring the efficiency of internal control procedures, managing the process of selecting statutory auditors, expressing an opinion on the amount of their fees and monitoring compliance with rules designed to ensure auditor independence, regularly interviewing statutory auditors without executive management present and calling upon outside experts if necessary.

Although the audit committee requirements under French law and recommendations under the AFEP-MEDEF Code are less detailed than those contained in the NYSE listing standards, the NYSE listing standards, French law and the AFEP-MEDEF Code share the goal of establishing a system for overseeing the company's accounting that is independent from management and that ensures auditor independence. As a result, they address similar topics, and there is some overlap.

For the specific tasks performed by the Audit Committee of TOTAL that exceed those required by French law and those recommended by the AFEP-MEDEF Code, see "Item 6. Corporate Governance — Audit Committee".

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 auditor. French law requires French companies that publish consolidated financial statements, such as TOTAL, 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' meeting. In making its decision, the shareholders' meeting may rely on proposals submitted to it by the board of directors, the decision of the latter being taken upon consultation with the audit committee. The shareholders' meeting elects the auditors for an audit period of six fiscal years. The auditors may only be dismissed by a court and only on grounds of professional negligence or incapacity to perform their mission.

#### **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 perform an annual review of its operation and that a formal evaluation, possibly with the assistance of an outside consultant, be undertaken every three years, which for TOTAL took place end of 2009, and that shareholders be informed each year in the annual report of the evaluations.

#### 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 is no similar requirement or recommendation under French law. However, 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 discussion of the code of ethics. Adopted by TOTAL, see "Item 6. Corporate Governance" and "Item 16B. Code of Ethics".

S-1

## **Table of Contents**

## **ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

## **ITEM 18. FINANCIAL STATEMENTS**

The following financial statements, together with the report of Ernst & Young Audit and KPMG S.A. thereon, are held as part of this annual report.

	Page
Report of Independent Registered Public Accounting Firms on the Consolidated Financial Statements	F-1
Report of Independent Registered Public Accounting Firms on the Internal Control over Financial Reporting	F-2
Consolidated Statement of Income for the Years Ended December 31, 2009, 2008 and 2007	F-3
Consolidated Balance Sheet at December 31, 2009, 2008 and 2007	F-4
Consolidated Statement of Cash Flow for the Years Ended December 31, 2009, 2008 and 2007	F-5
Consolidated Statement of Changes in Shareholders' Equity for the years ended December 31, 2009, 2008 and 2007	F-6
Consolidated Statement of Comprehensive Income	F-7
Notes to the Consolidated Financial Statements	F-8

#### Supplemental Oil and Gas Information (Unaudited)

Schedules have been omitted since they are not required under the applicable instructions or the substance of the required information is shown in the financial statements.

137

## **ITEM 19. EXHIBITS**

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

- 1. Bylaws (*Statuts*) of TOTAL S.A. (as amended through December 31, 2009)
- 8. List of Subsidiaries (see Note 35 to the Consolidated Financial Statements included in this Annual Report)
- 11. Code of Ethics (incorporated by reference to the Company's Annual Report on Form 20-F for the year ended December 31, 2005)
- 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 Consent of ERNST & YOUNG AUDIT and of KPMG S.A.

138

## 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/ CHRISTOPHE DE MARGERIE Name: Christophe de Margerie Title: Chief Executive Officer

Date: April 1, 2010

139

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

Year ended December 31, 2009

The Board of Directors and Shareholders TOTAL S.A.

We have audited the accompanying consolidated balance sheets of TOTAL S.A. and subsidiaries (the "Company") as of December 31, 2009, 2008 and 2007, and the related consolidated statements of income, cash flows, changes in shareholders' equity and comprehensive income for each of the three years in the period ended December 31, 2009. 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 at December 31, 2009, 2008 and 2007, and the consolidated results of its operations and its consolidated cash flows for each of the three years in the period ended December 31, 2009, in conformity with International Financial Reporting Standards as adopted by the European Union and in conformity with International Financial Reporting Standards Board.

As discussed in the Introduction of the Notes to the consolidated financial statements, the Company has changed its method for reserve estimates due to the adoption of the Accounting Standards Update No. 2010-03, *Oil and Gas Reserve Estimation and Disclosures*, effective for annual reporting periods ended on or after December 31, 2009.

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, 2009, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria) and our report dated March 8, 2010 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Paris La Défense, March 8, 2010

KPMG AUDIT A division of KPMG S.A. /s/ JAY NIRSIMLOO Jay Nirsimloo Partner ERNST & YOUNG Audit

/s/ PASCAL MACIOCE Pascal Macioce Partner

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

Year ended December 31, 2009

The Board of Directors and Shareholders TOTAL S.A.

We have audited TOTAL S.A. and subsidiaries' ("the Company") internal control over financial reporting as of December 31, 2009, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). 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.

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, 2009, based on the COSO criteria.

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, 2009, 2008 and 2007 and the related consolidated statements of income, cash flows, changes in shareholders' equity and comprehensive income for each of the three years in the period ended December 31, 2009, and our report dated March 8, 2010 expressed an unqualified opinion on those consolidated financial statements.

Paris La Défense, March 8, 2010

> KPMG Audit A division of KPMG S.A. /s/ JAY NIRSIMLOO Jay Nirsimloo Partner

ERNST & YOUNG Audit

/s/ PASCAL MACIOCE Pascal Macioce Partner

## CONSOLIDATED STATEMENT OF INCOME

## TOTAL

For the year ended December 31, (€ million) <sup>(a)</sup>		2009	2008	2007
Sales Excise taxes	(Notes 4 & 5)	<b>131,327</b> (19,174)	<b>179,976</b> (19,645)	<b>158,752</b> (21,928)
Revenues from sales		112,153	160,331	136,824
Purchases net of inventory variation	(Note 6)	(71,058)	(111,024)	(87,807)
Other operating expenses	(Note 6)	(18,591)	(19,101)	(17,414)
Exploration costs	(Note 6)	(698)	(764)	(877)
Depreciation, depletion and amortization of tangible assets and mineral interests Other income	(Note 7)	(6,682) 314	(5,755) 369	(5,425) 674
Other expense	(Note 7)	(600)	(554)	(470)
Financial interest on debt		. ,	. ,	. ,
Financial income from marketable securities & cash equivalents		(530) 132	(1,000) 473	(1,783) 1,244
Cost of net debt	(Note 29)	(398)	(527)	(539)
Other financial income	(Note 8)	643	728	643
Other financial expense	(Note 8)	(345)	(325)	(274)
Equity in income (loss) of affiliates	(Note 12)	1,642	1,721	1,775
Income taxes	(Note 9)	(7,751)	(14,146)	(13,575)
Consolidated net income		8,629	10,953	13,535
Group share		8,447	10,590	13,181
Minority interests		182	363	354
Earnings per share (€)		3.79	4.74	5.84
Fully-diluted earnings per share (€)		3.78	4.71	5.80

(a) Except for per share amounts.

## CONSOLIDATED BALANCE SHEET

TOTAL

is of December 31, (€million) SSETS Jon-current assets trangible assets, net (Notes 5 & troperty, plant and equipment, net (Notes 5 & troperty, plant and equipment, net (Note 5 & (Note 12) ther investments of non-current financial debt (Note 12) ther non-current assets (Note 12) ther non-current assets turrent assets turrent assets turrent assets (Note 12) ther current assets (Note 14) otal non-current assets (Note 15) cocounts receivable, net (Note 16) ther current assets (Note 16) ther current assets (Note 16) turrent financial assets (Note 20) cash and cash equivalents (Note 20) total assets total assets total assets tareholders' equity ommon shares aid-in surplus and retained earnings currency translation adjustment reasury shares total shareholders' equity - Group share (Note 17) linority interests total shareholders' equity toral shareholders' equity total shareholders' equi		2008 5,341 46,142 14,668 1,165 892 3,044 71,252 9,642 187 12,321 47,058 118,310 5,930 52,947	2007 4,650 41,467 15,280 1,291 460 2,155 <b>65,303</b> 13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b>
intangible assets, net       (Notes 5 & troperty, plant and equipment, net       (Note 12)         ther investments       (Note 12)       (Note 13)       (Note 13)         ther investments of non-current financial debt       (Note 12)       (Note 13)         ther non-current assets       (Note 14)       (Note 20)         total non-current assets       (Note 15)       (Note 16)         total non-current assets       (Note 16)       (Note 16)         total non-current assets       (Note 16)       (Note 20)         counts receivable, net       (Note 20)       (Note 20)         ther current assets       (Note 20)       (Note 20)         courrent assets       (Note 20)       (Note 20)         courrent assets       (Note 20)       (Note 20)         cotal current assets       (Note 20)       (Note 20)         cotal current assets       (Note 20)       (Note 20)         cotal current assets       (Note 20)       (Note 20)         total current assets       (Note 20)       (Note 20)         total assets       (Note 20)       (Note 20)         total se	1) 51,590 13,624 1,162 1,025 3,081 77,996 13,867 15,719 8,198 311 11,662 49,757 127,753 5,871	46,142 14,668 1,165 892 3,044 <b>71,252</b> 9,621 15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	41,467 15,280 1,291 460 2,155 <b>65,303</b> 13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
Intangible assets, net (Notes 5 & (Note 12)))). (Note 12) (Note 12) (Note 12) (Note 13) (Note 13) (Note 14) (Note 14) (Note 14) (Note 14) (Note 15) (Note 14) (Note 15) (Note 15) (Note 15) (Note 15) (Note 15) (Note 16) (Note 16) (Note 16) (Note 20) (Note 16) (Note 20) (Not	1) 51,590 13,624 1,162 1,025 3,081 77,996 13,867 15,719 8,198 311 11,662 49,757 127,753 5,871	46,142 14,668 1,165 892 3,044 <b>71,252</b> 9,621 15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	41,467 15,280 1,291 460 2,155 <b>65,303</b> 13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
Interperty, plant and equipment, net (Notes 5 & (Notes 5 & (Notes 5 & (Notes 7 & (Notes	1) 51,590 13,624 1,162 1,025 3,081 77,996 13,867 15,719 8,198 311 11,662 49,757 127,753 5,871	46,142 14,668 1,165 892 3,044 <b>71,252</b> 9,621 15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	41,467 15,280 1,291 460 2,155 <b>65,303</b> 13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
quity affiliates: investments and loans       (Note 12)         ther investments       (Note 13)         ledging instruments of non-current financial debt       (Note 20)         otal non-current assets       (Note 14)         otal non-current assets       (Note 15)         current assets       (Note 15)         iventories, net       (Note 16)         iventories, net       (Note 16)         iventorial assets       (Note 20)         iventorial assets       (Note 15)         iventorial assets       (Note 16)         iventorial assets       (Note 20)         iventorial assets       (Note 20)         iventorial assets       (Note 15)         iventorial assets       (Note 20)         idal non-current assets       (Note 20)         idal assets       (Note 20)         IABILITIES & SHAREHOLDERS' EQUITY       Inarcholders' equity         inarcholders' equity       Common shares         iaid-in surplus and retained earnings       Europeration adjustment         reasury shares       Cola shareholders' equity - Group share         iotal shareholders' equity - Group share       (Note 17)         linority interests       Cola shareholders' equity	13,624 1,162 1,025 3,081 <b>77,996</b> 13,867 15,719 8,198 311 11,662 <b>49,757</b> <b>127,753</b> 5,871	14,668 1,165 892 3,044 <b>71,252</b> 9,621 15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	15,280 1,291 460 2,155 <b>65,303</b> 13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
ther investments (Note 13) (Note 13) (Note 20) (Note 15) (Note 15) (Note 15) (Note 16) (Note 16) (Note 20) (Note 21) (Note 20) (Note 20)	1,162 1,025 3,081 13,867 15,719 8,198 311 11,662 49,757 127,753 5,871	1,165 892 3,044 <b>71,252</b> 9,621 15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	1,291 460 2,155 <b>65,303</b> 13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b>
ledging instruments of non-current financial debt       (Note 20)         otal non-current assets       (Note 14)         otal non-current assets       (Note 15)         courrent assets       (Note 15)         overnories, net       (Note 16)         otal courrent assets       (Note 16)         other current assets       (Note 16)         ourrent financial assets       (Note 20)         otal cash equivalents       (Note 20)         otal current assets       (Note 20)         otal assets       IABILITIES & SHAREHOLDERS' EQUITY         common shares       (Note 17)         common shares       (Note 17)         courrent reasury shares       (Note 17)         otal shareholders' equity - Group share       (Note 17)         linority interests       (Note 17)         otal shareholders' equity       Group share         otal shareholders' equity       Grou	1,025 3,081 <b>77,996</b> 13,867 15,719 8,198 311 11,662 <b>49,757</b> <b>127,753</b> 5,871	892 3,044 <b>71,252</b> 9,621 15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	460 2,155 65,303 13,851 19,129 8,006 1,264 5,988 48,238 113,541 5,989
Other non-current assets       (Note 14         iotal non-current assets       (Note 15         courrent assets       (Note 15)         oventories, net       (Note 16)         courrent assets       (Note 16)         courrent assets       (Note 16)         courrent assets       (Note 20)         courrent assets       (Note 20)         courrent assets       (Note 27)         iotal assets       (Note 27)         common shares       (Note 27)         iaid-in surplus and retained earnings       (Note 17)         courrent assets       (Note 17)         iotal shareholders' equity - Group share       (Note 17)         inority interests       (Note 17)         iotal shareholders' equity       Group share         iotal shareholders' eq	3,081 77,996 13,867 15,719 8,198 311 11,662 49,757 127,753 5,871	3,044 71,252 9,621 15,287 9,642 187 12,321 47,058 118,310 5,930	2,155 65,303 13,851 19,129 8,006 1,264 5,988 48,238 113,541 5,989
otal non-current assets         current assets         ourrent assets         ourrent assets         ccounts receivable, net         (Note 15         ccounts receivable, net         (Note 16         (Note 16         (Note 16         (Note 16         Current assets         (Note 20         cash and cash equivalents         (Note 20         otal current assets         otal current assets         IABILITIES & SHAREHOLDERS' EQUITY         hareholders' equity         common shares         raid-in surplus and retained earnings         currency translation adjustment         reasury shares         otal shareholders' equity - Group share         (Note 17         linority interests         otal shareholders' equity	77,996 13,867 15,719 8,198 311 11,662 49,757 127,753 5,871	71,252 9,621 15,287 9,642 187 12,321 47,058 118,310 5,930	65,303 13,851 19,129 8,006 1,264 5,988 48,238 113,541 5,989
iurrent assets iventories, net (Note 15 iccounts receivable, net (Note 15 iccounts receivable, net (Note 16 ither current assets (Note 20 icash and cash equivalents (Note 20 icash assets (Note 20 icash asse	13,867 15,719 8,198 311 11,662 <b>49,757</b> <b>127,753</b> 5,871	9,621 15,287 9,642 187 12,321 47,058 118,310	13,851 19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
Inventories, net (Note 15 cccounts receivable, net (Note 16 Other current assets (Note 20 Cash and cash equivalents (Note 20 Cotal current assets (Note 20 Cotal current assets (Note 27 Cotal current assets IABILITIES & SHAREHOLDERS' EQUITY Hareholders' equity Common shares raid-in surplus and retained earnings raid-in	15,719 8,198 311 <u>11,662</u> <b>49,757</b> <b>127,753</b>	15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
ccounts receivable, net     (Note 16)       ther current assets     (Note 16)       current financial assets     (Note 20)       cash and cash equivalents     (Note 20)       otal current assets     (Note 27)       otal assets     (Note 27)       ital is surplus and retained earnings     (Note 27)       ital assets     (Note 17)       ital assets     (Note 17)       ital is hareholders' equity     (Note 17)       ital shareholders' equity     (Note 17)	15,719 8,198 311 <u>11,662</u> <b>49,757</b> <b>127,753</b>	15,287 9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	19,129 8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
Other current assets       (Note 16)         current financial assets       (Note 20)         cash and cash equivalents       (Note 20)         otal current assets       (Note 27)         otal current assets       (Note 27)         otal assets       (Note 27)         IABILITIES & SHAREHOLDERS' EQUITY       (Note 27)         common shares       (Note 17)         common shares       (Note 17)         correct yranslation adjustment       (Note 17)         treasury shares       (Note 17)         total shareholders' equity       (Note 17)	8,198 311 11,662 <b>49,757</b> <b>127,753</b> 5,871	9,642 187 12,321 <b>47,058</b> <b>118,310</b> 5,930	8,006 1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
current financial assets       (Note 20)         cash and cash equivalents       (Note 20)         otal current assets       (Note 27)         otal assets       (Note 27)         IABILITIES & SHAREHOLDERS' EQUITY       (Note 27)         hareholders' equity       (Note 27)         common shares       (Note 27)         cali in surplus and retained earnings       (Note 27)         currency translation adjustment       (Note 17)         reasury shares       (Note 17)         linority interests       (Note 17)         total shareholders' equity       (Note 17)	311 11,662 <b>49,757</b> <b>127,753</b> 5,871	187 12,321 <b>47,058</b> <b>118,310</b> 5,930	1,264 5,988 <b>48,238</b> <b>113,541</b> 5,989
cash and cash equivalents     (Note 27)       iotal current assets     iotal assets       IABILITIES & SHAREHOLDERS' EQUITY	11,662 49,757 127,753 5,871	12,321 47,058 118,310 5,930	5,988 48,238 113,541 5,989
otal current assets         otal assets         IABILITIES & SHAREHOLDERS' EQUITY         shareholders' equity         common shares         'aid-in surplus and retained earnings         'urrency translation adjustment         reasury shares         'otal shareholders' equity - Group share         (Note 17'         linority interests         'otal shareholders' equity	<b>49,757</b> <b>127,753</b> 5,871	<b>47,058</b> <b>118,310</b> 5,930	<b>48,238</b> <b>113,541</b> 5,989
ordal assets IABILITIES & SHAREHOLDERS' EQUITY shareholders' equity common shares laid-in surplus and retained earnings currency translation adjustment reasury shares rotal shareholders' equity - Group share (Note 17 linority interests rotal shareholders' equity	<b>127,753</b> 5,871	<b>118,310</b> 5,930	<b>113,541</b> 5,989
IABILITIES & SHAREHOLDERS' EQUITY         whareholders' equity         common shares         aid-in surplus and retained earnings         currency translation adjustment         reasury shares         fotal shareholders' equity - Group share         inority interests         fotal shareholders' equity	5,871	5,930	5,989
hareholders' equity common shares aid-in surplus and retained earnings currency translation adjustment reasury shares otal shareholders' equity - Group share (Note 17) linority interests otal shareholders' equity			
common shares aid-in surplus and retained earnings currency translation adjustment reasury shares otal shareholders' equity - Group share (Note 17) linority interests otal shareholders' equity			
aid-in surplus and retained earnings currency translation adjustment reasury shares iotal shareholders' equity - Group share (Note 17) linority interests iotal shareholders' equity			
Currency translation adjustment reasury shares iotal shareholders' equity - Group share (Note 17) linority interests iotal shareholders' equity	55 372	E0 047	
reasury shares otal shareholders' equity - Group share (Note 17 linority interests otal shareholders' equity			48,797
otal shareholders' equity - Group share     (Note 17)       linority interests     (Note 17)       otal shareholders' equity     (Note 17)	(5,069)		(4,396)
linority interests otal shareholders' equity	(3,622)	(5,009)	(5,532)
otal shareholders' equity	52,552	48,992	44,858
	987	958	842
on ourrent lightlitics	53,539	49,950	45,700
Deferred income taxes (Note 9)	8,948	7,973	7,933
mployee benefits (Note 18)	2,040	2,011	2,527
rovisions and other non-current liabilities (Note 19)	9,381	7,858	6,843
otal non-current liabilities	20,369	17,842	17,303
Ion-current financial debt (Note 20	19,437	16,191	14,876
current liabilities			
ccounts payable	15,383	14,815	18,183
ther creditors and accrued liabilities (Note 21	11,908	11,632	12,806
Current borrowings (Note 20)	6,994	7,722	4,613
ther current financial liabilities (Note 20)	123	158	60
oral current liabilities (1000 20		34,327	35,662
otal liabilities and shareholders' equity	34,408		

## CONSOLIDATED STATEMENT OF CASH FLOW

## TOTAL

(Note 27)			
For the year ended December 31, (€million)	2009	2008	2007
CASH FLOW FROM OPERATING ACTIVITIES			
Consolidated net income	8,629	10,953	13,535
Depreciation, depletion and amortization	7,107	6,197	5,946
Non-current liabilities, valuation allowances, and deferred taxes	441	(150)	826
Impact of coverage of pension benefit plans	_	(505)	_
(Gains) losses on disposals of assets	(200)	(257)	(639)
Undistributed affiliates' equity earnings	(378)	(311)	(821)
(Increase) decrease in working capital	(3,316)	2,571	(1,476)
Other changes, net	77	171	315
Cash flow from operating activities	12,360	18,669	17,686
CASH FLOW USED IN INVESTING ACTIVITIES			
Intangible assets and property, plant and equipment additions (	11,849)	(11,861)	(10,549)
Acquisitions of subsidiaries, net of cash acquired	(160)	(559)	(20)
Investments in equity affiliates and other securities	(400)	(416)	(351)
Increase in non-current loans	(940)	(804)	(802)
Total expenditures ()	13,349)	(13,640)	(11,722)
Proceeds from disposals of intangible assets and property, plant and equipment	138	130	569
Proceeds from disposals of subsidiaries, net of cash sold	_	88	5
Proceeds from disposals of non-current investments	2,525	1,233	527
Repayment of non-current loans	418	1,134	455
Total divestments	3,081	2,585	1,556
Cash flow used in investing activities (	10,268)	(11,055)	(10,166)
CASH FLOW USED IN FINANCING ACTIVITIES			
Issuance (repayment) of shares:			
- Parent company shareholders	41	262	89
- Treasury shares	22	(1,189)	(1,526)
- Minority shareholders	—	(4)	2
Dividends paid:			
- Parent company shareholders	(5,086)	(4,945)	(4,510)
- Minority shareholders	(189)	(213)	(228)
Net issuance (repayment) of non-current debt	5,522	3,009	3,220
Increase (decrease) in current borrowings	(3,124)	1,437	(2,654)
Increase (decrease) in current financial assets and liabilities	(54)	850	2,265
Cash flow used in financing activities	(2,868)	(793)	(3,342)
Net increase (decrease) in cash and cash equivalents	(776)	6,821	4,178
Effect of exchange rates	117	(488)	(683)
Cash and cash equivalents at the beginning of the period	12,321	5,988	2,493
Cash and cash equivalents at the end of the period	11,662	12,321	5,988

# CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

#### TOTAL Paid-in surplus Common shares issued **Treasury shares** Shareholders Total and Currency Minority shareholders' retained translation equity -(€ million) Group share Number Amount earnings adjustment Number Amount interests equity 41,148 As of January 1, 2007 2,425,767,953 6,064 41,460 (1,383)(161,200,707) (5,820) 40,321 827 Net income 2007 13,181 13,181 354 13,535 Other comprehensive income (Note 117 (3,013) (2,896)(111)(3,007)17) Comprehensive income 13,298 10.285 (3.013)243 10.528 Dividend (4,510)(4, 510)(228)(4,738) \_ \_\_\_\_ Issuance of common shares (Note 17) 2,769,144 7 82 89 89 Purchase of treasury shares \_ (32,387,355) (1,787)(1,787)(1,787)\_ Sale of treasury shares<sup>(a)</sup> (77) 9,161,830 264 264 341 Share-based payments (Note 25) 196 196 196 Other operations with minority interests Share cancellation (Note 17) (33,005,000)(82) (1,652)33,005,000 1,734 (5,748)(228) (5,976) Transactions with shareholders (30.235.856 (75) (5,961)9.779.475 288 As of December 31, 2007 2,395,532,097 5,989 48,797 (4, 396)(151,421,232) (5,532) 44,858 842 45,700 Net income 2008 10,590 363 10,953 10,590 Other comprehensive income (Note (77<u>2</u>) (480) (738) (258)(34) 17) Comprehensive income 10,332 (480) \_ \_ 9,852 329 10.181 Dividend (4,945)| (4,945)(213) (5, 158)\_ 6,275,977 16 262 Issuance of common shares (Note 17) 246 262 (1,339) \_ (27,600,000)(1, 339)(1, 339)Purchase of treasury shares \_ Sale of treasury shares(a) (71) 5,939,137 150 150 221 Share-based payments (Note 25) 154 154 154 Other operations with minority interests (30,000,000) (1,566) 30,000,000 Share cancellation (Note 17) (75) 1,641 (213) Transactions with shareholders (23,724,023)(59) (6,182) 8,339,137 523 (5,718)(5,931) 2,371,808,074 As of December 31, 2008 5,930 52,947 (4,876) (143,082,095) (5,009) 48,992 958 49,950 Net income 2009 8,447 8,447 182 8.629 Other comprehensive income (Note 60 246 (193)53 17) 113 **Comprehensive income** 8,693 (193) 8,500 242 8,742 Dividend (5,086)(5,086)\_ (189) (5,275)1,414,810 3 Issuance of common shares (Note 17) 38 41 41 \_ Purchase of treasury shares \_ \_ Sale of treasury shares(a) (143)\_ 2,874,905 165 22 22 \_ \_ \_ Share-based payments (Note 25) 106 106 106 Other operations with minority interests (23)(23)(24) (47) 1,222 Share cancellation (Note 17) (24,800,000)(62) 24,800,000 (1.160)Transactions with shareholders (23, 385, 190)(59) (6, 268)27,674,905 1,387 (4,940)(213)(5, 153)As of December 31, 2009 2,348,422,884 5,871 55,372 (5,069) (115,407,190) (3,622) 52,552 987 53,539

(a) Treasury shares related to the stock option purchase plans and restricted stock grants.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME<sup>(a)</sup>

TOTAL

For the year ended December 31, (€ million)	2009	2008	2007
Consolidated net income	8,629	10,953	13,535
Other comprehensive income			
Currency translation adjustment	(244)	(722)	(2,703)
Available for sale financial assets	38	(254)	111
Cash flow hedge	128	_	_
Share of other comprehensive income of associates, net amount	234	173	(406)
Other	(5)	1	(3)
Tax effect	(38)	30	(6)
Total other comprehensive income (net amount) (note 17)	113	(772)	(3,007)
Comprehensive income	8,742	10,181	10,528
- Group share	8,500	9,852	10,285
- Minority interests	242	329	243

(a) In accordance with revised IAS 1, applicable from January 1, 2009.

## TOTAL

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

On February 10, 2010, the Board of Directors established and authorized the publication of the Consolidated Financial Statements of TOTAL S.A. for the year ended December 31, 2009, which will be submitted for approval to the shareholders' meeting to be held on May 21, 2010.

#### INTRODUCTION

The Consolidated Financial Statements of TOTAL S.A. and its subsidiaries (the Group) have been prepared on the basis of IFRS (International Financial Reporting Standards) as adopted by the European Union and IFRS as issued by the IASB (International Accounting Standard Board) as of December 31, 2009.

The accounting principles applied in the Consolidated Financial Statements as of December 31, 2009 were the same as those that were used as of December 31, 2008 except for amendments and interpretations of IFRS which were mandatory for the periods beginning after January 1, 2009 (and not early adopted). Their adoption has no impact on the Consolidated Financial Statements as of December 31, 2009.

Among these new standards or interpretations, it should be noted that the revised version of IAS 1 "Presentation of financial statements", effective for annual periods beginning on or after January 1, 2009, resulted in the following:

 presentation of the consolidated statement of comprehensive income; and
 information on other comprehensive income presented in Note 17 to the Consolidated Financial Statements.

In addition, the IASB issued in 2009 amendments to standard IFRS 7 "Financial instruments: disclosures" which introduce new disclosure requirements, effective for annual periods beginning on or after January 1, 2009. In particular, financial instruments shall be presented according to the fair value measurement method used (three-level hierarchy described in Note 1 M(v) to the Consolidated Financial Statements).

Lastly, the Group has applied the new definitions and the new method of estimating oil & gas reserves resulting from U.S. Accounting Standards Update No. 2010-03, "Oil and Gas Reserve Estimation and

Disclosures", effective for annual reporting periods ended on or after December 31, 2009. The adoption of these new rules had no significant impact on oil & gas reserve estimates and no significant impact on the Consolidated Financial Statements.

The preparation of financial statements in accordance with IFRS requires the management to make estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of preparation of the financial statements and reported income and expenses for the period. The management reviews these estimates and assumptions on an ongoing basis, by reference to past experience and various other factors considered as reasonable which form the basis for assessing the carrying amount of assets and liabilities. Actual results may differ significantly from these estimates, if different assumptions or circumstances apply. These judgments and estimates relate principally to the application of the successful efforts method for the oil and gas accounting, the valuation of long-lived assets, the provisions for asset retirement blenefits and the income tax computation.

Furthermore, where the accounting treatment of a specific transaction is not addressed by any accounting standard or interpretation, the management applies its judgment to define and apply accounting policies that will lead to relevant and reliable information, so that the financial statements:

- give a true and fair view of the Group's financial position, financial performance and cash flows;
- reflect the substance of transactions;
- are neutral;
- are prepared on a prudent basis; and
   are complete in all material aspects.

## 1) ACCOUNTING POLICIES

Pursuant to the accrual basis of accounting followed by the Group, the financial statements reflect the effects of transactions and other events when they occur. Assets and liabilities such as property, plant and equipment and intangible assets are usually measured at amortized cost. Financial assets and liabilities are usually measured at fair value.

Accounting policies used by the Group are described below:

#### A) PRINCIPLES OF CONSOLIDATION

Subsidiaries that are directly controlled by the parent company or indirectly controlled by other consolidated subsidiaries are fully consolidated.

Investments in jointly-controlled entities are proportionately consolidated.

Investments in associates, in which the Group has significant influence, are accounted for by the equity method. Significant influence is presumed when the Group holds, directly or indirectly (e.g. through subsidiaries), 20% or more of the voting rights.

Companies in which ownership interest is less than 20%, but over which the Company is deemed to exercise significant influence, are also accounted for by the equity method.

All significant intercompany balances, transactions and income have been eliminated.

#### **B) BUSINESS COMBINATIONS**

Business combinations are accounted for using the purchase method. This method implies the recognition of the assets, liabilities and contingent liabilities of the companies acquired by the Group at their fair value.

The difference between the acquisition cost of the shares and fair value of the acquired share of the assets, liabilities and contingent liabilities identified on the acquisition date is recorded as goodwill.

If the cost of an acquisition is less than the fair value of net assets of the subsidiary acquired, an additional analysis is performed on the identification and valuation of the identifiable elements of the assets and liabilities. Any residual negative goodwill is recorded as income.

The analysis of goodwill is finalized within one year from the acquisition date.

#### **C) FOREIGN CURRENCY TRANSLATION**

The financial statements of subsidiaries are prepared in the currency that most clearly reflects their business environment. This is referred to as their functional currency.

#### (i) Monetary transactions

Transactions denominated in foreign currencies are translated at the exchange rate on the transaction date. At each balance sheet date, monetary assets and liabilities are translated at the closing rate and the resulting exchange differences are recognized in "Other income" or "Other expenses".

#### (ii) Translation of financial statements denominated in foreign currencies

Assets and liabilities of foreign entities are translated into euros on the basis of the exchange rates at the end of the period. The income and cash flow statements are translated using the average exchange rates for the period. Foreign exchange differences resulting from such translations are either recorded in shareholders' equity under "Currency translation adjustments" (for the Group share) or under "Minority interests" (for the minority share) as deemed appropriate.

#### D) SALES AND REVENUES FROM SALES

Revenues from sales are recognized when the significant risks and rewards of ownership have been passed to the buyer and the amount can be reasonably measured. Sales figures include excise taxes collected by the Group within the course of its oil distribution operations. Excise taxes are deducted from sales in order to obtain the "Revenues from sales" indicator.

Revenues from sales of crude oil, natural gas and coal are recorded upon transfer of title, according to the terms of the sales contracts.

Revenues from the production of crude oil and natural gas properties, in which the Group has an interest with other producers, are recognized based on actual volumes sold during the period. Any difference between volumes sold and entitlement volumes, based on the Group net working interest, are recognized as "Crude oil and natural gas inventories" or "Accounts receivable, net" or "Accounts payable", as appropriate.

Revenues from gas transport are recognized when services are rendered. These revenues are based on the quantities transported and measured according to procedures defined in each service contract.

Revenues from sales of electricity are recorded upon transfer of title, according to the terms of the related contracts.

Revenues from services are recognized when the services have been rendered.

Shipping revenues and expenses from time-charter activities are recognized on a pro rata basis over a period that commences upon the unloading of the previous voyage and terminates upon the unloading of the current voyage. Shipping revenue recognition starts only when a charter has been agreed to by both the Group and the customer.

Oil and gas sales are inclusive of quantities delivered that represent production royalties and taxes, when paid in cash, and outside the United States and Canada.

Certain transactions within the trading activities (contracts involving quantities that are purchased to third parties then resold to third parties) are shown at their net value in sales.

Exchanges of crude oil and petroleum products within normal trading activities do not generate any income and therefore these flows are shown at their net value in both the statement of income and the balance sheet.

#### E) SHARE-BASED PAYMENTS

The Group may grant employees stock options, create employee share purchase plans and offer its employees the opportunity to subscribe to reserved capital increases. These employee benefits are recognized as expenses with a corresponding credit to shareholders' equity.

The expense is equal to the fair value of the instruments granted. The fair value of the options is calculated using the Black-Scholes model at the grant date. The expense is recognized on a straight-line basis between the grant date and vesting date.

For restricted share plans, the expense is calculated using the market price at the grant date after deducting the expected distribution rate during the vesting period.

The cost of employee-reserved capital increases is immediately expensed. A discount reduces the expense in order to account for the nontransferability of the shares awarded to the employees over a period of five years.

#### F) INCOME TAXES

Income taxes disclosed in the statement of income include the current tax expenses and the deferred tax expenses.

The Group uses the liability method whereby deferred income taxes are recorded based on the temporary differences between the carrying amounts of assets and liabilities recorded in the balance sheet and their tax bases, and on carry-forwards of unused tax losses and tax credits.

Deferred tax assets and liabilities are measured using the tax rates that have been enacted or substantially enacted at the balance sheet date. The tax rates used depend on the timing of reversals of temporary differences, tax losses and other tax credits. The effect of a change in tax rate is recognized either in the Consolidated Statement of Income or in shareholders' equity depending on the item it relates to.

Deferred tax assets are recognized when future recovery is probable.

Asset retirement obligations and finance leases give rise to the recognition of assets and liabilities for accounting purposes as described in paragraph K "Leases" and paragraph Q "Asset retirement obligations" of this Note. Deferred income taxes resulting from temporary differences between the carrying amounts and tax bases of such assets and liabilities are recognized.

Deferred tax liabilities resulting from temporary differences between the carrying amounts of equity-method investments and their tax bases are recognized. The deferred tax calculation is based on the expected future tax effect (dividend distribution rate or tax rate on the gain or loss upon disposal of these investments).

Taxes paid on the Upstream production are included in operating expenses, including those related to historical concessions held by the Group in the Middle East producing countries.

#### **G) EARNINGS PER SHARE**

Earnings per share is calculated by dividing net income (Group share) by the weighted-average number of common shares outstanding during the period.

Diluted earnings per share is calculated by dividing net income (Group share) by the fully-diluted weighted-average number of common shares outstanding during the period. Treasury shares held by the parent company, TOTAL S.A., and TOTAL shares held by the Group subsidiaries are deducted from consolidated shareholders' equity. These shares are not considered outstanding for purposes of this calculation which also takes into account the dilutive effect of stock options, restricted share grants and capital increases with a subscription period closing after the end of the fiscal year.

The weighted-average number of fully-diluted shares is calculated in accordance with the treasury stock method provided for by IAS 33. The proceeds, which would be recovered in the event of an exercise of rights related to dilutive instruments, are presumed to be a share buyback at the average market price over the period. The number of shares thereby obtained leads to a

reduction in the total number of shares that would result from the exercise of rights.

#### H) OIL AND GAS EXPLORATION AND PRODUCING PROPERTIES

The Group applies IFRS 6 "Exploration for and Evaluation of Mineral Resources". Oil and gas exploration and production properties and assets are accounted for in accordance with the successful efforts method.

#### (i) Exploration costs

Geological and geophysical costs, including seismic surveys for exploration purposes are expensed as incurred.

Mineral interests are capitalized as intangible assets when acquired. These acquired interests are tested for impairment on a regular basis, property-by-property, based on the results of the exploratory activity and the management's evaluation.

In the event of a discovery, the unproved mineral interests are transferred to proved mineral interests at their net book value as soon as proved reserves are booked.

Exploratory wells are tested for impairment on a well-by-well basis and accounted for as follows:

- Costs of exploratory wells which result in proved reserves are capitalized and then depreciated using the unit-of-production method based on proved developed reserves;
- Costs of dry exploratory wells and wells that have not found proved reserves are charged to expense;
- Costs of exploratory wells are temporarily capitalized until a determination is made as to whether the well has found proved reserves if both of the following conditions are met:
  - The well has found a sufficient quantity of reserves to justify its completion as a producing well, if appropriate, assuming that the required capital expenditures are made:
  - required capital expenditures are made;
    The Group is making sufficient progress assessing the reserves and the economic and operating viability of the project. This progress is evaluated on the basis of indicators such as whether additional exploratory works are under way or firmly planned (wells, seismic or significant studies), whether costs are being incurred for development studies and whether the Group is waiting for governmental or other third-party authorization of a proposed project, or availability of capacity on an existing transport or processing facility.

Costs of exploratory wells not meeting these conditions are charged to expense.

#### (ii) Oil and Gas producing assets

Development costs incurred for the drilling of development wells and for the construction of production facilities are capitalized, together with borrowing costs incurred during the period of construction and the present value of estimated costs of asset retirement obligations. The depletion rate is usually equal to the ratio of oil and gas production for the period to proved developed reserves (unit-of-production method).

With respect to production sharing contracts, this computation is based on the portion of production and reserves assigned to the Group taking into account estimates based on the contractual clauses regarding the reimbursement of exploration and development costs (cost oil) as well as the sharing of hydrocarbon rights (profit oil).

Transportation assets are depreciated using the unit-of-production method based on throughput or by using the straight-line method whichever best reflects the economic life of the asset.

Proved mineral interests are depreciated using the unit-of-production method based on proved reserves.

#### I) GOODWILL AND OTHER INTANGIBLE ASSETS

Other intangible assets include goodwill, patents, trademarks, and lease rights.

Intangible assets are carried at cost, after deducting any accumulated depreciation and accumulated impairment losses.

Goodwill in a consolidated subsidiary is calculated as the excess of the cost of shares, including transaction expenses, over the fair value of the Group's share of the net assets at the acquisition date. Goodwill is not amortized but is tested for impairment annually or as soon as there is any indication of impairment (see Note 1 paragraph L to the Consolidated Financial Statements "Impairment of long-lived assets").

In equity affiliates, goodwill is included in the investment book value.

Other intangible assets (except goodwill) have a finite useful life and are amortized on a straight-line basis over 10 to 40 years depending on the useful life of the assets.

#### Research and development

Research costs are charged to expense as incurred.

Development expenses are capitalized when the following can be demonstrated:

- the technical feasibility of the project and the availability of the adequate resources for the completion of the intangible asset;
- the ability of the asset to generate probable future economic benefits;
  the ability to measure reliably the expenditures attributable to the asset;
- and
- the feasibility and intention of the Group to complete the intangible asset and use or sell it.

Advertising costs are charged to expense as incurred.

#### J) OTHER PROPERTY, PLANT AND EQUIPMENT

Other property, plant and equipment are carried at cost, after deducting any accumulated depreciation and accumulated impairment losses. This cost includes borrowing costs directly attributable to the acquisition or production of a qualifying asset incurred until assets are placed in service. Borrowing costs are capitalized as follows:

- if the project benefits from a specific funding, the capitalization of borrowing costs is based on the borrowing rate;
- if the project is financed by all the Group's debt, the capitalization of borrowing costs is based on the weighted average borrowing cost for the period.

Routine maintenance and repairs are charged to expense as incurred. The costs of major turnarounds of refineries and large petrochemical units are capitalized as incurred and depreciated over the period of time between two consecutive major turnarounds.

Other property, plant and equipment are depreciated using the straight-line method over their useful lives, which are as follows:

•	Furniture, office equipment, machinery and tools	3-12 years
٠	Transportation equipments	5-20 years
٠	Storage tanks and related equipment	10-15 years
٠	Specialized complex installations and pipelines	10-30 years
٠	Buildings	10-50 years

#### K) LEASES

A finance lease transfers substantially all the risks and rewards incidental to ownership from the lessor to the lessee. These contracts are capitalized as assets at fair value or, if lower, at the present value of the minimum lease payments according to the contract. A corresponding financial debt is recognized as a financial liability. These assets are depreciated over the corresponding useful life used by the Group.

Leases that are not finance leases as defined above are recorded as operating leases.

Certain arrangements do not take the legal form of a lease but convey the right to use an asset or a group of assets in return for fixed payments. Such arrangements are accounted for as leases and are analyzed to determine whether they should be classified as operating leases or as finance leases.

#### L) IMPAIRMENT OF LONG-LIVED ASSETS

The recoverable amounts of intangible assets and property, plant and equipment are tested for impairment as soon as any indication of impairment exists. This test is performed at least annually for goodwill.

The recoverable amount is the higher of the fair value (less costs to sell) or its value in use.

Assets are grouped into cash-generating units (or CGUs) and tested. A cashgenerating unit is a homogeneous group of assets that generates cash inflows that are largely independent of the cash inflows from other groups of assets.

The value in use of a CGU is determined by reference to the discounted expected future cash flows, based upon the management's expectation of future economic and operating conditions. If this value is less than the carrying amount, an impairment loss on property, plant and equipment and mineral interests, or on other intangible assets, is recognized either in "Depreciation, depletion and amortization of property, plant and equipment and mineral interests" or in "Other expense", respectively. This impairment loss is first allocated to reduce the carrying amount of any goodwill.

Impairment losses recognized in prior periods can be reversed up to the original carrying amount, had the impairment loss not been recognized. Impairment losses recognized for goodwill cannot be reversed.

#### M) FINANCIAL ASSETS AND LIABILITIES

Financial assets and liabilities are financial loans and receivables, investments in non-consolidated companies, publicly traded equity securities, derivatives instruments and current and non-current financial liabilities.

The accounting treatment of these financial assets and liabilities is as follows:

#### (i) Loans and receivables

Financial loans and receivables are recognized at amortized cost. They are tested for impairment, by comparing the carrying amount of the assets to estimates of the discounted future recoverable cash flows. These tests are conducted as soon as there is any evidence that their fair value is less than their carrying amount, and at least annually. Any impairment loss is recorded in the statement of income.

## (ii) Investments in non-consolidated companies and publicly traded equity securities

These assets are classified as financial assets available for sale and therefore measured at their fair value. For listed securities, this fair value is equal to the market price. For unlisted securities, if the fair value is not reliably determinable, securities are recorded at their historical value. Changes in fair value are recorded in shareholders' equity. If there is any evidence of a significant or long-lasting loss, an impairment loss is recorded in the Consolidated Statement of Income. This impairment is reversed in the statement of income only when the securities are sold.

These investments are presented in the section "Other investments" of the balance sheet.

#### (iii) Derivative instruments

The Group uses derivative instruments to manage its exposure to risks of changes in interest rates, foreign exchange rates and commodity prices. Changes in fair value of derivative instruments are recognized in the statement of income or in shareholders' equity and are recognized in the balance sheet in the accounts corresponding to their nature, according to the risk management strategy described in Note 31 to the Consolidated Financial Statements. The derivative instruments used by the Group are the following:

Cash management

Financial instruments used for cash management purposes are part of a hedging strategy of currency

and interest rate risks within global limits set by the Group and are considered to be used for transactions (held for trading). Changes in fair value are systematically recorded in the statement of income. The balance sheet value of those instruments is included in "Current financial assets" or "Other current financial liabilities".

Long-term financing

When an external long-term financing is set up, specifically to finance subsidiaries, and when this financing involves currency and interest rate derivatives, these instruments are qualified as:

i. Fair value hedge of the interest rate risk on the external debt and of the currency risk of the loans to subsidiaries. Changes in fair value of derivatives are recognized in the statement of income as are changes in fair value of financial debts and loans to subsidiaries.

The fair value of those hedging instruments of long-term financing is included in the assets under "Hedging instruments on non-current financial debt" or in the liabilities under "Non-current financial debt "for the non-current portion. The current portion (less than one year) is accounted for in "Current financial assets" or "Other current financial liabilities".

In case of the anticipated termination of derivative instruments accounted for as fair value hedges, the amount paid or received is recognized in the statement of income and:

- If this termination is due to an early cancellation of the hedged items, the adjustment previously recorded as revaluation of those hedged items is also recognized in the statement of income;
- If the hedged items remain in the balance sheet, the adjustment previously recorded as a revaluation of those hedged items is spread over the remaining life of those items.
- ii. Cash flow hedge of the currency risk of the external debt. Changes in fair value are recorded in equity for the effective portion of the hedging and in the statement of income for the ineffective portion of the hedging. Amounts recorded in equity are transferred to the income statement when the hedged transaction affects profit or loss.

The fair value of those hedging instruments of long-term financing is included in the assets under "Hedging instruments on non-current

financial debt" or in the liabilities under "Non-current financial debt" for the non-current portion. The current portion (less than one year) is accounted for in "Current financial assets" or "Other current financial liabilities".

If the hedging instrument expires, is sold or terminated by anticipation, gains or losses previously recognized in equity remain in equity. Amounts are recycled in the income statement when the hedged transaction affects profit or loss.

Foreign subsidiaries' equity hedge

Certain financial instruments hedge against risks related to the equity of foreign subsidiaries whose functional currency is not the euro (mainly the dollar). These instruments qualify as "net investment hedges". Changes in fair value are recorded in shareholders' equity.

The fair value of these instruments is recorded under "Current financial assets" or "Other current financial liabilities".

Financial instruments related to commodity contracts

Financial instruments related to commodity contracts, including crude oil, petroleum products, gas and power purchasing/selling contracts related to the trading activities, together with the commodity contract derivative instruments such as energy contracts and forward freight agreements, are used to adjust the Group's exposure to price fluctuations within global trading limits. These instruments are considered, according to the industry practice, as held for trading. Changes in fair value are recorded in the statement of income. The fair value of these instruments is recorded in "Other current assets" or "Other creditors and accrued liabilities" depending on whether they are assets or liabilities.

Detailed information about derivatives positions is disclosed in Notes 20, 28, 29, 30 and 31 to the Consolidated Financial Statements.

#### (iv) Current and non-current financial liabilities

Current and non-current financial liabilities (excluding derivatives) are recognized at amortized cost, except those for which a hedge accounting can be applied as described in the previous paragraph.

#### (v) Fair value of financial instruments

Fair values are estimated for the majority of the Group's financial instruments, with the exception of publicly traded equity securities and marketable securities for which the market price is used.

Estimated fair values, which are based on principles such as discounting future cash flows to present value, must be weighted by the fact that the value of a financial instrument at a given time may be influenced by the market environment (liquidity especially), and also the fact that subsequent changes in interest rates and exchange rates are not taken into account.

As a consequence, the use of different estimates, methodologies and assumptions could have a material effect on the estimated fair value amounts.

The methods used are as follows:

• Financial debts, swaps

The market value of swaps and of bonds that are hedged by those swaps, have been determined on an individual basis by discounting future cash flows with the zero coupon interest rate curves existing at year-end.

Financial instruments related to commodity contracts

The valuation methodology is to mark to market all open positions for both physical and derivative transactions. The valuations are determined on a daily basis using observable market data based on organized and over the counter (OTC) markets. In particular cases when market data are not directly available, the valuations are derived from observable data such as arbitrages, freight or spreads and market corroboration. For valuation of risks which are the result of a calculation, such as options for example, commonly known models are used to compute the fair value.

Other financial instruments

The fair value of the interest rate swaps and of FRA (Forward Rate Agreement) are calculated by discounting future cash flows on the basis of zero coupon interest rate curves existing at year-end after adjustment for interest accrued but unpaid.

Forward exchange contracts and currency swaps are valued on the basis of a comparison of the negociated forward rates with the rates in effect on the financial markets at year-end for similar maturities.

Exchange options are valued based on the Garman-Kohlhagen model including market quotations at year-end.

Fair value hierarchy

IFRS 7 "Financial instruments: disclosures", amended in 2009, introduces a fair value hierarchy for financial instruments and proposes the following three-level classification :

- level 1: quotations for assets and liabilities (identical to the ones that are being valued) obtained at the valuation date on an active market to which the entity has access;
- level 2: the entry data are observable data but do not correspond to quotations for identical assets or liabilities;
- level 3: the entry data are not observable data. For example: these
  data come from extrapolation. This level applies when there is no
  market or observable data and the company has to use its own
  hypotheses to estimate the data that other market players would
  have used to determine the fair value of the asset.

Fair value hierarchy is disclosed in Notes 29 and 30 to the Consolidated Financial Statements.

#### N) INVENTORIES

Inventories are measured in the Consolidated Financial Statements at the lower of historical cost or market value. Costs for petroleum and petrochemical products are determined according to the FIFO (First-In, First-Out) method and other inventories are measured using the weighted-average cost method.

#### Downstream (Refining — Marketing)

Petroleum product inventories are mainly comprised of crude oil and refined products. Refined products principally consist of gasoline, kerosene, diesel, fuel oil and heating oil produced by the Group's refineries. The turnover of petroleum products does not exceed two months on average.

Crude oil costs include raw material and receiving costs. Refining costs principally include the crude oil costs, production costs (energy, labor, depreciation of producing assets) and allocation of production overhead (taxes, maintenance, insurance, etc.). Start-up costs and general administrative costs are excluded from the cost price of refined products.

#### Chemicals

Costs of chemical products inventories consist of raw material costs, direct labor costs and an allocation of  $% \left( {\left[ {{{\rm{cost}}} \right]_{\rm{cost}}} \right)_{\rm{cost}} \right)$ 

production overhead. Start-up costs and general administrative costs are excluded from the cost of inventories of chemicals products.

#### **O) TREASURY SHARES**

Treasury shares of the parent company held by its subsidiaries or itself are deducted from consolidated shareholders' equity. Gains or losses on sales of treasury shares are excluded from the determination of net income and are recognized in shareholders' equity.

#### P) PROVISIONS AND OTHER NON-CURRENT LIABILITIES

Provisions and non-current liabilities are comprised of liabilities for which the amount and the timing are uncertain. They arise from environmental risks, legal and tax risks, litigation and other risks.

A provision is recognized when the Group has a present obligation (legal or constructive) as a result of a past event for which it is probable that an outflow of resources will be required and when a reliable estimate can be made regarding the amount of the obligation. The amount of the liability corresponds to the best possible estimate.

#### **Q) ASSET RETIREMENT OBLIGATIONS**

Asset retirement obligations, which result from a legal or constructive obligation, are recognized based on a reasonable estimate in the period in which the obligation arises.

The associated asset retirement costs are capitalized as part of the carrying amount of the underlying asset and depreciated over the useful life of this asset.

An entity is required to measure changes in the liability for an asset retirement obligation due to the passage of time (accretion) by applying a risk-free discount rate to the amount of the liability. The increase of the provision due to the passage of time is recognized as "Other financial expense".

#### **R) EMPLOYEE BENEFITS**

In accordance with the laws and practices of each country, the Group participates in employee benefit plans offering retirement, death and disability, healthcare and special termination benefits. These plans provide benefits based on various factors such as length of service, salaries, and contributions made to the governmental bodies responsible for the payment of benefits.

These plans can be either defined contribution or defined benefit pension plans and may be entirely or

partially funded with investments made in various non-Group instruments such as mutual funds, insurance contracts, and other instruments.

For defined contribution plans, expenses correspond to the contributions paid.

Defined benefit obligations are determined according to the Projected Unit Method. Actuarial gains and losses may arise from differences between actuarial valuation and projected commitments (depending on new calculations or assumptions) and between projected and actual return of plan assets.

The Group applies the corridor method to amortize its actuarial gains and losses. This method amortizes the net cumulative actuarial gains and losses that exceed 10% of the greater of the present value of the defined benefit obligation and the fair value of plan assets, over the average expected remaining working lives of the employees participating in the plan.

In case of a change in or creation of a plan, the vested portion of the cost of past services is recorded immediately in the statement of income, and the unvested past service cost is amortized over the vesting period.

The net periodic pension cost is recognized under "Other operating expenses".

#### S) CONSOLIDATED STATEMENT OF CASH FLOWS

The Consolidated Statement of Cash Flows prepared in foreign currencies has been translated into euros using the exchange rate on the transaction date or the average exchange rate for the period. Currency translation differences arising from the translation of monetary assets and liabilities denominated in foreign currency into euros using the closing exchange rates are shown in the Consolidated Statement of Cash Flows under "Effect of exchange rates". Therefore, the Consolidated Statement of Cash Flows will not agree with the figures derived from the Consolidated Balance Sheet.

#### Cash and cash equivalents

Cash and cash equivalents are comprised of cash on hand and highly liquid short-term investments that are easily convertible into known amounts of cash and are subject to insignificant risks of changes in value.

Investments with maturity greater than three months and less than twelve months are shown under "Current financial assets".

Changes in current financial assets and liabilities are included in the financing activities section of the Consolidated Statement of Cash Flows.

#### Non-current financial debt

Changes in non-current financial debt have been presented as the net variation to reflect significant changes mainly related to revolving credit agreements.

#### T) CARBON DIOXIDE EMISSION RIGHTS

In the absence of a current IFRS standard or interpretation on accounting for emission rights of carbon dioxide, the following principles have been applied:

- emission rights granted free of charge are accounted for at zero carrying amount;
- liabilities resulting from potential differences between available quotas and quotas to be delivered at the end of the compliance period are accounted for as liabilities and measured at fair market value;
- spot market transactions are recognized in income at cost; and
- forward transactions are recognized at their fair market value on the face of the balance sheet. Changes in the fair value of such forward transactions are recognized in income.

#### U) NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Pursuant to IFRS 5 "Non-current assets held for sale and discontinued operations", assets and liabilities of affiliates that are held for sale are presented separately on the face of the balance sheet.

Net income from discontinued operations is presented separately on the face of the statement of income. Therefore, the notes to the Consolidated Financial Statements related to the statement of income only refer to continuing operations.

A discontinued operation is a component of the Group for which cash flows are independent. It represents a major line of business or geographical area of operations which has been disposed of or is currently being held for sale.

#### V) ALTERNATIVE IFRS METHODS

For measuring and recognizing assets and liabilities, the following choices among alternative methods allowable under IFRS have been made:

 property, plant and equipment, and intangible assets are measured using historical cost model instead of revaluation model;

- actuarial gains and losses on pension and other post-employment benefit obligations are recognized according to the corridor method (see Note 1 paragraph R to the Consolidated Financial Statements);
- jointly-controlled entities are consolidated using the proportionate method, as provided for in IAS 31 "Interests in joint ventures".

#### W) NEW ACCOUNTING PRINCIPLES NOT YET IN EFFECT

The standards or interpretations published respectively by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) which were not yet in effect at December 31, 2009, were as follows:

## Revised IFRS 3 "Business Combinations" and IAS 27 "Consolidated and Separate Financial Statements"

In January 2008, the IASB issued revised versions of IFRS 3 "Business Combinations" and IAS 27 "Consolidated and Separate Financial Statements". These revised standards introduce new provisions regarding the accounting for business combinations. They are effective as of the first annual period starting after July 1, 2009 (i.e. as of January 1, 2010 for the Group). Their application is prospective.

#### **IFRS 9 "Financial Instruments"**

In November 2009, the IASB issued standard IFRS 9 "Financial Instruments" that introduces new requirements for the classification and measurement of financial assets. This standard shall be completed in 2010 with requirements regarding classification and measurement of liabilities, derecognition of financial instruments, impairment and hedge accounting. Under standard IFRS 9, financial assets are measured either at fair value through profit or loss or at amortised cost if certain conditions are met. The standard is applicable for annual periods starting on or after January 1, 2013. The application of the standard as published in 2009 should not have any material effect on the Group's consolidated balance sheet, statement of income and shareholder's equity.

#### **Revised IAS 24 "Related Party Disclosures"**

In November 2009, the IASB issued revised standard IAS 24 "Related Party Disclosures" that clarifies the definition of a related party and reduces the disclosure requirements for entities controlled by a government. The standard is applicable for annual periods starting on or after January 1, 2011. The application of this standard should not have any material impact on information presented in the notes to the Consolidated Financial Statements.

#### IFRIC 17 "Distributions of Non-cash Assets to Owners"

In November 2008, the IFRIC issued interpretation IFRIC 17 "Distributions of Non-cash Assets to Owners". The interpretation addresses the accounting of non-cash assets distributed among two entities which are not jointly-controlled. It provides that the dividend payable should be measured at the fair value of the net assets to be distributed and that any difference with the carrying amount of the net assets distributed should be recognised in profit or loss. The interpretation is effective for annual periods starting on or after July 1, 2009 (i.e. starting January 1, 2010 for the Group). The application of IFRIC 17 should not have any material effect on the Group's consolidated balance sheet, statement of income and shareholder's equity.

#### IFRIC 19 "Extinguishing Financial Liabilities with Equity Instruments"

In November 2009, the IFRIC issued interpretation IFRIC 19 "Extinguishing Financial Liabilities with Equity Instruments". The interpretation deals with accounting for debt to equity swaps. It clarifies that equity instruments issued are measured at fair value and that any difference with the carrying amount of the liability is recognised in profit or loss. The interpretation is effective for annual periods starting on or after July 1, 2010 (i.e. starting January 1, 2011 for the Group). The application of IFRIC 19 should not have any material effect on the Group's consolidated balance sheet, statement of income and shareholder's equity.

### 2) MAIN INDICATORS — INFORMATION BY BUSINESS SEGMENT

Performance indicators excluding the adjustment items, such as adjusted operating income, adjusted net operating income, and adjusted net income are meant to facilitate the analysis of the financial performance and the comparison of income between periods.

#### Adjustment items

The detail of these adjustment items is presented in Note 4 to the Consolidated Financial Statements.

Adjustment items include:

#### (i) Special items

Due to their unusual nature or particular significance, certain transactions qualified as "special items" are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. However, in certain instances, transactions such as restructuring costs or assets

disposals, which are not considered to be representative of the normal course of business, may be qualified as special items although they may have occurred within prior years or are likely to occur again within the coming years.

#### (ii)The inventory valuation effect

The adjusted results of the Downstream and Chemicals segments are presented according to the replacement cost method. This method is used to assess the segments' performance and facilitate the comparability of the segments' performance with those of its competitors.

In the replacement cost method, which approximates the LIFO (Last-In, First-Out) method, the variation of inventory values in the statement of income is determined by the average prices of the period rather than the historical value. The inventory valuation effect is the difference between the results according to the FIFO (First-In, First-Out) and the replacement cost.

## (iii) TOTAL's equity share of adjustments and selected items related to Sanofi-Aventis

#### Main indicators:

#### (i) Operating income (measure used to evaluate operating performance)

Revenue from sales after deducting cost of goods sold and inventory variations, other operating expenses, exploration expenses and depreciation, depletion, and amortization.

Operating income excludes the amortization of intangible assets other than mineral interests, currency translation adjustments and gains or losses on the disposal of assets.

## (ii) Net operating income (measure used to evaluate the return on capital employed)

Operating income after taking into account the amortization of intangible assets other than mineral interests, currency translation adjustments, gains or losses on the disposal of assets, as well as all other income and expenses related to capital employed (dividends from non-consolidated companies, equity in income of affiliates, capitalized interest expenses), and after income taxes applicable to the above.

The only income and expense not included in net operating income but included in net income are interest expenses related to net financial debt, after applicable income taxes (net cost of net debt) and minority interests.

#### (iii)Adjusted income

Operating income, net operating income, or net income excluding the effect of adjustment items described above.

#### (iv)Capital employed

Non-current assets and working capital, at replacement cost, net of deferred income taxes and non-current liabilities.

#### (v)ROACE (Return on Average Capital Employed)

Ratio of adjusted net operating income to average capital employed between the beginning and the end of the period.

#### (vi)Net debt

Non-current debt, including current portion, current borrowings, other current financial liabilities less cash and cash equivalents and other current financial assets.

#### 3) CHANGES IN THE GROUP STRUCTURE, MAIN ACQUISITIONS AND DIVESTMENTS

#### 2009

- In December 2009, TOTAL signed an agreement with Chesapeake Energy Corporation whereby Total acquired a 25% share in Chesapeake's Barnett shale gas portfolio located in the United States (State of Texas). The acquisition cost of these assets amounted to €1,562 million and it represents the value of mineral interests that have been recognized as intangible assets on the face of the Consolidated Balance Sheet for €1,449 million and the value of tangible assets that have been recognized on the face of the Consolidated Balance Sheet for € 113 million. As no cash payment has occurred in 2009, a corresponding debt has been recognized in the sections "Provisions and other noncurrent liabilities" and "Other creditors and accrued liabilities" for €818 million and €744 million respectively.
- During 2009, TOTAL progressively sold 3.99% of Sanofi-Aventis' share capital, thus reducing its interest to 7.39%. Sanofi-Aventis is accounted for by the equity method in TOTAL's Consolidated Financial Statements.

#### 2008

Pursuant to the tender offer described in the prospectus on May 13, 2008
 and renewed by the

notices on June 19, July 4 and July 16, 2008, TOTAL acquired 100% of Synenco Energy Inc's Class A ordinary shares. Synenco's main asset is a 60% interest in the Northern Lights project in the Athabasca region of the Canadian province of Alberta.

The acquisition cost, net of cash acquired (€161 million) for all shares amounted to €352 million. This cost essentially represented the value of the company's mineral interests that have been recognized as intangible assets on the face of the Consolidated Balance Sheet for €21 million.

Synenco Energy Inc. is fully consolidated in TOTAL's Consolidated Financial Statements. Its contribution to the consolidated net income for fiscal year 2008 was not material.

In August 2008, TOTAL acquired the Dutch company Goal Petroleum BV. The acquisition cost amounted to €349 million. This cost essentially represented the value of the company's mineral interests that have been recognized as intangible assets on the face of the Consolidated Balance Sheet for €292 million.

Goal Petroleum BV is fully consolidated in TOTAL's Consolidated Financial Statements. Its contribution to the consolidated net income for fiscal year 2008 was not material.

- Pursuant to the agreements signed between the partners in November 2008, the Group's participation in the Kashagan field decreased from 18.52% to 16.81%.
- During 2008, TOTAL progressively sold 1.68% of Sanofi-Aventis' share capital, thus reducing its interest to 11.38%. Sanofi-Aventis is accounted for by the equity method in TOTAL's Consolidated Financial Statements.

2007

• Pursuant to the agreements signed in 2007, the Group's participation in Sincor project in Venezuela decreased from 47% to 30.323%.

- In December 2007, TOTAL completed the sale of its 70% interest in the Milford Haven Refinery in Wales (UK) to its partner Murco Petroleum Company. This operation will allow TOTAL to concentrate its UK refining operations at the wholly-owned Lindsey Oil Refinery.
- During the fourth quarter 2007, TOTAL progressively sold 0.4% of Sanofi-Aventis' share capital, thus reducing its interest to 13.06%. Sanofi-Aventis is accounted for by the equity method in TOTAL's Consolidated Financial Statements.

## 4) BUSINESS SEGMENT INFORMATION

Financial information by business segment is reported in accordance with the internal reporting system and shows internal segment information that is used to manage and measure the performance of TOTAL. The Group's activities are conducted through three business segments: Upstream, Downstream and Chemicals.

- the Upstream segment includes the activities of the Exploration & Production division and the Gas & Power division;
- the Downstream segment includes activities of the Refining & Marketing division and the Trading & Shipping division; and
- the Chemicals segment includes Base Chemicals and Specialties.

The Corporate segment includes the operating and financial activities of the holding companies (including the investment in Sanofi-Aventis).

The operational profit and assets are broken down by business segment prior to the consolidation and inter-segment adjustments.

Sales prices between business segments approximate market prices.

## A) INFORMATION BY BUSINESS SEGMENT

(€million)		Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
Non-Group sales		16.072	100.518	14.726	11	_	131,327
Intersegment sales		15,958	3,786	735	156	(20,635)	
Excise taxes			(19,174)	_			(19,174
Revenues from sales		32,030	85,130	15,461	167	(20,635)	112,153
Operating expenses		(14,752)	(81,281)	(14,293)	(656)	20,635	(90,347
Depreciation, depletion and amortization of tangible asse	ts and		( , , ,	( ) )	( )	,	
mineral interests		(4,420)	(1,612)	(615)	(35)	_	(6,682
Operating income		12,858	2,237	553	(524)	_	15,124
Equity in income (loss) of affiliates and other items		846	169	(58)	697	_	1.654
Tax on net operating income		(7,486)	(633)	(92)	326	_	(7,885
Net operating income		6,218	1,773	403	499	_	8,893
Net cost of net debt		1					(264
Minority interests							(182
Net income							8,447
(adjustments <sup>(a)</sup> )	Upstream	Downstrea	m Chem	icals C	orporate	Intercompany	Total
(adjustments <sup>(a)</sup> ) (€million)	Upstream	Downstrea	m Chem	icals C	orporate	Intercompany	Total
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales	Upstream	Downstrea	m Chem	icals C	orporate	Intercompany	Tota
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales	Upstream	Downstrea	m Chem	icals C	orporate	Intercompany	Total
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes	Upstream	Downstrea	m Chem	icals C	orporate	Intercompany	Total
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes Revenues from sales					orporate	Intercompany	
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses	Upstream (17)	Downstrea		icals C	orporate	Intercompany	Total
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses Depreciation, depletion and amortization of	. (17)	1,5{	58	344	orporate	Intercompany	1,885
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests	. (17) (4)	1,55	58 47)	344 (40)	- 	Intercompany	1,885 (391
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes Revenues from sales Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests Operating income <sup>(b)</sup>	. (17)	1,5{	58 47)	344	orporate — — —	Intercompany	1,885 (391
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes Revenues from sales Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests Operating income <sup>(b)</sup> Equity in income (loss) of affiliates and other	(17) (4) (21)	1,55 (34 <b>1,2</b>	58 47) 11	344 (40) <b>304</b>	-  	Intercompany	1,885 (391 <b>1,494</b>
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes Revenues from sales Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests Operating income <sup>(b)</sup> Equity in income (loss) of affiliates and other items <sup>(c)</sup>	(17) (4) (21) (160)	1,55 (34 <b>1,2</b>	58 47) 11 22	344 (40) <b>304</b> (123)	- 	Intercompany	1,885 (391 <b>1,494</b> (378
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests <b>Operating income</b> <sup>(b)</sup> Equity in income (loss) of affiliates and other items <sup>(c)</sup> Tax on net operating income	(17) (4) (21) (160) 17	1,55 (34 <b>1,2</b> (4	58 47) 11 22 13)	344 (40) <b>304</b> (123) (50)		Intercompany	1,885 (391 <b>1,494</b> (378 (449
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests <b>Operating income</b> <sup>(b)</sup> Equity in income (loss) of affiliates and other items <sup>(c)</sup> Tax on net operating income <b>Net operating income</b> <sup>(b)</sup>	(17) (4) (21) (160)	1,55 (34 <b>1,2</b> (4	58 47) 11 22	344 (40) <b>304</b> (123)	- 	Intercompany	1,885 (391 <b>1,494</b> (378
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests <b>Operating income</b> <sup>(b)</sup> Equity in income (loss) of affiliates and other items <sup>(c)</sup> Tax on net operating income <b>Net operating income</b> <sup>(b)</sup> Net cost of net debt	(17) (4) (21) (160) 17	1,55 (34 <b>1,2</b> (4	58 47) 11 22 13)	344 (40) <b>304</b> (123) (50)		Intercompany	1,885 (391 <b>1,494</b> (378 (449 <b>667</b> —
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales Intersegment sales Excise taxes <b>Revenues from sales</b> Operating expenses Depreciation, depletion and amortization of tangible assets and mineral interests <b>Operating income</b> <sup>(b)</sup> Equity in income (loss) of affiliates and other items <sup>(c)</sup> Tax on net operating income <b>Net operating income</b> <sup>(b)</sup>	(17) (4) (21) (160) 17	1,55 (34 <b>1,2</b> (4	58 47) 11 22 13)	344 (40) <b>304</b> (123) (50)		Intercompany	1,885 (391 <b>1,494</b> (378 (449

(a) . (b) sp ns, II ory quity

(a)	Adjustments include special items, inventory valuation effect a	nd equity snare of ac	ijustments and selected	items related to Sand	on-Aventis.
(b)	Of which inventory valuation effect	Upstream	Downstream	Chemicals	Corporate
	on operating income	_	1,816	389	_
	on net operating income	_	1,285	254	—
(c)	Of which equity share of adjustments and selected items related to Sanofi-Aventis	_	_	_	(300)

For the year ended December 31, 2009	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(adjusted)						
(€ million)						
Non-Group sales	16,072	100,518	14,726	11	—	131,327
Intersegment sales	15,958	3,786	735	156	(20,635)	
Excise taxes		(19,174)				(19,174)
Revenues from sales	32,030	85,130	15,461	167	(20,635)	112,153
Operating expenses	(14,735)	(82,839)	(14,637)	(656)	20,635	(92,232)
Depreciation, depletion and amortization of tangible assets and						
mineral interests	(4,416)	(1,265)	(575)	(35)	_	(6,291)
Adjusted operating income	12,879	1,026	249	(524)	_	13,630
Equity in income (loss) of affiliates and other items	1,006	147	65	814	_	2,032
Tax on net operating income	(7,503)	(220)	(42)	329	—	(7,436)
Adjusted net operating income	6,382	953	272	619	—	8,226
Net cost of net debt						(264)
Minority interests						(178)
Adjusted net income						7,784
For the year ended December 31, 2009	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(€million)						
Total expenditures	9,855	2,771	631	92		13,349
Total divestments	398	133	47	2,503		3,081
Cash flow from operating activities	10,200	1,164	1,082	(86)		12,360
Balance sheet as of December 31, 2009			·			
Property, plant and equipment, intangible assets, net	43,997	9,588	5,248	271		59,104
Investments in equity affiliates	4,260	2,110	652	4,235		11,257
Loans to equity affiliates and other non-current assets	3,844	1,369	850	547		6,610
Working capital	660	7,624	2,151	58		10,493
Provisions and other non-current liabilities	(15,364)	(2,190)	(1,721)	(1,094)		(20,369)
Capital Employed (balance sheet)	37,397	18,501	7,180	4,017		67,095
Less inventory valuation effect		(3,202)	(282)	840		(2,644)
Capital Employed (Business segment information)	37,397	15,299	6,898	4,857		64,451
ROACE as a percentage	18%	7%	4%			13%

For the year ended December 31, 2008	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(€ million)	•			•		
Non-Group sales	24,256	135,524	20,150	46	_	179,976
Intersegment sales	25,132	5,574	1,252	120	(32,078)	_
Excise taxes	_	(19,645)	—	_		(19,645)
Revenues from sales	49,388	121,453	21,402	166	(32,078)	160,331
Operating expenses	(21,915)	(119,425)	(20,942)	(685)	32,078	(130,889)
Depreciation, depletion and amortization of tangible assets and						
mineral interests	(4,005)	(1,202)	(518)	(30)	_	(5,755)
Operating income	23,468	826	(58)	(549)	—	23,687
Equity in income (loss) of affiliates and other items	1,541	(158)	(34)	590	_	1,939
Tax on net operating income	(14,563)	(143)	76	315	_	(14,315)
Net operating income	10,446	525	(16)	356	—	11,311
Net cost of net debt						(358)
Minority interests						(363)
Net income						10,590
	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(adjustments <sup>(a)</sup> )						
(€million)						
Non-Group sales						
Intersegment sales						
Excise taxes						
Revenues from sales						
Operating expenses	—	(2,776)	(925)	_		(3,701)
Depreciation, depletion and amortization of tangible						
assets and mineral interest	(171)	—	(6)	_		(177)
Operating income <sup>(b)</sup>	(171)	(2,776)	(931)	_		(3,878)
Equity in income (loss) of affiliates and other items <sup>(c)</sup>	(164)	(195)	(82)	(345)		(786)
Tax on net operating income	57	927	329	(2)		1,311
Net operating income <sup>(b)</sup>	(278)	(2,044)	(684)	(347)		(3,353)
Net cost of net debt						_
net cost of het debt						
Minority interests						23

(a) Adjustments include special items, inventory valuation effect and equity share of adjustments related to Sanofi-Aventis.

(b)	Of which inventory valuation effect	Upstream	Downstream	Chemicals	Corporate
	on operating income	—	(2,776 )	(727)	_
	on net operating income	_	(1,971)	(504)	
(C)	Of which equity share of adjustments related to Sanofi-Aventis	_	· _ ·		(393)

For the year ended December 31, 2008						
(adjusted)	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(€ million)						
Non-Group sales	24,256	135.524	20,150	46	_	179,976
Intersegment sales	25,132	5,574	1,252	120	(32,078)	_
Excise taxes	·	(19,645)	·	_	· · _ /	(19,645)
Revenues from sales	49,388	121,453	21,402	166	(32,078)	160,331
Operating expenses	(21,915)	(116,649)	(20,017)	(685)	32,078	(127,188)
Depreciation, depletion and amortization of tangible						
assets and mineral interests	(3,834)	(1,202)	(512)	(30)	_	(5,578)
Adjusted operating income	23,639	3,602	873	(549)	_	27,565
Equity in income (loss) of affiliates and other items	1,705	37	48	935	_	2,725
Tax on net operating income	(14,620)	(1,070)	(253)	317	_	(15,626)
Adjusted net operating income	10,724	2,569	668	703	_	14,664
Net cost of net debt						(358)
Minority interests						(386)
Adjusted net income						13,920
For the year ended December 31, 2008						
		_		-		
(€million)	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(€million)	•			•	Intercompany	
	Upstream 10,017 1,130	<b>Downstream</b> 2,418 216	Chemicals 1,074 53	Corporate 131 1,186	Intercompany	<b>Total</b> 13,640 2,585
(€million) Total expenditures	10,017	2,418	1,074	131	Intercompany	13,640
(€million) Total expenditures Total divestments	10,017 1,130	2,418 216	1,074 53	131 1,186	Intercompany	13,640 2,585
(€million) Total expenditures Total divestments Cash flow from operating activities	10,017 1,130	2,418 216	1,074 53	131 1,186	Intercompany	13,640 2,585
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008	10,017 1,130	2,418 216	1,074 53	131 1,186	Intercompany	13,640 2,585
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets,	10,017 1,130 13,765	2,418 216 3,111	1,074 53 920	131 1,186 873	Intercompany	13,640 2,585 18,669
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net	10,017 1,130 13,765 37,090	2,418 216 3,111 8,823	1,074 53 920 5,323	131 1,186 873 247	Intercompany	13,640 2,585 18,669 51,483
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates	10,017 1,130 13,765 37,090	2,418 216 3,111 8,823	1,074 53 920 5,323	131 1,186 873 247	Intercompany	13,640 2,585 18,669 51,483
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current	10,017 1,130 13,765 37,090 3,892	2,418 216 3,111 8,823 1,958	1,074 53 920 5,323 677	131 1,186 873 247 6,134	Intercompany	13,640 2,585 18,669 51,483 12,661
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets	10,017 1,130 13,765 37,090 3,892 3,739	2,418 216 3,111 8,823 1,958 1,170	1,074 53 920 5,323 677 762	131 1,186 873 247 6,134 545	Intercompany	13,640 2,585 18,669 51,483 12,661 6,216
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets Working capital	10,017 1,130 13,765 37,090 3,892 3,739 570	2,418 216 3,111 8,823 1,958 1,170 5,317	1,074 53 920 5,323 677 762 2,348	131 1,186 873 247 6,134 545 (132)	Intercompany	13,640 2,585 18,669 51,483 12,661 6,216 8,103
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets Working capital Provisions and other non-current liabilities	10,017 1,130 13,765 37,090 3,892 3,739 570 (12,610)	2,418 216 3,111 8,823 1,958 1,170 5,317 (2,191)	1,074 53 920 5,323 677 762 2,348 (1,903)	131 1,186 873 247 6,134 545 (132) (1,138)	Intercompany	13,640 2,585 18,669 51,483 12,661 6,216 8,103 (17,842)
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates Loans to equity affiliates and other non-current assets Working capital Provisions and other non-current liabilities Capital Employed (balance sheet)	10,017 1,130 13,765 37,090 3,892 3,739 570 (12,610)	2,418 216 3,111 8,823 1,958 1,170 5,317 (2,191) <b>15,077</b>	1,074 53 920 5,323 677 762 2,348 (1,903) <b>7,207</b>	131 1,186 873 247 6,134 545 (132) (1,138) <b>5,656</b>	Intercompany	13,640 2,585 18,669 51,483 12,661 6,216 8,103 (17,842) <b>60,621</b>
(€million) Total expenditures Total divestments Cash flow from operating activities Balance sheet as of December 31, 2008 Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates Loans to equity affiliates and other non-current assets Working capital Provisions and other non-current liabilities Capital Employed (balance sheet) Less inventory valuation effect	10,017 1,130 13,765 37,090 3,892 3,739 570 (12,610)	2,418 216 3,111 8,823 1,958 1,170 5,317 (2,191) <b>15,077</b>	1,074 53 920 5,323 677 762 2,348 (1,903) <b>7,207</b>	131 1,186 873 247 6,134 545 (132) (1,138) <b>5,656</b>	Intercompany	13,640 2,585 18,669 51,483 12,661 6,216 8,103 (17,842) <b>60,621</b>

For the year ended December 31, 2007 (€ million)	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
Non-Group sales	19.706	119,212	19,805	29	_	158,752
Intersegment sales	21,173	5,125	1,190	181	(27,669)	
Excise taxes	_	(21,928)	_	_		(21,928
Revenues from sales	40,879	102,409	20,995	210	(27,669)	136,824
Operating expenses	(17,697)	(96,367)	(19,076)	(627)	27,669	(106,098
Depreciation, depletion and amortization of tangible						
assets and mineral interests	(3,679)	(1,218)	(495)	(33)	_	(5,425
Operating income	19,503	4,824	1,424	(450)	_	25,301
Equity in income (loss) of affiliates and other items	1,330	284	(11)	745	_	2,348
Tax on net operating income	(11,996)	(1,482)	(426)	128	_	(13,776
Net operating income	8,837	3,626	987	423	_	13,873
Net cost of net debt						(338
Minority interests						(354
Net income						13,181
(adjustments <sup>(a)</sup> ) (€million) Non-Group sales	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
Intersegment sales Excise taxes						
Revenues from sales						
Operating expenses	(11)	1,580	273	_		1,842
Depreciation, depletion and amortization of tangible		(10)				(
assets and mineral interests		(43)	(4)	—		(47)
Operating income <sup>(b)</sup>	(11)	1,537	269	—		1,795
Equity in income (loss) of affiliates	(1)		(= .)	(225)		(0.50)
and other items <sup>(c)</sup>	(4)	24	(54)	(225)		(259)
Tax on net operating income	3	(470)	(75)	(2)		(544)
Net operating income <sup>(b)</sup>	(12)	1,091	140	(227)		992
Net cost of net debt						(4.4)
Minority interests						(14)
Net income						978

(4)	rajustitionits include special terms, inventory valuation	i onoor and oquity of	naro or adjuotimornio r	olated to balloli / li	onno.
(b)	Of which inventory valuation effect	Upstream	Downstream	Chemicals	Corporate
	on operating income	_	1,529	301	—
	on net operating income	_	1,098	201	—
(c)	Of which equity share of adjustments related to				
	Sanofi-Aventis	—	_	_	(318)

For the year ended December 31, 2007						
(adjusted)	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(€ million)						
Non-Group sales	19,706	119,212	19,805	29		158,752
Intersegment sales	21,173	5,125	1,190	181	(27,669)	
Excise taxes	_	(21,928)	_	_	_	(21,928)
Revenues from sales	40,879	102,409	20,995	210	(27,669)	136,824
Operating expenses	(17,686)	(97,947)	(19,349)	(627)	27,669	(107,940)
Depreciation, depletion and amortization of tangible						
assets and mineral interests	(3,679)	(1,175)	(491)	(33)	_	(5,378)
Adjusted operating income	19,514	3,287	1,155	(450)	—	23,506
Equity in income (loss) of affiliates and other items	1,334	260	43	970	_	2,607
Tax on net operating income	(11,999)	(1,012)	(351)	130	_	(13,232)
Adjusted net operating income	8,849	2,535	847	650	_	12,881
Net cost of net debt	· · · · · ·					(338)
Minority interests						(340)
Adjusted net income						12,203
						,
For the year ended December 31, 2007	Upstream	Downstream	Chemicals	Corporate	Intercompany	Total
(€million)	opsitean	Downstream	Chemicals	corporate	Intercompany	Total
Total expenditures	8,882	1,875	911	54		11,722
Total divestments	751	394	83	328		1,556
Cash flow from operating activities	12,692	4,148	1,096	(250)		17,686
Balance sheet as of December 31, 2007						
Balance sheet as of December 31, 2007 Property, plant and equipment, intangible assets, net	32,535	8,308	5,061	213		46,117
	32,535 3,021	8,308 2,105	5,061 728	213 6,851		46,117 12,705
Property, plant and equipment, intangible assets, net			- /			- /
Property, plant and equipment, intangible assets, net Investments in equity affiliates	3,021	2,105	728	6,851		12,705
Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets	3,021 3,748	2,105 1,183	728 456	6,851 634		12,705 6,021
Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets Working capital	3,021 3,748 (94)	2,105 1,183 6,811	728 456 2,774	6,851 634 506		12,705 6,021 9,997
Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets Working capital Provisions and other non-current liabilities	3,021 3,748 (94) (12,147)	2,105 1,183 6,811 (2,018)	728 456 2,774 (1,697)	6,851 634 506 (1,441)		12,705 6,021 9,997 (17,303)
Property, plant and equipment, intangible assets, net Investments in equity affiliates Loans to equity affiliates and other non-current assets Working capital Provisions and other non-current liabilities Capital Employed (balance sheet)	3,021 3,748 (94) (12,147)	2,105 1,183 6,811 (2,018) <b>16,389</b>	728 456 2,774 (1,697) <b>7,322</b>	6,851 634 506 (1,441) <b>6,763</b>		12,705 6,021 9,997 (17,303) <b>57,537</b>

## B) RECONCILIATION BETWEEN BUSINESS SEGMENT INFORMATION AND THE CONSOLIDATED STATEMENT OF INCOME

The table below presents the impact of adjustment items on the Consolidated Statement of Income:

For the year ended December 31, 2009			Consolidated statement of
(€ million)	Adjusted	Adjustments <sup>(a)</sup>	income
Sales	131,327	_	131,327
Excise taxes	(19,174)	—	(19,174)
Revenues from sales	112,153	—	112,153
Purchases, net of inventory variation	(73,263)	2,205	(71,058)
Other operating expenses	(18,271)	(320)	(18,591)
Exploration costs	(698)	—	(698)
Depreciation, depletion and amortization of tangible assets and mineral interests	(6,291)	(391)	(6,682)
Other income	131	183	314
Other expense	(315)	(285)	(600)
Financial interest on debt	(530)	—	(530)
Financial income from marketable securities & cash equivalents	132	—	132
Cost of net debt	(398)	_	(398)
Other financial income	643	—	643
Other financial expense	(345)	—	(345)
Equity in income (loss) of affiliates	1,918	(276)	1,642
Income taxes	(7,302)	(449)	(7,751)
Consolidated net income	7,962	667	8,629
Group share	7,784	663	8,447
Minority interests	178	4	182

(a) Adjustments include special items, inventory valuation effect and equity share of adjustments and selected items related to Sanofi-Aventis.

For the year ended December 31, 2008 (€ million)	Adjusted	Adjustments <sup>(a)</sup>	Consolidated statement of income
Sales	179,976	_	179,976
Excise taxes	(19,645)	_	(19,645)
Revenues from sales	160,331	_	160,331
Purchases, net of inventory variation	(107,521)	(3,503)	(111,024)
Other operating expenses	(18,903)	(198)	(19,101)
Exploration costs	(764)		(764)
Depreciation, depletion and amortization of tangible assets and mineral interests	(5,578)	(177)	(5,755)
Other income	153	216	369
Other expense	(147)	(407)	(554)
Financial interest on debt	(1,000)	—	(1,000)
Financial income from marketable securities & cash equivalents	473	—	473
Cost of net debt	(527)	_	(527)
Other financial income	728	—	728
Other financial expense	(325)	—	(325)
Equity in income (loss) of affiliates	2,316	(595)	1,721
Income taxes	(15,457)	1,311	(14,146)
Consolidated net income	14,306	(3,353)	10,953
Group share	13,920	(3,330)	10,590
Minority interests	386	(23)	363

(a) Adjustments include special items, inventory valuation effect and equity share of adjustments related to Sanofi-Aventis.

For the year ended December 31, 2007			Consolidated statement of
(€ million)	Adjusted	Adjustments <sup>(a)</sup>	income
Sales	158,752	_	158,752
Excise taxes	(21,928)	_	(21,928)
Revenues from sales	136,824	_	136,824
Purchases, net of inventory variation	(89,688)	1,881	(87,807)
Other operating expenses	(17,375)	(39)	(17,414)
Exploration costs	(877)	<u> </u>	(877)
Depreciation, depletion and amortization of tangible assets and mineral interests	(5,378)	(47)	(5,425)
Other income	384	290	674
Other expense	(225)	(245)	(470)
Financial interest on debt	(1,783)	_	(1,783)
Financial income from marketable securities & cash equivalents	1,244	—	1,244
Cost of net debt	(539)	—	(539)
Other financial income	643	_	643
Other financial expense	(274)	—	(274)
Equity in income (loss) of affiliates	2,079	(304)	1,775
Income taxes	(13,031)	(544)	(13,575)
Consolidated net income	12,543	992	13,535
Group share	12,203	978	13,181
Minority interests	340	14	354

(a) Adjustments include special items, inventory valuation effect and equity share of adjustments related to Sanofi-Aventis.

## C) ADJUSTMENT ITEMS BY BUSINESS SEGMENT

The adjustment items for income as per Note 2 to the Consolidated Financial Statements are detailed as follows:

## Adjustments to operating income

For the year ended December 31, 2009 (€ million)	Upstream	Downstream	Chemicals	Corporate	Total
Inventory valuation effect	_	1,816	389	_	2,205
Restructuring charges	—	_	_	_	_
Asset impairment charges	(4)	(347)	(40)	_	(391)
Other items	(17)	(258)	(45)	_	(320)
Total	(21)	1,211	304	_	1,494

#### Adjustments to net income, Group share

For the year ended December 31, 2009 (€ million)	Upstream	Downstream	Chemicals	Corporate	Total
Inventory valuation effect	_	1,279	254	_	1,533
TOTAL's equity share of adjustments and selected items related to					
Sanofi-Aventis	—	_	—	(300)	(300)
Restructuring charges	_	(27)	(102)	—	(129)
Asset impairment charges	(52)	(253)	(28)	_	(333)
Gains (losses) on disposals of assets	_	_	_	179	179
Other items	(112)	(182)	7	—	(287)
Total	(164)	817	131	(121)	663

### Adjustments to operating income

For the year ended December 31, 2008 (€ million)	Upstream	Downstream	Chemicals	Corporate	Total
Inventory valuation effect	_	(2,776)	(727)	_	(3,503)
Restructuring charges	_	—	—	—	—
Asset impairment charges	(171)	—	(6)	_	(177)
Other items	—	_	(198)	_	(198)
Total	(171)	(2,776)	(931)	_	(3,878)

#### Adjustments to net income, Group share

For the year ended December 31, 2008 (€million)	Upstream	Downstream	Chemicals	Corporate	Total
Inventory valuation effect	_	(1,949)	(503)	_	(2,452)
TOTAL's equity share of adjustments related to Sanofi-Aventis	—	_	_	(393)	(393)
Restructuring charges	—	(47)	(22)	—	(69)
Asset impairment charges	(172)	(26)	(7)	—	(205)
Gains (losses) on disposals of assets	130	_	_	84	214
Other items	(236)	—	(151)	(38)	(425)
Total	(278)	(2,022)	(683)	(347)	(3,330)



## Adjustments to operating income

For the year ended December 31, 2007 (€ million)	Upstream	Downstream	Chemicals	Corporate	Total
Inventory valuation effect	_	1,529	301	_	1,830
Restructuring charges		—	—	—	—
Asset impairment charges	—	(43)	(4)	_	(47)
Other items	(11)	51	(28)	—	12
Total	(11)	1,537	269	—	1,795

#### Adjustments to net income, Group share

For the year ended December 31, 2007 (€ million)	Upstream	Downstream	Chemicals	Corporate	Total
Inventory valuation effect	_	1,084	201	_	1,285
TOTAL's equity share of special items recorded by Sanofi-Aventis	_	—	_	75	75
TOTAL's equity share of adjustments related to Sanofi-Aventis	_	_	_	(318)	(318)
Restructuring charges	_	(20)	(15)	_	(35)
Asset impairment charges	(93)	(61)	(8)	_	(162)
Gains (losses) on disposals of assets	89	101	_	116	306
Other items	(8)	(27)	(38)	(100)	(173)
Total	(12)	1,077	140	(227)	978

#### D) ADDITIONAL INFORMATION ON IMPAIRMENTS

In the Upstream, Downstream and Chemicals segments, impairments of assets have been recognized for the year ended December 31, 2009, with an impact of €413 million in operating income and €382 million in net income, Group share. These impairments have been disclosed as adjustments to operating income for €391 million and as adjustments to net income, Group share for €333 million. These items are identified in paragraph 4C above as adjustment items with the heading "Asset impairment charges".

The impairment losses impact certain Cash Generating Units (CGU) for which there were indications of impairment, due mainly to changes in the operating conditions or the economic environment of their specific businesses.

The principles applied are the following:

- the recoverable amount of CGUs has been based on their value in use, as defined in Note 1 paragraph L to the Consolidated Financial Statements "Impairment of long-lived assets";
- future cash flows have been determined with the assumptions in the longterm plan of the Group. These assumptions (including future prices of products, supply and demand for products, future production volumes) represent the best estimate by management of the Group of all economic conditions during the remaining life of assets;

future cash flows are based on the long-term plan and are prepared over a period consistent with the life of the assets within the CGU. They include specific risks attached to CGU assets and are discounted using a 8% after tax discount rate. This rate is a weighted-average capital cost estimated from historical market data.

These assumptions have been applied consistently for the years ending in 2007, 2008 and 2009.

The CGUs of the Upstream segment affected by these impairments are oil fields and associates accounted for by the equity method.

The CGUs of the Dowstream segment are affiliates or groups of affiliates (or industrial assets) organized mostly by country for the refining activities and by relevant geographical area for the marketing activities. The year 2009 was marked by the deterioration of the economic environment, and especially by the decline in refining margins that have resulted in changes in the operating conditions of assets in some business units of the Downstream segment. These factors have triggered the recognition of impairments of assets impacting the operating income for C47 millions and the net income for C253 million. Given the deteriorated economic environment, sensitivity analysis using a lower refining margin have been performed by the Group and have not led to additional impairment.

The CGUs of the Chemicals segment are worldwide business units, including activities or products with common strategic, commercial and industrial characteristics.

For the year ended December 31, 2008, impairments of assets have been recognized in the Upstream, Downstream and Chemicals segments with an impact of  $\pounds$ 16 million in operating income and  $\pounds$ 244 million in net income, Group share. These impairments have been disclosed as adjustments to operating income for  $\pounds$ 177 million and adjustments to net income, Group share for  $\pounds$ 205 million.

For the year ended December 31, 2007, impairments of assets have been recognized in the Upstream, Downstream and Chemicals segments with an impact of €47 million in operating income and €162 million in net income, Group share.

For the year ended December 31, 2009, no reversal of impairment has been recognized. For the year ended December 31, 2008, reversals of impairment losses have been recognized in the Upstream segment with an impact of €41 million in operating income and €29 million in net income, Group share. No reversal of impairment losses has been recognized in 2007.

## 5) INFORMATION BY GEOGRAPHICAL AREA

		Rest of	North		Rest of	
(€million)	France	Europe	America	Africa	world	Total
For the year ended December 31, 2009						
Non-Group sales	32,437	60,140	9,515	9,808	19,427	131,327
Property, plant and equipment, intangible assets, net	6,973	15,218	8,112	17,312	11,489	59,104
Capital expenditures	1,189	2,502	1,739	4,651	3,268	13,349
For the year ended December 31, 2008						
Non-Group sales	43,616	82,761	14,002	12,482	27,115	179,976
Property, plant and equipment, intangible assets, net	7,260	13,485	5,182	15,460	10,096	51,483
Capital expenditures	1,997	2,962	1,255	4,500	2,926	13,640
For the year ended December 31, 2007						
Non-Group sales	37,949	73,757	12,404	10,401	24,241	158,752
Property, plant and equipment, intangible assets, net	6,437	14,554	4,444	11,872	8,810	46,117
Capital expenditures	1,627	2,538	740	3,745	3,072	11,722

## 6) OPERATING EXPENSES

For the year ended December 31, (€million)	2009	2008	2007
Purchases, net of inventory variation <sup>(a)</sup>	(71,058)	(111,024)	(87,807)
Exploration costs	(698)	(764)	(877)
Other operating expenses <sup>(b)</sup>	(18,591)	(19,101)	(17,414)
of which non-current operating liabilities (allowances) reversals	515	459	781
of which current operating liabilities (allowances) reversals	(43)	(29)	(42)
Operating expenses	(90,347)	(130,889)	(106,098)

(a) Includes royalties paid on oil and gas production in the Upstream segment (see in particular the taxes paid to Middle East oil producing countries for the Group's concessions as detailed in Note 33 to the Consolidated Financial Statements "Other information").

(b) Principally composed of production and administrative costs (see in particular the payroll costs as detailed in Note 26 to the Consolidated Financial Statements "Payroll and staff").

## 7) OTHER INCOME AND OTHER EXPENSE

For the year ended December 31, (€ million)	2009	2008	2007
Gains (losses) on disposal of assets	200	257	639
Foreign exchange gains	—	112	35
Other	114	—	—
Other income	314	369	674
Foreign exchange losses	(32)	_	
Amortization of other intangible assets (excl. mineral interests)	(142)	(162)	(178)
Other	(426)	(392)	(292)
Other expense	(600)	(554)	(470)

#### Other income

In 2009, gains and losses on disposal of assets are mainly related to the disposal of shares of Sanofi-Aventis.

In 2008, gains and losses on disposal of assets were mainly related to sales of non-current assets in the Upstream segment, as well as the disposal of shares of Sanofi-Aventis.

In 2007, gains and losses on disposal of assets were mainly related to sales of non-current assets in the Upstream and Downstream segments, as well as the disposal of shares of Sanofi-Aventis.

#### Other expense

In 2009, the heading "Other" is mainly comprised of €190 million of restructuring charges in the Downstream and Chemicals segments.

## 8) OTHER FINANCIAL INCOME AND EXPENSE

In 2008, the heading "Other" was mainly comprised of:

- €107 million of restructuring charges in the Upstream, Downstream and Chemicals segments; and
- €48 million of changes in provisions related to various antitrust investigations as described in Note 32 to the Consolidated Financial Statements "Other risks and contingent liabilities".

In 2007, the heading "Other" was mainly comprised of:

- €51 million of restructuring charges in the Downstream and Chemicals segments; and
- €100 million of changes in provisions related to various antitrust investigations as described in Note 32 to the Consolidated Financial Statements "Other risks and contingent liabilities".

As of December 31, (€million)	2009	2008	2007
Dividend income on non-consolidated subsidiaries	210	238	218
Capitalized financial expenses	117	271	322
Other	316	219	103
Other financial income	643	728	643
Accretion of asset retirement obligations	(283)	(229)	(189)
Other	(62)	(96)	(85)
Other financial expense	(345)	(325)	(274)

## 9) INCOME TAXES

Since 1966, the Group has been taxed in accordance with the consolidated income tax treatment approved on a renewable basis by the French Ministry of Economy, Industry and Employment. The approval for the

consolidated income tax treatment covers the period 2008-2010.

No deferred tax is recognized for the temporary differences between the carrying amounts and tax bases of investments in foreign subsidiaries which are considered to be permanent investments.

Undistributed earnings from foreign subsidiaries considered to be reinvested indefinitely amounted to  $\notin$ 22,292 million as of December 31, 2009. The determination of the tax effect relating to such reinvested income is not practicable.

In addition, no deferred tax is recognized on unremitted earnings (approximately €17,968 million) of the Group's French subsidiaries since the remittance of such earnings would be tax exempt for the subsidiaries in which the Company owns 95% or more of the outstanding shares.

Income taxes are detailed as follows:

For the year ended December 31, (€ million)	2009	2008	2007
Current income taxes	(7,213)	(14,117)	(12,141)
Deferred income taxes	(538)	(29)	(1,434)
Total income taxes	(7,751)	(14,146)	(13,575)

Before netting deferred tax assets and liabilities by fiscal entity, the components of deferred tax balances as of December 31, 2009, 2008 and 2007 are as follows:

As of December 31, (€ million)	2009	2008	2007
Net operating losses and tax carry forwards	1,114	1,031	560
Employee benefits	517	519	760
Other temporary non-deductible provisions	2,184	2,075	2,341
Gross deferred tax assets	3,815	3,625	3,661
Valuation allowance	(484)	(475)	(449)
Net deferred tax assets	3,331	3,150	3,212
Excess tax over book depreciation	(9,791)	(8,836)	(9,254)
Other temporary tax deductions	(1,179)	(1,171)	(1,209)
Gross deferred tax liability	(10,970)	(10,007)	(10,463)
Net deferred tax liability	(7,639)	(6,857)	(7,251)

After netting deferred tax assets and liabilities by fiscal entity, deferred taxes are presented on the balance sheet as follows:

As of December 31, (€ million)		2009	2008	2007
Deferred tax assets, non-current	(note 14)	1,164	1,010	797
Deferred tax assets, current	(note 16)	214	206	112
Deferred tax liabilities, non-current		(8,948)	(7,973)	(7,933)
Deferred tax liabilities, current		(69)	(100)	(227)
Net amount		(7,639)	(6,857)	(7,251)

The net deferred tax variation in the balance sheet is analyzed as follows:

As of December 31, (€million)	2009	2008	2007
Opening balance	(6,857)	(7,251)	(6,369)
Deferred tax on income	(538)	(29)	(1,434)
Deferred tax on shareholders' equity <sup>(a)</sup>	(38)	30	(6)
Changes in scope of consolidation	(1)	(1)	158
Currency translation adjustment	(205)	394	400
Closing balance	(7,639)	(6,857)	(7,251)

(a) This amount includes mainly current income taxes and deferred taxes for changes in fair value of listed securities classified as financial assets available for sale as well as deferred taxes related to the cash flow hedge (see Note 17 to the Consolidated Financial Statements).

Reconciliation between provision for income taxes and pre-tax income:

For the year ended December 31, (€ million)	2009	2008	2007
Consolidated net income	8,629	10,953	13,535
Provision for income taxes	7,751	14,146	13,575
Pre-tax income	16,380	25,099	27,110
French statutory tax rate	34.43%	34.43%	34.43%
Theoretical tax charge	(5,640)	(8,642)	(9,334)
Difference between French and foreign income tax rates	(3,214)	(6,326)	(5,118)
Tax effect of equity in income (loss) of affiliates	565	593	611
Permanent differences	597	315	122
Adjustments on prior years income taxes	(47)	12	75
Adjustments on deferred tax related to changes in tax rates	(1)	(31)	(16)
Changes in valuation allowance of deferred tax assets	(6)	(63)	80
Other	(5)	(4)	5
Net provision for income taxes	(7,751)	(14,146)	(13,575)

The French statutory tax rate includes the standard corporate tax rate (33.33%) and additional applicable taxes that bring the overall tax rate to 34.43% in 2009 (identical to 2008 and 2007).

Permanent differences are mainly due to impairment of goodwill and to dividends from non-consolidated companies as well as the specific taxation rules applicable to certain activities and within the consolidated income tax treatment.

#### Net operating losses and tax credit carryforwards

Deferred tax assets related to net operating losses and tax carryforwards were available in various tax jurisdictions, expiring in the following years:

As of December 31, (€million)	200	2009 2008		08	8 2007		
	Basis	Тах	Basis	Тах	Basis	Тах	
2008	_	_	_	_	290	141	
2009	—	_	233	115	222	109	
2010	258	126	167	79	129	59	
2011	170	83	93	42	33	13	
2012 <sup>(a)</sup>	121	52	61	19	68	22	
2013 <sup>(b)</sup>	133	43	1,765	587			
2014 and after	1,804	599	_	_	_	_	
Unlimited	661	211	560	189	641	216	
Total	3,147	1,114	2,879	1,031	1,383	560	

(a) Net operating losses and tax credit carryforwards in 2012 and after for 2007 (b) Net operating losses and tax credit carryforwards in 2013 and after for 2008

## **10) INTANGIBLE ASSETS**

Атс			
As of December 31, 2009 (€million)	Cost	impairment	Net
Goodwill	1,776	(614)	1,162
Proved and unproved mineral interests	8,204	(2,421)	5,783
Other intangible assets	2,712	(2,143)	569
Total intangible assets	12,692	(5,178)	7,514



	Amortization and					
As of December 31, 2008 (€ million)	Cost	impairment	Net			
Goodwill	1,690	(616)	1,074			
Proved and unproved mineral interests	6,010	(2,268)	3,742			
Other intangible assets	2,519	(1,994)	525			
Total intangible assets	10,219	(4,878)	5,341			
		Amortization and				
As of December 31, 2007 (€ million)	Cost	impairment	Net			
Goodwill	1,684	(617)	1,067			
Proved and unproved mineral interests	5,327	(2,310)	3,017			
Other intangible assets	2,452	(1,886)	566			
Total intangible assets	9,463	(4,813)	4,650			

Changes in net intangible assets are analyzed in the following table:

(€ million)	Net amount as of January 1,	Acquisitions	Disposals	Amortization and impairment	Currency translation adjustment	Other	Net amount as of December 31,
2009	5,341	629	(64)	(345)	2	1,951	7,514
2008	4,650	404	(3)	(259)	(93)	642	5,341
2007	4,705	472	(160)	(274)	(208)	115	4,650

In 2009, the heading "Other" mainly includes Chesapeake's Barnett shale mineral interests for €1,449 million (see Note 3 to the Consolidated Financial Statements).

In 2008, the heading "Other" mainly included the impact of "proved and unproved mineral interests" from Synenco Energy Inc. for €21 million and from Goal Petroleum B.V. for €292 million.

A summary of changes in the carrying amount of goodwill by business segment for the year ended December 31, 2009 is as follows:

(€million)	Net goodwill as of January 1, 2009	Increases	Impairments	Other	Net goodwill as of December 31, 2009
Upstream	78				78
1				_	
Downstream	130	70	_	2	202
Chemicals	841	11	_	5	857
Corporate	25	—	—	—	25
Total	1,074	81	—	7	1,162

# 11) PROPERTY, PLANT AND EQUIPMENT

		Depreciation and	
As of December 31, 2009 (€million)	Cost	impairment	Net
Upstream properties			
Proved properties	71,082	(44,718)	26,364
Unproved properties	182	(1)	181
Work in progress	10,351	(51)	10,300
Subtotal	81,615	(44,770)	36,845
Other property, plant and equipment			
Land	1,458	(435)	1,023
Machinery, plant and equipment (including transportation equipment)	22,927	(15,900)	7,027
Buildings	6,142	(3,707)	2,435
Work in progress	2,774	(155)	2,619
Other	6,506	(4,865)	1,641
Subtotal	39,807	(25,062)	14,745
Total property, plant and equipment	121,422	(69,832)	51,590
As of December 31, 2008 (€ million)	Cost	and impairment	Net
Upstream properties	COSI	inpannent	Net
Proved properties	61.727	(39,315)	22,412
Unproved properties	106	(00,010)	105
Work in progress	9,586		9,586
Subtotal	71,419	(39,316)	32,103
Other property, plant and equipment			<u> </u>
Land	1,446	(429)	1,017
Machinery, plant and equipment (including transportation equipment)	21,734	(14,857)	6,877
Buildings	5,739	(3,441)	2,298
Work in progress	2,226	(10)	2,216
Other	6,258	(4,627)	1,631
Subtotal	37,403	(23,364)	14,039
Total property, plant and equipment	108,822	(62,680)	46,142

As of December 31, 2007 (€million)	Depreciation and Cost impairment			
Upstream properties				
Proved properties	60,124	(38,735)	21,389	
Unproved properties	48	(1)	47	
Work in progress	7,010	—	7,010	
Subtotal	67,182	(38,736)	28,446	
Other property, plant and equipment				
Land	1,460	(417)	1,043	
Machinery, plant and equipment (including transportation equipment)	20,575	(14,117)	6,458	
Buildings	5,505	(3,430)	2,075	
Work in progress	1,832	(4)	1,828	
Other	6,291	(4,674)	1,617	
Subtotal	35,663	(22,642)	13,021	
Total property, plant and equipment	102,845	(61,378)	41,467	

Changes in net property, plant and equipment are analyzed in the following table:

	Net amount as of			Depreciation and	Currency translation		Net amount as of
<u>(</u> € million)	January 1,	Acquisitions	Disposals	impairment	adjustment	Other	December 31,
2009	46,142	11,212	(65)	(6,765)	397	669	51,590
2008	41,467	11,442	(102)	(5,941)	(1,151)	427	46,142
2007	40,576	10,241	(729)	(5,674)	(2,347)	(600)	41,467

In 2009, the heading "Other" mainly includes changes in net property, plant and equipment related to asset retirement obligations and Chesapeake's Barnett shale tangible assets for €113 million (see Note 3 to the Consolidated Financial Statements).

In 2008, the heading "Other" mainly included changes in net property, plant and equipment related to asset retirement obligations.

In 2007, the heading "Disposals" mainly included the impact of conversion of the Sincor project and the disposal of the Group's interest in the Milford Haven refinery. The heading "Other" mainly included the impact of conversion of the Sincor project and changes in net property, plant and equipment related to asset retirement obligations.

Property, plant and equipment presented above include the following amounts for facilities and equipment under finance leases that have been capitalized:

		Depreciation and	
As of December 31, 2009 (€million)	Cost	impairment	Net
Machinery, plant and equipment	548	(343)	205
Buildings	60	(30)	30
Other	—	_	_
otal	608	(373)	235
		Depreciation and	
As of December 31, 2008 (€million)	Cost	impairment	Net
Machinery, plant and equipment	558	(316)	242
Buildings	35	(28)	7
Other	—		—
Total	593	(344)	249
		Depreciation and	
As of December 31, 2007 (€million)	Cost	impairment	Net
Machinery, plant and equipment	503	(265)	238
Buildings	35	(29)	6
Other	—	_	—
Total	538	(294)	244

# 12) EQUITY AFFILIATES: INVESTMENTS AND LOANS

Equity value (€ million)	As of December 31,					
	2009	2008	2007	2009	2008	2007
	% owned			equity value		
NLNG	15.00%	15.00%	15.00%	1,136	1,135	1,062
PetroCedeño — EM <sup>(a)</sup>	30.32%	30.32%	30.32%	874	760	534
CEPSA (Upstream share)	48.83%	48.83%	48.83%	385	403	246
Angola LNG Ltd. <sup>(a)</sup>	13.60%	13.60%	13.60%	490	326	155
Qatargas	10.00%	10.00%	10.00%	83	251	172
Société du Terminal Méthanier de Fos Cavaou	28.79%	30.30%	30.30%	124	114	92
SCP Limited	10.00%	10.00%	10.00%	89	96	91
Dolphin Energy Ltd (Del) Abu Dhabi	24.50%	24.50%	24.50%	118	85	37
Qatar Liquefied Gas Company Limited II (Train B)	16.70%	16.70%	16.70%	143	82	86
Moattama Gas Transportation Cy	31.24%	31.24%	31.24%	51	65	53
Ocensa	15.20%	15.20%	15.20%	85	60	57
Gasoducto Gasandes Argentina	56.50%	56.50%	56.50%	46	58	74
Gaz transport & Technigaz <sup>(a)</sup>	30.00%	30.00%	30.00%	26	53	46
Laffan Refinery	10.00%	10.00%	10.00%	60	53	39
Shtokman Development AG <sup>(b)</sup>	25.00%	25.00%	_	162	35	_
Other	—	—	—	388	315	277
Total Upstream				4,260	3,891	3,021
CEPSA (Downstream share)	48.83%	48.83%	48.83%	1,927	1,810	1,932
Saudi Aramco Total Refining & Petrochemicals <sup>(b)</sup>	37.50%	37.50%	_	60	75	_
Wepec	22.41%	22.41%	22.41%	_	—	70
Other		_	_	123	73	103
Total Downstream				2,110	1,958	2,105
CEPSA (Chemicals share)	48.83%	48.83%	48.83%	396	424	524
Qatar Petrochemical Company Ltd	20.00%	20.00%	20.00%	205	192	150
Other	_	_	_	51	61	54
Total Chemicals				652	677	728
Sanofi-Aventis	7.39%	11.38%	13.06%	4,235	6,137	6,851
Other	_	_	_	_	_	_
Total Corporate				4,235	6,137	6,851
Total investments				11,257	12,663	12,705
Loans				2,367	2,005	2,575
Total investments and loans				13,624	14,668	15,280

(a) Investment accounted for by the equity method as from 2007.
(b) Investment accounted for by the equity method as from 2008.

Equity in income (loss) (€million)		Α	s of Decem	ber 31,			
	2009	2008	2007	2009	2008	2007	
		% owned			equity in income (loss)		
NLNG	15.00%	15.00%	15.00%	227	554	477	
PetroCedeño — EM <sup>(a)</sup>	30.32%	30.32%	30.32%	166	193		
CEPSA (Upstream share)	48.83%	48.83%	48.83%	23	50	88	
Angola LNG Ltd. <sup>(a)</sup>	13.60%	13.60%	13.60%	9	10	7	
Qatargas	10.00%	10.00%	10.00%	114	126	74	
Société du Terminal Méthanier de Fos Cavaou	28.79%	30.30%	30.30%	_	(5)	(2)	
SCP Limited	10.00%	10.00%	10.00%	6	4	1	
Dolphin Energy Ltd (Del) Abu Dhabi	24.50%	24.50%	24.50%	94	83	5	
Qatar Liquefied Gas Company Limited II (Train B)	16.70%	16.70%	16.70%	8	(11)	(5)	
Moattama Gas Transportation Cy	31.24%	31.24%	31.24%	75	`81 <sup>′</sup>	67	
Ocensa	15.20%	15.20%	15.20%	36	_	_	
Gasoducto Gasandes Argentina	56.50%	56.50%	56.50%	(6)	(10)	(22)	
Gaz transport & Technigaz <sup>(a)</sup>	30.00%	30.00%	30.00%	20	·51	45	
Laffan Refinery	10.00%	10.00%	10.00%	(4)	2	_	
Shtokman Development AG <sup>(b)</sup>	25.00%	25.00%	_	4	_	_	
Other	—		—	87	50	6	
Total Upstream				859	1,178	741	
CEPSA (Downstream share)	48.83%	48.83%	48.83%	149	76	253	
Saudi Aramco Total Refining & Petrochemicals <sup>(b)</sup>	37.50%	37.50%	_	(12)	_	_	
Wepec	22.41%	22.41%	22.41%	_	(110)	14	
Other		_	_	81	(13)	(1)	
Total Downstream				218	(47)	266	
CEPSA (Chemicals share)	48.83%	48.83%	48.83%	10	10	24	
Qatar Petrochemical Company Ltd	20.00%	20.00%	20.00%	74	66	55	
Other			_	(5)	(1)	1	
Total Chemicals				79	75	80	
Sanofi-Aventis	7.39%	11.38%	13.06%	486	515	688	
Other			_		_	_	
Total Corporate				486	515	688	
Total investments				1,642	1,721	1,775	

(a) Investment accounted for by the equity method as from 2007.(b) Investment accounted for by the equity method as from 2008.

The market value of the Group's share in CEPSA amounted to €2,845 million as of December 31, 2009 for an equity value of €2,708 million.

The market value of the Group's share in Sanofi-Aventis amounted to €5,324 million as of December 31, 2009.

In Group share, the main financial items of the equity affiliates are as follows :

As of December 31, (€million)	2009	2008
Assets	22,681	23,173
Shareholders' equity	11,257	12,663
Liabilities	11,424	10,510
For the year ended December 31, (€million)	2009	2008
Revenues from sales	14,434	19,982
Pre-tax income	2,168	2,412
Income tax	(526)	(691)
Net income	1,642	1,721

#### **13) OTHER INVESTMENTS**

	Carrying	Unrealized gain	Balance
As of December 31, 2009 (€ million)	amount	(loss)	sheet value
Areva <sup>(a)</sup>	69	58	127
Arkema	15	47	62
Chicago Mercantile Exchange Group <sup>(b)</sup>	1	9	10
Olympia Energy Fund — energy investment fund <sup>(c)</sup>	35	(2)	33
Other publicly traded equity securities	—	_	_
Total publicly traded equity securities <sup>(d)</sup>	120	112	232
BBPP	72	_	72
BTC Limited	144	_	144
Other equity securities	714	—	714
Total other equity securities <sup>(d)</sup>	930	_	930
Other investments	1,050	112	1,162
	Carrying	Unrealized gain	Balance
As of December 31, 2008 (€ million)	amount	(loss)	sheet value
Areva <sup>(a)</sup>	69	59	128
Arkema	16	15	31
Chicago Mercantile Exchange Group <sup>(b)</sup>	1	5	6
Olympia Energy Fund — energy investment fund <sup>(c)</sup>	36	(5)	31
Other publicly traded equity securities	_		_
Total publicly traded equity securities <sup>(d)</sup>	122	74	196
BBPP	75		75
BTC Limited	161	_	161
Other equity securities	733	_	733
Total other equity securities <sup>(d)</sup>	969	_	969
Other investments	1,091	74	1,165

As of December 31, 2007 (€million)	Carrying amount	Unrealized gain (loss)	Balance sheet value
Areva <sup>(a)</sup>	69	216	285
Arkema	16	97	113
Nymex Holdings Inc	1	15	16
Other publicly traded equity securities	—	_	_
Total publicly traded equity securities <sup>(d)</sup>	86	328	414
BBPP	71	_	71
BTC Limited	161	_	161
Other equity securities	645	—	645
Total other equity securities <sup>(d)</sup>	877	_	877
Other investments	963	328	1,291

(a) Unrealized gain based on the investment certificate.

(b) The Nymex Holdings Inc. securities have been traded during the acquisition process running from June 11 to August 22, 2008 through which Chicago Mercantile Exchange Group acquired all the Nymex Holdings Inc. securities.

(c) Securities acquired in 2008.

(d) Including cumulative impairments of €599 million in 2009, €608 million in 2008 and € 632 million in 2007.

These investments are classified as "Financial assets available for sale" (see Note 1 paragraph M(ii) to the Consolidated Financial Statements).

#### 14) OTHER NON-CURRENT ASSETS

As of December 31, 2009 (€ million)	Gross value	Valuation allowance	Net value
Deferred income tax assets	1,164		1,164
Loans and advances <sup>(a)</sup>	1,871	(587)	1,284
Other	633		633
Total	3,668	(587)	3,081
As of December 31, 2008 (€ million)	Gross value	Valuation allowance	Net value
Deferred income tax assets	1,010	_	1,010
Loans and advances <sup>(a)</sup>	1,932	(529)	1,403
Other	631	_	631
Total	3,573	(529)	3,044
As of December 31, 2007 (€million)	Gross value	Valuation allowance	Net value
Deferred income tax assets	797		797
Loans and advances <sup>(a)</sup>	1,378	(527)	851
Other	507		507
Total	2,682	(527)	2,155

(a) Excluding loans to equity affiliates.

Changes in the valuation allowance on loans and advances are detailed as follows:

For the year ended December 31, (€ million)	Valuation allowance as of January 1,	Increases	Decreases	Currency translation adjustment and other variations	Valu allowan Decem	ce as of
2009	(529)	(19)	29	(68)		(587)
2008 2007	(527) (488)	(33) (13)	52 6	(21) (32)		(529) (527)
15) INVENTORIES						
As of December 31, 2009 (€million)				Gross value	Valuation allowance	Net value
Crude oil and natural gas				4,581	_	4,581
Refined products				6,647	(18)	6,629
Chemicals products				1,234	(113)	1,121
Other inventories				1,822	(286)	1,536
Total				14,284	(417)	13,867
				Gross	Valuation	Net
As of December 31, 2008 (€million)				value	allowance	value
Crude oil and natural gas				2,772	(326)	2,446
Refined products				4,954	(416)	4,538
Chemicals products				1,419	(105)	1,314
Other inventories				1,591	(268)	1,323
Total				10,736	(1,115)	9,621
				Gross	Valuation	Net
As of December 31, 2007 (€million)				value	allowance	value
Crude oil and natural gas				4,746	_	4,746
Refined products				6,874	(11)	6,863
Chemicals products				1,188	(91)	1,097
Other inventories				1,368	(223)	1,145
Total				14,176	(325)	13,851

Changes in the valuation allowance on inventories are as follows:

For the year ended December 31, (€million)	Valuation allowance as of January 1,	Increase (net)	Currency translation adjustment and other variations	Valuation allowance as of December 31,
2009	(1,115)	700	(2)	(417)
2008	(325)	(740)	(50)	(1,115)
2007	(440)	124	(9)	(325)

## 16) ACCOUNTS RECEIVABLE AND OTHER CURRENT ASSETS

	Gross	Valuation	Net
As of December 31, 2009 (€million)	value	allowance	value
Accounts receivable	16,187	(468)	15,719
Recoverable taxes	2,156	_	2,156
Other operating receivables	5,214	(69)	5,145
Deferred income tax	214	—	214
Prepaid expenses	638	_	638
Other current assets	45	_	45
Other current assets	8,267	(69)	8,198
	Gross	Valuation	Net
As of December 31, 2008 (€ million)	value	allowance	value
Accounts receivable	15,747	(460)	15,287
Recoverable taxes	2,510	_	2,510
Other operating receivables	6,227	(19)	6,208
Deferred income tax	206	_	206
Prepaid expenses	650	—	650
Other current assets	68	_	68
Other current assets	9,661	(19)	9,642
	Gross	Valuation	Net
As of December 31, 2007 (€ million)	value	allowance	value
Accounts receivable	19,611	(482)	19,129
Recoverable taxes	2,735	_	2,735
Other operating receivables	4,457	(27)	4,430
Deferred income tax	112		112
Prepaid expenses	687	—	687
Other current assets	42	_	42
Other current assets	8,033	(27)	8,006

Changes in the valuation allowance on "Accounts receivable" and "Other current assets" are as follows:

(€ million)	Valuation allowance as of January 1,	Increase (net)	Currency translation adjustments and other variations	Valuation allowance as of December 31,
Accounts receivable				
2009	(460)	(17)	9	(468)
2008	(482)	9	13	(460)
2007	(489)	(25)	32	(482)
Other current assets				
2009	(19)	(14)	(36)	(69)
2008	(27)	7	<b>`</b> 1	(19)
2007	(39)	(4)	16	(27)

As of December 31, 2009, the net portion of the overdue receivables included in "Accounts receivable" and "Other current assets" is €3,610 million, of which €2,116 million has expired for less than 90 days, €486 million has expired between 90 days and 6 months, €246 million has expired between 6 and 12 months and €762 million has expired for more than 12 months.

As of December 31, 2008, the net portion of the overdue receivables included in "Accounts receivable" and "Other current assets" was €3,744 million, of which €2,420 million had expired for less than 90 days, €729 million had expired between 90 days and 6 months, €54 million had expired between 6 and 12 months and €541 million had expired for more than 12 months.

# 17) SHAREHOLDERS' EQUITY

# Number of Total Shares

The Company's common shares, par value  $\notin$  2.50, as of December 31, 2009 are the only category of shares. Shares may be held in either bearer or registered form.

Double voting rights are granted to holders of shares that are fully-paid and held in the name of the same shareholder for at least two years, with due consideration for the total portion of the share capital represented. Double voting rights are also assigned to restricted shares in the event of an increase in share

capital by incorporation of reserves, profits or premiums based on shares already held that are entitled to double voting rights.

Pursuant to the Company's bylaws (*Statuts*), no shareholder may cast a vote at a shareholders' meeting, either by himself or through an agent, representing more than 10% of the total voting rights for the Company's shares. This limit applies to the aggregated amount of voting rights held directly, indirectly or through voting proxies. However, in the case of double voting rights, this limit may be extended to 20%.

These restrictions no longer apply if any individual or entity, acting alone or in concert, acquires at least two-thirds of the total share capital of the Company, directly or indirectly, following a public tender offer for all of the Company's shares.

The authorized share capital amounts to 3,381,921,458 shares as of December 31, 2009 compared to 3,413,204,025 as of December 31, 2008 and 4,042,585,605 as of December 31, 2007.

As of January 1, 2007		2,425,767,953
Shares issued in connection with:	Exercise of TOTAL share subscription options	2,453,832
	Exchange guarantee offered to the beneficiaries of Elf Aquitaine share	
	subscription options	315,312
Cancellation of shares <sup>(a)</sup>		(33,005,000)
As of January 1, 2008		2,395,532,097
Shares issued in connection with:	Capital increase reserved for employees	4,870,386
	Exercise of TOTAL share subscription options	1,178,167
	Exchange guarantee offered to the beneficiaries of Elf Aquitaine share	
	subscription options	227,424
Cancellation of shares <sup>(b)</sup>		(30,000,000)
As of January 1, 2009		2,371,808,074
Shares issued in connection with:	Exercise of TOTAL share subscription options	934,780
	Exchange guarantee offered to the beneficiaries of Elf Aquitaine share	
	subscription options	480,030
Cancellation of shares <sup>(c)</sup>		(24,800,000)
As of December 31, 2009 <sup>(d)</sup>		2,348,422,884

(a) Decided by the Board of Directors on January 10, 2007.

(b) Decided by the Board of Directors on July 31, 2008.

(c) Decided by the Board of Directors on July 30, 2009.

(d) Including 115,407,190 treasury shares deducted from consolidated shareholders' equity.

The variation of both weighted-average number of shares and weighted-average number of diluted shares respectively used in the calculation of earnings per share and fully-diluted earnings per share is detailed as follows:

	2009	2008	2007
Number of shares as of January 1,	2,371,808,074	2,395,532,097	2,425,767,953
Number of shares issued during the year (pro rated)			
Exercise of TOTAL share subscription options	221,393	742,588	1,020,190
Exercise of TOTAL share purchase options	93,827	2,426,827	4,141,186
Exchange guarantee offered to the beneficiaries of Elf Aquitaine share subscription options	393,623	86,162	163,074
TOTAL restricted shares	1,164,389	1,112,393	1,114,796
Capital increase reserved for employees	—	3,246,924	—
TOTAL shares held by TOTAL S.A. or by its subsidiaries and deducted from shareholders' equity	(143,082,095)	(168,290,440)	(176,912,968)
Weighted-average number of shares	2,230,599,211	2,234,856,551	2,255,294,231
Dilutive effect			
TOTAL share subscription and purchase options	1,711,961	6,784,200	13,698,928
TOTAL restricted shares	4,920,599	4,172,944	4,387,761
Exchange guarantee offered to the beneficiaries of Elf Aquitaine share subscription options	60,428	460,935	655,955
Capital increase reserved for employees	—	383,912	348,109
Weighted-average number of diluted shares	2,237,292,199	2,246,658,542	2,274,384,984

#### Capital increase reserved for Group employees

At the shareholders' meeting held on May 11, 2007, the shareholders delegated to the Board of Directors the authority to increase the share capital of the Company in one or more transactions and within a maximum period of 26 months from the date of the meeting, by an amount not exceeding 1.5% of the share capital outstanding on the date of the meeting of the Board of Directors at which a decision to proceed with an issuance is made reserving subscriptions for such issuance to the Group employees participating in a company savings plan. It is being specified that the amount of any such capital increase reserved for Group employees was counted against the aggregate maximum nominal amount of share capital increases authorized by the shareholders' meeting held on May 11, 2007 for issuing new ordinary shares or other securities granting immediate or future access to the Company's share capital with preferential subscription rights ( $\notin$  billion in nominal value).

Pursuant to this delegation of authorization, the Board of Directors, during its November 6, 2007 meeting, implemented a first capital increase reserved for employees within the limit of 12 million shares, par value €2.50, at a price of €44.40 per share, with dividend rights as of the January 1, 2007. The subscription period ran from March 10, 2008, to March 28, 2008. 4,870,386 shares were subscribed by employees pursuant to the capital increase.

#### Share cancellation

Pursuant to the authorization granted by the shareholders' meeting held on May 11, 2007 authorizing reduction of capital by cancellation of shares held by the Company within the limit of 10% of the outstanding capital every 24 months, the Board of Directors decided on July 30, 2009 to cancel 24,800,000 shares acquired in 2008 at an average price of €49.28 per share.

#### Treasury shares (TOTAL Shares held by TOTAL S.A.)

As of December 31, 2009, TOTAL S.A. held 15,075,922 of its own shares, representing 0.64% of its share capital, detailed as follows:

- 6,017,499 shares allocated to covering TOTAL share purchase option plans for Group employees and executive officers;
- 5,799,400 shares allocated to TOTAL restricted shares plans for Group employees; and
- 3,259,023 shares intended to be allocated to new TOTAL share purchase option plans or to new restricted shares plans.

These shares are deducted from the consolidated shareholders' equity.

As of December 31, 2008, TOTAL S.A. held 42,750,827 of its own shares, representing 1.80% of its share capital, detailed as follows:

- 12,627,522 shares allocated to covering TOTAL share purchase option plans for Group employees;
- 5,323,305 shares allocated to TOTAL restricted shares plans for Group employees; and
- 24,800,000 shares purchased for cancellation between January and October 2008 pursuant to the authorization granted by the shareholders' meetings held on May 11, 2007 and May 16, 2008. The Board of Directors on July 30, 2009 decided to cancel these 24,800,000 shares acquired at an average price of €49.28 per share.

These shares were deducted from the consolidated shareholders' equity.

As of December 31, 2007, TOTAL S.A. held 51,089,964 of its own shares, representing 2.13% of its share capital, detailed as follows:

- 16,343,349 shares allocated to covering TOTAL share purchase option plans for Group employees;
- 4,746,615 shares allocated to TOTAL restricted share plans for Group employees; and
- 30,000,000 shares purchased for cancellation between February and December 2007 pursuant to the authorization granted by the shareholders' meetings held on May 12, 2006 and May 11, 2007. The Board of Directors on July 31, 2008 decided to cancel these 30,000,000 shares acquired at an average price of €54.69 per share.

These shares were deducted from the consolidated shareholders' equity.

#### TOTAL Shares held by Group subsidiaries

As of December 31, 2009, 2008 and 2007, TOTAL S.A. held indirectly through its subsidiaries 100,331,268 of its own shares, representing 4.27% of its share capital as of December 31, 2009, 4.23% of its share capital as of December 31, 2008 and 4.19% of its share capital as of December 31, 2007 detailed as follows:

 2,023,672 shares held by a consolidated subsidiary, Total Nucléaire, 100% indirectly controlled by TOTAL S.A.; and  98,307,596 shares held by subsidiaries of Elf Aquitaine (Financière Valorgest, Sogapar and Fingestval).

These shares are deducted from the consolidated shareholders' equity.

#### Dividend

TOTAL S.A. paid on May 22, 2009 the balance of the dividend of €1.14 per share for the 2008 fiscal year (the ex-dividend date was May 19, 2009). In addition, TOTAL S.A. paid on November 18, 2009 an interim dividend of €1.14 per share for the fiscal year 2009 (the ex-dividend date was November 13, 2009).

A resolution will be submitted at the shareholders' meeting on May 21, 2010 to pay a dividend of  $\notin$ 2.28 per share for the 2009 fiscal year, i.e. a balance of  $\notin$ 1.14 per share to be distributed after deducting the interim dividend of  $\notin$ 1.14 already paid.

#### Paid-in surplus

In accordance with French law, the paid-in surplus corresponds to share premiums of the parent company which can be capitalized or used to offset losses if the legal reserve has reached its minimum required level. The amount of the paid-in surplus may also be distributed subject to taxation unless the unrestricted reserves of the parent company are distributed prior to this item.

As of December 31, 2009, paid-in surplus amounted to €27,171 million (€28,284 million as of December 31, 2008 and €29,598 million as of December 31, 2007).

#### Reserves

Under French law, 5% of net income must be transferred to the legal reserve until the legal reserve reaches 10% of the nominal value of the share capital. This reserve cannot be distributed to the shareholders other than upon liquidation but can be used to offset losses.

If wholly distributed, the unrestricted reserves of the parent company would be taxed for an approximate amount of €514 million as of December 31, 2009.

#### Other comprehensive income

Detail of other comprehensive income showing items reclassified from equity to net income is presented in the table below:

For the year ended December 31, (€ million)	2009	9	2008	20	07
Currency translation adjustment – Unrealized gain/(loss) of the period – Less gain/(loss) included in net income	(243) 1	<b>(244)</b> (	(722) —	(2,703)	(2,703)
Available for sale financial assets – Unrealized gain/(loss) of the period – Less gain/(loss) included in net income	38	<b>38</b> (	( <b>254)</b> 	111 —	111
Cash flow hedge – Unrealized gain/(loss) of the period – Less gain/(loss) included in net income	349 221	128		_	_
Share of other comprehensive income of equity affiliates, net amount		234	173		(406)
<b>Other</b> – Unrealized gain/(loss) of the period – Less gain/(loss) included in net income	(5)	(5)	1 1	(3)	(3)
Tax effect		(38)	30		(6)
Total other comprehensive income, net amount		113	(772)		(3,007)

Tax effects relating to each component of other comprehensive income are as follows:

For the year ended December 31,									
(€ million)		2009			2008			2007	
	Pre-tax	Tax	Net	Pre-tax	Tax	Net	Pre-tax	Tax	Net
	amount	effect	amount	amount	effect	amount	amount	effect	amount
Currency translation adjustment	(244)		(244)	(722)		(722)	(2,703)		(2,703)
Available for sale financial assets	38	4	42	(254)	30	(224)	111	(6)	105
Cash flow hedge	128	(42)	86			_	_		_
Share of other comprehensive income of equity affiliates, net		. ,							
amount	234		234	173		173	(406)		(406)
Other	(5)		(5)	1		1	(3)		(3)
Total other comprehensive income	151	(38)	113	(802)	30	(772)	(3,001)	(6)	(3,007)

#### **18) EMPLOYEE BENEFITS OBLIGATIONS**

Liabilities for employee benefits obligations consist of the following:

As of December 31, (€ million)	2009	2008	2007
Pension benefits liabilities	1,236	1,187	1,721
Other benefits liabilities	592	608	611
Restructuring reserves (early retirement plans)	212	216	195
Total	2,040	2,011	2,527

The Group's main defined benefit pension plans are located in France, in the United Kingdom, in the United States, in Belgium and in Germany. Their main characteristics are the following:

• The benefits are usually based on the final salary and seniority;

They are usually funded (pension fund or insurer); and

• They are closed to new employees who benefit from defined contribution pension plans.

F-46

The pension benefits include also termination indemnities and early retirement benefits.

The other benefits are the employer contribution to post-employment medical care.

The fair value of the defined benefit obligation and plan assets in the Consolidated Financial Statements is detailed as follows:

		Pension	benefits	Other benefits		
As of December 31, (€ million)	2009	2008	2007	2009	2008	2007
Change in benefit obligation						
Benefit obligation at beginning of year	7,405	8,129	8,742	544	583	648
Service cost	134	143	160	10	14	12
Interest cost	428	416	396	30	24	28
Curtailments	(5)	(3)	(9)	(1)	—	—
Settlements	(3)	(5)	(20)	—	(4)	—
Special termination benefits	—	_	_	—	_	—
Plan participants' contributions	10	12	10	—	—	—
Benefits paid	(484)	(463)	(448)	(33)	(37)	(40)
Plan amendments	118	12	(70)	(2)	(12)	(2)
Actuarial losses (gains)	446	(248)	(384)	—	(27)	(38)
Foreign currency translation and other	120	(588)	(248)	(1)	3	(25)
Benefit obligation at year-end	8,169	7,405	8,129	547	544	583
Change in fair value of plan assets						
Fair value of plan assets at beginning of year	(5,764)	(6,604)	(6,401)	_	_	_
Expected return on plan assets	(343)	(402)	(387)	_	_	_
Actuarial losses (gains)	(317)	1,099	140	_	_	—
Settlements	2	2	8	_	_	_
Plan participants' contributions	(10)	(12)	(10)	_	_	_
Employer contributions (a)	(126)	(855)	(556)	_	_	—
Benefits paid	396	375	349	_	_	—
Foreign currency translation and other	(124)	633	253	—	—	—
Fair value of plan assets at year-end	(6,286)	(5,764)	(6,604)	_	_	_
Unfunded status	1,883	1,641	1,525	547	544	583
Unrecognized prior service cost	(153)	(48)	(49)	15	21	18
Unrecognized actuarial (losses) gains	(1,045)	(953)	(160)	30	43	10
Asset ceiling	9	<b>`</b> 5	<b>5</b>	—	—	_
Net recognized amount	694	645	1,321	592	608	611
Pension benefits and other benefits liabilities	1,236	1,187	1,721	592	608	611
Other non-current assets	(542)	(542)	(400)	_	_	_

(a) In 2008, the Group covered certain employee pension benefit plans through insurance companies for an amount of €757 million.

As of December 31, 2009, the fair value of pension benefits and other pension benefits which are entirely or partially funded amounted to €7,206 million and the present value of the unfunded benefits amounted to €1,510 million (against €6,515 million and €1,434 million respectively as of December 31, 2008 and €7,175 million and €1,537 million respectively as of December 31, 2007).

The experience actuarial gains (losses) related to the defined benefit obligation and the fair value of plan assets are as follows:

For the year ended December 31, (€million)			2009	2008	2007
Experience actuarial gains (losses) related to the defined benefit obligation			108	(12)	(80)
Experience actuarial gains (losses) related to the fair value of plan assets			317	(1,099)	(140)
As of December 31, (€ million)	2009	2008	2007	2006	2005
Pension benefits					
Benefit obligation	8,169	7,405	8,129	8,742	9,647
Fair value of plan assets	(6,286)	(5,764)	(6,604)	(6,401)	(6,274)
Unfunded status	1,883	1,641	1,525	2,341	3,373
Other benefits					
Benefits obligation	547	544	583	648	774
Fair value of plan assets	_	_	_	_	_
Unfunded status	547	544	583	648	774

The Group expects to contribute €152 million to its pension plans in 2010.

Estimated future payments		
(€million)	Pension benefits	Other benefits
2010	489	35
2011	468	36
2012	481	36
2013	472	36
2014	474	37
2015-2019	2,508	195

Asset allocation	Pe	Pension benefits				
As of December 31,		2008	2007			
Equity securities	31%	25%	36%			
Debt securities	62%	56%	56%			
Monetary	3%	16%	4%			
Real estate	4%	3%	4%			

The Group's assumptions of expected returns on assets are built up by asset class and by country based on long-term bond yields and risk premiums.

The discount rate retained corresponds to the rate of prime corporate bonds according to a benchmark per country of different market data on the closing date.

Assumptions used to determine benefits obligations	Pension benefits			0	Other benefits		
As of December 31,	2009	2008	2007	2009	2008	2007	
Discount rate (weighted average for all regions)	5.41%	5.93%	5.50%	5.60%	6.00%	5.50%	
Of which Euro zone	5.12 %	5.72 %	5.15 %	5.18 %	5.74 %	5.14%	
Of which United States	6.00 %	6.23 %	6.00 %	5.99 %	6.21 %	5.98%	
Of which United Kingdom	5.50 %	6.00 %	5.75 %	_	6.00 %	5.75%	
Average expected rate of salary increase	4.50%	4.56%	4.29%	_	_	_	
Expected rate of healthcare inflation							
— initial rate	_	_	_	4.91%	4.88%	5.16%	
— ultimate rate	_	_	_	3.79%	3.64%	3.64%	

Assumptions used to determine the net periodic benefit cost (income)	Pension benefits			Other benefits		
For the year ended December 31,	2009	2008	2007	2009	2008	2007
Discount rate (weighted average for all regions)	5.93%	5.50%	4.69%	6.00%	5.50%	4.89%
Of which Euro zone	5.72 %	5.15 %	4.23 %	5.74 %	5.14 %	4.30%
Of which United States	6.23 %	6.00 %	5.50 %	6.21 %	5.98 %	5.49%
Of which United Kingdom	6.00 %	5.75 %	5.00 %	6.00 %	5.75 %	5.00%
Average expected rate of salary increase	4.56%	4.29%	4.14%	_	_	_
Expected return on plan assets	6.14%	6.60%	6.26%	_	_	_
Expected rate of healthcare inflation						
— initial rate	_	_	_	4.88%	5.16%	5.57%
- ultimate rate	_	_	_	3.64%	3.64%	3.65%

A 0.5% increase or decrease in discount rates - all other things being equal - would have the following approximate impact:

	0.5%	0.5%
(€million)	increase	decrease
Benefit obligation as of December 31, 2009	(452)	500
2010 net periodic benefit cost (income)	(21)	29

A 0.5% increase or decrease in expected return on plan assets rate – all other things being equal – would have an impact of €29 million on 2010 net periodic benefit cost (income).

The components of the net periodic benefit cost (income) in 2009, 2008 and 2007 are:

	Pen	Pension benefits				Other benefits		
For the year ended December 31, (€million)	2009	2008	2007	2009	2008	2007		
Service cost	134	143	160	10	14	12		
Interest cost	428	416	396	30	24	28		
Expected return on plan assets	(343)	(402)	(387)	_	_	_		
Amortization of prior service cost	13	34	31	(7)	(10)	(5)		
Amortization of actuarial losses (gains)	50	22	17	(6)	(2)	(1)		
Asset ceiling	4	1	_	_	_	_		
Curtailments	(4)	(3)	(8)	(1)	_	_		
Settlements	(1)	(2)	(12)	_	(3)	(1)		
Special termination benefits	_	_	_	_	_	_		
Net periodic benefit cost (income)	281	209	197	26	23	33		

A positive or negative change of one-percentage-point in the healthcare inflation rate would have the following approximate impact:

	1% point increase	1% point decrease
Benefit obligation as of December 31, 2009	60	(47)
2009 net periodic benefit cost (income)	7	(3)

## **19) PROVISIONS AND OTHER NON-CURRENT LIABILITIES**

As of December 31, (€ million)	2009	2008	2007
Litigations and accrued penalty claims	423	546	601
Provisions for environmental contingencies	623	558	552
Asset retirement obligations	5,469	4,500	4,206
Other non-current provisions	1,331	1,804	1,188
Other non-current liabilities	1,535	450	296
Total	9,381	7,858	6,843

In 2009, litigation reserves mainly include a provision covering risks concerning antitrust investigations related to Arkema amounting to €43 million as of December 31, 2009. Other risks and commitments that give rise to contingent liabilities are described in Note 32 to the Consolidated Financial Statements.

In 2009, other non current provisions mainly include:

- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €40 million as of December 31, 2009;
- Provisions related to restructuring activities in the Downstream and Chemicals segments for €130 million as of December 31, 2009; and
- The contingency reserve related to the Buncefield depot explosion (civil liability) for €295 million as of December 31, 2009.

In 2009, other non current liabilities mainly include debts (whose maturity is more than one year) related to fixed assets acquisitions. This heading is mainly composed of a €818 million debt related to Chesapeake acquisition (see Note 3 to the Consolidated Financial Statements).

In 2008, litigation reserves mainly included a provision covering risks concerning antitrust investigations related to Arkema amounting to  $\pounds$ 5 million as of December 31, 2008. Other risks and commitments that give rise to contingent liabilities are described in Note 32 to the Consolidated Financial Statements.

In 2008, other non current provisions mainly included the contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €256 million as of December 31, 2008.

In 2007, litigation reserves mainly included a provision covering risks concerning antitrust investigations related to Arkema amounting to €138 million as of December 31, 2007. Other risks and commitments that give rise to contingent liabilities are described in Note 32 to the Consolidated Financial Statements.

In 2007, other non-current provisions mainly included:

- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €134 million as of December 31, 2007; and
- Provisions related to restructuring activities in the Chemicals segment for €49 million as of December 31, 2007.

#### Changes in provisions and other non-current liabilities

(€million)	As of January 1,	Allowances	Reversals	Currency translation adjustment	Other	As of December 31,
2009	7,858	1,254	(1,413)	202	1,480	9,381
2008	6,843	1,424	(864)	(460)	915	7,858
2007	6,467	747	(927)	(303)	859	6,843

#### Allowances

In 2009, allowances of the period (€1,254 million) mainly include:

- Asset retirement obligations for €283 million (accretion);
- Environmental contingencies for €147 million in the Downstream and Chemicals segments;
- The contingency reserve related to the Buncefield depot explosion (civil liability) for €223 million; and
- Provisions related to restructuring of activities for €121 million.

In 2008, allowances of the period (€1,424 million) mainly included:

- Asset retirement obligations for €229 million (accretion);
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €140 million;
- Environmental contingencies for €89 million;
- An allowance of €48 million for litigation reserves in connection with antitrust investigations, as described in Note 32 to the Consolidated Financial Statements "Other risks and contingent liabilities"; and
- Provisions related to restructuring of activities for € 27 million.

In 2007, allowances of the period (€747 million) mainly included:

- Provisions for asset retirement obligations for €189 million (accretion);
- An allowance of €100 million for litigation reserves in connection with antitrust investigations, as described in Note 32 to the Consolidated Financial Statements "Other risks and contingent liabilities";
- Environmental contingencies in the Chemicals segment for €23 million; and
- Provisions related to restructuring of activities for € 15 million.

#### Reversals

In 2009, reversals of the period (€1,413 million) mainly relate to the following incurred expenses:

- Provisions for asset retirement obligations for €191 million;
- €52 million for litigation reserves in connection with antitrust investigations;
- Environmental contingencies written back for €86 million;
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability), written back for €216 million;
- The contingency reserve related to the Buncefield depot explosion (civil liability), written back for €375 million; and
- Provisions for restructuring and social plans written back for €28 million.

In 2008, reversals of the period ( $\circledast$ 64 million) were mainly related to the following incurred expenses:

- Provisions for asset retirement obligations for €280 million;
- €163 million for litigation reserves in connection with antitrust investigations;
- Environmental contingencies written back for €96 million;
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability), written back for €18 million; and
- Provisions for restructuring and social plans written back for €10 million.

In 2007, reversals of the period (027 million) were mainly related to the following incurred expenses:

- Provisions for asset retirement obligations for €209 million;
- Environmental contingencies in the Chemicals segment written back for €52 million;
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability), written back for €42 million; and
- Provisions for restructuring and social plans written back for €37 million.

#### CHANGES IN THE ASSET RETIREMENT OBLIGATION

(€million)	As of January 1,	Accretion	Revision in estimates	New obligations	Spending on existing obligations	Currency translation adiustment	Other	As of December 31.
2009	4,500	283	447	179	(191)	232	19	5,469
2008	4,206	229	563	188	(280)	(414)	8	4,500
2007	3,893	189	203	371	(209)	(206)	(35)	4,206

## 20) FINANCIAL DEBT AND RELATED FINANCIAL INSTRUMENTS

A) NON-CURRENT FINANCIAL DEBT AND RELATED FINANCIAL INSTRUMENTS

As of December 31, 2009 (€million) (Assets)/Liabilities	Secured	Unsecured	Total
Non-current financial debt	312	19,125	19,437
of which hedging instruments of non-current financial debt (liabilities)	_	241	241
Hedging instruments of non-current financial debt (assets) <sup>(a)</sup>	_	(1,025)	(1,025
Non-current financial debt – net of hedging instruments	312	18,100	18,412
Bonds, net of hedging instruments	_	17,584	17,584
Bank and other, floating rate	60	379	439
Bank and other, fixed rate	50	79	129
Financial lease obligations	202	58	260
Non-current financial debt – net of hedging instruments	312	18,100	18,412

Assets)/Liabilities	Secured	Unsecured	Total
Non-current financial debt	895	15,296	16,19 <sup>-</sup>
of which hedging instruments of non-current financial debt (liabilities)	_	440	440
ledging instruments of non-current financial debt (assets) <sup>(a)</sup>	_	(892)	(892
Ion-current financial debt – net of hedging instruments	895	14,404	15,299
Bonds, net of hedging instruments	_	13,667	13,667
Bank and other, floating rate	553	665	1,218
Bank and other, fixed rate	140	6	146
Financial lease obligations	202	66	268
Non-current financial debt – net of hedging instruments	895	14.404	15,299

As of December 31, 2007 (€ million) (Assets)/Liabilities	Secured	Unsecured	Total
Non-current financial debt	772	14.104	14.876
of which hedging instruments of non-current financial debt (liabilities)	_	369	369
Hedging instruments of non-current financial debt (assets) <sup>(a)</sup>	_	(460)	(460)
Non-current financial debt – net of hedging instruments	772	13,644	14,416
Bonds, net of hedging instruments	_	11,650	11,650
Bank and other, floating rate	453	1,781	2,234
Bank and other, fixed rate	2	213	215
Financial lease obligations	317	_	317
Non-current financial debt – net of hedging instruments	772	13,644	14,416

(a) See the description of these hedging instruments in Notes 1 paragraph M(iii) "Long-term financing", 28 and 29 to the Consolidated Financial Statements.

Fair value of bonds, as of December 31, 2009, after taking into account currency and interest rates swaps, is detailed as follows:

		Fair	value after hedging	as of			
(€ million)	Year of issue	December 31, 2009	December 31, 2008	December 31, 2007	Currency	Maturity	Initial rate before hedging instruments
Parent company							
Bond	1996	_	_	324	FRF	2008	6.750%
Bond	1997	_	124	118	FRF	2009	6.200%
Bond	1998	_	_	26	FRF	2008	Pibor 3 months + 0.380%
Bond	1998	_	119	113	FRF	2009	5.125%
Bond	1998	116	121	114	FRF	2013	5.000%
Bond	2000	61	63	60	EUR	2010	5.650%
Current portion (less than one year)	2000	(61)	(243)	(349)	LUK	2010	5.03078
Total parent company		116	184	(349) <b>406</b>			
		110	104	400			
Elf Aquitaine SA	1000		4 000	000	FUE	0000	1 50000
Bond	1999	—	1,003	998	EUR	2009	4.500%
Current portion (less than one year)		—	(1,003)				
Total Elf Aquitaine SA		—	—	998			
TOTAL CAPITAL <sup>(a)</sup>							
Bond	2002	14	14	14	USD	2012	5.890%
Bond	2003	—	-	39	AUD	2008	5.000%
Bond	2003	_	_	41	AUD	2008	5.000%
Bond	2003	_	-	44	CAD	2008	4.250%
Bond	2003	_	-	148	CHF	2008	2.010%
Bond	2003	_	_	98	CHF	2008	2.010%
Bond	2003	—	_	360	EUR	2008	3.500%
Bond	2003	_	_	72	EUR	2008	3.500%
Bond	2003	_	_	113	EUR	2008	3.500%
Bond	2003	_	_	170	USD	2008	3.250%
Bond	2003	_	52	49	AUD	2009	6.250%
Bond	2003	_	154	145	CHF	2009	2.385%
Bond	2003	160	166	157	CHF	2010	2.385%
Bond	2003	21	22	20	USD	2013	4.500%
Bond	2003-		395	373	USD	2009	3.500%
bolid	2003-		000	575	000	2003	5.50078
Bond	2004			34	USD	2008	3.250%
Bond	2004	_	_	34	USD	2008	3.250%
		_	_				
Bond	2004	_	—	68	USD	2008	3.250%
Bond	2004	_	57	54	AUD	2009	6.000%
Bond	2004		28	26	AUD	2009	6.000%
Bond	2004	53	55	52	CAD	2010	4.000%
Bond	2004	113	117	110	CHF	2010	2.385%
Bond	2004	438	454	429	EUR	2010	3.750%
Bond	2004	322	334	316	GBP	2010	4.875%
Bond	2004	128	132	125	GBP	2010	4.875%
Bond	2004	185	191	181	GBP	2010	4.875%
Bond	2004	53	55	52	AUD	2011	5.750%

		Fair	value after hedging	as of			
(€ million)	Year of issue	December 31, 2009	December 31, 2008	December 31, 2007	Currency	Maturity	Initial rate before hedging instruments
Bond	2004	107	111	105	CAD	2011	4.875%
Bond	2004	203	216	204	USD	2011	4.125%
Bond	2004	69	72	68	USD	2011	4.125%
Bond	2004	116	120	114	CHF	2012	2.375%
Bond	2004	47	49	46	NZD	2014	6.750%
Bond	2005	_	36	34	USD	2009	3.500%
Bond	2005	53	55	52	AUD	2011	5.750%
Bond	2005	56	58	55	CAD	2011	4.000%
Bond	2005	112	116	109	CHF	2011	1.625%
Bond	2005	226	226	226	CHF	2011	1.625%
Bond	2005	144	144	136	USD	2011	4.125%
Bond	2005	63	63	63	AUD	2012	5.750%
Bond	2005	180	187	177	CHF	2012	2.135%
Bond	2005	65	65	65	CHF	2012	2.135%
Bond	2005	97	98	97	CHF	2012	2.375%
Bond	2005	363	376	356	EUR	2012	3.250%
Bond	2005	292	287	286	GBP	2012	4.625%
Bond	2005	57	57	57	NZD	2012	6.500%
Bond	2006	75	75	75	GBP	2012	4.875%
Bond	2006	50	50	50	EUR	2010	3.750%
Bond	2006	50	50	50	EUR	2010	3.750%
Bond	2006	100	102	100	EUR	2010	3.750%
Bond	2006	42	42	42	EUR	2010	EURIBOR 3 months +0.040%
Bond	2006	300	300	300	EUR	2011	3.875%
Bond	2006	150	150	150	EUR	2011	3.875%
Bond	2000	300	300	300	EUR	2011	3.875%
Bond	2006	120	120	120	USD	2011	5.000%
Bond	2006	300	300	300	EUR	2011	3.875%
Bond	2000	472	473	474	USD	2011	5.000%
Bond	2006	62	62	62	AUD	2012	5.625%
Bond	2000	72	72	72	CAD	2012	4.125%
Bond	2000	100	100	100	EUR	2012	3.250%
Bond	2000	74	74	74	GBP	2012	4.625%
Bond	2000	100	100	100	EUR	2012	3.250%
Bond	2000	100	100	126	CHF	2012	2.510%
Bond	2000	123	123	120	CHF	2013	2.635%
Bond	2008	127	127	127	CHF	2014	2.035%
	2008	65	65	65	CHF	2016	
Bond Bond	2006	64	64	64	CHF	2016	2.385% 2.385%
		64 63	64 64	64 64	CHF	2016	
Bond	2006						2.385%
Bond	2006	129	129	129	CHF	2018	3.135%
Bond	2007	60	60	60	CHF	2010	2.385%
Bond	2007	74	74	74	GBP	2010	4.875%
Bond	2007	77	77	77	USD	2011	5.000%
Bond	2007	370	370	371	USD	2012	5.000%
Bond	2007	222	222	222	USD	2012	5.000%
Bond	2007	61	61	61	AUD	2012	6.500%
Bond	2007	72	72	72	CAD	2012	4.125%
Bond	2007	71	71	71	GBP	2012	4.625%
Bond	2007	300	300	301	EUR	2013	4.125%
Bond	2007	73	74	73	GBP	2013	5.500%

		Fair	value after hedging	as of			
(€ million)	Year of issue	December 31, 2009	December 31, 2008	December 31, 2007	Currency	Maturity	Initial rate before hedging instruments
Bond	2007	306	306	305	GBP	2013	5.500%
Bond	2007	72	73	74	GBP	2013	5.500%
Bond	2007	248	248	248	CHF	2014	2.635%
Bond	2007	31	31	31	JPY	2014	1.505%
Bond	2007	61	61	61	CHF	2014	2.635%
Bond	2007	49	49	49	JPY	2014	1.723%
Bond	2007	121	121	122	CHF	2015	3.125%
Bond	2007	300	300	302	EUR	2017	4.700%
Bond	2007	76	76	76	CHF	2018	3.135%
Bond	2007	60	60	60	CHF	2018	3.135%
Bond	2008	63	63	_	GBP	2010	4.875%
Bond	2008	66	66	_	GBP	2010	4.875%
Bond	2008	92	92	_	AUD	2011	7.500%
Bond	2008	100	100	_	EUR	2011	3.875%
Bond	2008	150	151	_	EUR	2011	3.875%
Bond	2008	50	50	_	EUR	2011	3.875%
Bond	2008	50 50	50 50	_	EUR	2011	3.875%
Bond	2008	50 60	60	_	JPY	2011	EURIBOR 6 months + 0.018%
Bond	2008	102	102	_	USD	2011	3.750%
		62		_			
Bond	2008 2008		62		CHF	2012	2.135%
Bond		124	124	—	CHF	2012	3.635%
Bond	2008	46	46	—	CHF	2012	2.385%
Bond	2008	92	92	_	CHF	2012	2.385%
Bond	2008	64	64	—	CHF	2012	2.385%
Bond	2008	50	50	—	EUR	2012	3.250%
Bond	2008	63	63	—	GBP	2012	4.625%
Bond	2008	63	63	—	GBP	2012	4.625%
Bond	2008	63	64	—	GBP	2012	4.625%
Bond	2008	62	62	—	NOK	2012	6.000%
Bond	2008	69	69	—	USD	2012	5.000%
Bond	2008	60	60	—	AUD	2013	7.500%
Bond	2008	61	61	_	AUD	2013	7.500%
Bond	2008	127	128	_	CHF	2013	3.135%
Bond	2008	62	63	_	CHF	2013	3.135%
Bond	2008	200	200	_	EUR	2013	4.125%
Bond	2008	100	100	_	EUR	2013	4.125%
Bond	2008	1,000	1,002	_	EUR	2013	4.750%
Bond	2008	63	63	_	GBP	2013	5.500%
Bond	2008	149	149	_	JPY	2013	EURIBOR 6 months + 0.008%
Bond	2008	191	194	_	USD	2013	4.000%
Bond	2008	61	61	_	CHF	2015	3.135%
Bond	2008	62	62	_	CHF	2015	3.135%
Bond	2008	61	62	_	CHF	2015	3.135%
Bond	2008	62	62	_	CHF	2018	3.135%
Bond	2009	56		_	AUD	2013	5.500%
Bond	2009	54	_	_	AUD	2013	5.500%
Bond	2009	236		_	CHF	2013	2.500%
Bond	2009	230	_	_	USD	2013	4.000%
Bond	2009	131	—	_	CHF	2013	2.625%
		998	_	_			
Bond	2009 2009		_	_	EUR EUR	2014	3.500%
Bond	2009	150	_	—	EUR	2014	3.500%

		Fair	value after hedging				
(€ million)	Year of issue	December 31, 2009	December 31, 2008	December 31, 2007	Currency	Maturity	Initial rate before hedging instruments
Bond	2009	40	_	_	HKD	2014	3.240%
Bond	2009	96	_	_	AUD	2015	6.000%
Bond	2009	550	_	_	EUR	2015	3.625%
Bond	2009	684	_	_	USD	2015	3.125%
Bond	2009	208	_	_	USD	2015	3.125%
Bond	2009	99	_	_	CHF	2016	2.385%
Bond	2009	115	_	_	GBP	2017	4.250%
Bond	2009	225	_	_	GBP	2017	4.250%
Bond	2009	448	_	_	EUR	2019	4.875%
Bond	2009	602	_	_	EUR	2019	4.875%
Bond	2009	69	_	_	HKD	2019	4.180%
Bond	2009	347	_	_	USD	2021	4.250%
Bond	2009	806	_	_	EUR	2024	5.125%
Current portion (less than one							
vear)		(1,937)	(722)	(1,222)			
Total TOTAL CAPITAL <sup>(a)</sup>		17,315	13,380	10,136			
Other consolidated subsidiaries		153	103	110			
Total		17,584	13,667	11,650			

(a) TOTAL CAPITAL is a wholly-owned indirect subsidiary of TOTAL S.A. (with the exception of one share held by each member of its Board of Directors). It acts as a financing vehicle for the Group. Its debt securities are fully and unconditionally guaranteed by TOTAL S.A. as to payment of principal, premium, if any, interest and any other amounts due.

## Loan repayment schedule (excluding current portion)

As of December 31, 2009 (€ million)	Non-current financial debt	of which hedging instruments of non-current financial debt (liabilities)	Hedging instruments of non-current financial debt (assets)	Non-current financial debt - net of hedging instruments	%
2011	3,857	42	(199)	3,658	20%
2012	3,468	48	(191)	3,277	18%
2013	3,781	95	(236)	3,545	19%
2014	2,199	6	(90)	2,109	11%
2015 and beyond	6,132	50	(309)	5,823	32%
Total	19,437	241	(1,025)	18,412	100%

As of December 31, 2008 (€million)	Non-current financial debt	of which hedging instruments of non-current financial debt (liabilities)	Hedging instruments of non-current financial debt (assets)	Non-current financial debt - net of hedging instruments	%
2010	3,160	170	(168)	2,992	20%
2011	3,803	24	(145)	3,658	24%
2012	3,503	115	(179)	3,324	22%
2013	3,430	127	(198)	3,232	21%
2014 and beyond	2,295	4	(202)	2,093	13%
Total	16,191	440	(892)	15,299	100%

As of December 31, 2007 (€ million)	Non-current financial debt	of which hedging instruments of non-current financial debt (liabilities)	Hedging instruments of non-current financial debt (assets)	Non-current financial debt - net of hedging instruments	%
2009	2,137	6	(114)	2,023	14%
2010	2,767	16	(207)	2,560	18%
2011	3,419	123	(65)	3,354	23%
2012	3,517	90	(30)	3,487	24%
2013 and beyond	3,036	134	(44)	2,992	21%
Total	14,876	369	(460)	14,416	100%

## Analysis by currency and interest rate

These analyses take into account interest rate and foreign currency swaps to hedge non-current financial debt.

As of December 31, (€ million)	2009	%	2008	%	2007	%
U.S. Dollar	3,962	21%	3,990	26%	4,700	33%
Euro	14,110	77%	10,685	70%	8,067	56%
Other currencies	340	2%	624	4%	1,649	11%
Total	18,412	100%	15,299	100%	14,416	100%
As of December 24. (Casilian)	2000	0/		0/	0007	0/
As of December 31, (€ million)	2009	%	2008	%	2007	%
Fixed rate	2,064	11%	633	4%	893	6%
Floating rate	16,348	89%	14,666	96%	13,523	94%
Total	18.412	100%	15,299	100%	14.416	100%

## B) CURRENT FINANCIAL ASSETS AND LIABILITIES

Current borrowings consist mainly of commercial papers or treasury bills or draws on bank loans. These instruments bear interest at rates that are close to market rates.

As of December 31, (€ million)	2000	2000	2007
(Assets) / Liabilities	2009	2008	2007
Current financial debt	4,761	5,586	2,530
Current portion of non-current financial debt	2,233	2,136	2,083
Current borrowings	6,994	7,722	4,613
Current portion of hedging instruments of debt (liabilities)	97	12	1
Other current financial instruments (liabilities)	26	146	59
Other current financial liabilities (note 28)	123	158	60
Current deposits beyond three months	(55)	(1)	(850)
Current portion of hedging instruments of debt (assets)	(197)	(100)	(388)
Other current financial instruments (assets)	(59)	(86)	(26)
Current financial assets (note 28)	(311)	(187)	(1,264)
Current borrowings and related financial assets and liabilities, net	6,806	7,693	3,409

#### C) NET-DEBT-TO-EQUITY RATIO

For its internal and external communication needs, the Group calculates a debt ratio by dividing its net financial debt by equity. Shareholders' equity as of December 31, 2009 is calculated after distribution of a dividend of €2.28 per share of which €1.14 per share was paid on November 19, 2009.

The net-debt-to-equity ratio is calculated as follows:

As of December 31, (€ million) (Assets) / Liabilities	2009	2008	2007
Current borrowings	6,994	7,722	4,613
Other current financial liabilities	123	158	60
Current financial assets	(311)	(187)	(1,264)
Non-current financial debt	19,437	16,191	14,876
Hedging instruments on non-current financial debt	(1,025)	(892)	(460)
Cash and cash equivalents	(11,662)	(12,321)	(5,988)
Net financial debt	13,556	10,671	11,837
Shareholders' equity - Group share	52,552	48,992	44,858
Estimated dividend payable	(2,546)	(2,540)	(2,397)
Minority interest	987	958	842
Total shareholder's equity	50,993	47,410	43,303
Net-debt-to-equity ratio	26.6%	22.5%	27.3%

## 21) OTHER CREDITORS AND ACCRUED LIABILITIES

As of December 31, (€million)	2009	2008	2007
Accruals and deferred income	223	151	137
Payable to States (including taxes and duties)	6,024	6,256	7,860
Payroll	955	928	909
Other operating liabilities	4,706	4,297	3,900
Total	11,908	11,632	12,806

As of December 31, 2009, the heading "Other operating liabilities" mainly includes €744 million related to Chesapeake acquisition (see Note 3 to the Consolidated Financial Statements).

## 22) LEASE CONTRACTS

The Group leases real estate, retail stations, ships, and other equipments (see Note 11 to the Consolidated Financial Statements).

The future minimum lease payments on operating and finance leases to which the Group is committed are shown as follows:

For the year ended December 31, 2009 (€ million)	Operating leases	Finance leases
2010	523	42
2011	377	43
2012	299	42
2013	243	41
2014	203	39
2015 and beyond	894	128
Total minimum payments	2,539	335
Less financial expenses	—	(53)
Nominal value of contracts	_	282
Less current portion of finance lease		
contracts	—	(22)
Outstanding liability of finance lease		
contracts	_	260

For the year ended December 31, 2008 (€million)	Operating leases	Finance leases
2009	429	47
2010	306	42
2011	243	42
2012	208	42
2013	166	40
2014 and beyond	675	148
Total minimum payments	2,027	361
Less financial expenses	_	(70)
Nominal value of contracts	_	291
Less current portion of finance lease		
contracts	—	(23)
Outstanding liability of finance lease		
contracts	_	268

For the year ended December 31,	Operating	Finance
2007 (€ million)	leases	leases
2008	427	50
2009	352	47
2010	291	46
2011	210	46
2012	149	47
2013 and beyond	492	154
Total minimum payments	1,921	390
Less financial expenses	—	(47)
Nominal value of contracts	_	343
Less current portion of finance lease		
contracts	—	(26)
Outstanding liability of finance lease		
contracts	_	317

Net rental expense incurred under operating leases for the year ended December 31, 2009 is €613 million (against €426 million in 2008 and €383 million in 2007).

## 23) COMMITMENTS AND CONTINGENCIES

		Maturity		
		Less than	Between	More than
As of December 31, 2009 (€ million)	Total	1 year	1 and 5 years	5 years
Non-current debt obligations net of hedging instruments (Note 20)	18,152	_	12,443	5,709
Current portion of non-current debt obligations net of hedging instruments (Note 20)	2,111	2,111	_	_
Finance lease obligations (Note 22)	282	22	146	114
Asset retirement obligations (Note 19)	5,469	235	972	4,262
Contractual obligations recorded in the balance sheet	26,014	2,368	13,561	10,085
Operating lease obligations (Note 22)	2,539	523	1,122	894
Purchase obligations	49,808	4,542	9,919	35,347
Contractual obligations not recorded in the balance sheet	52,347	5,065	11,041	36,241
Total of contractual obligations	78,361	7,433	24,602	46,326
Guarantees given for excise taxes	1,765	1,617	69	79
Guarantees given against borrowings	2,882	1,383	709	790
Indemnities related to sales of businesses	36	_	1	35
Guarantees of current liabilities	203	160	38	5
Guarantees to customers / suppliers	2,770	1,917	70	783
Letters of credit	1,499	1,485	2	12
Other operating commitments	765	582	103	80
Total of other commitments given	9,920	7,144	992	1,784
Mortgages and liens received	330	5	106	219
Other commitments received	5,637	3,187	481	1,969
Total of commitments received	5,967	3,192	587	2,188
		Maturity	and installments	
			and installments Between	More than
As of December 31, 2008 (€ million)	Total	Less than 1 vear	Between	More than 5 vears
	<b>Total</b> 15.031	Less than	Between 1 and 5 years	5 years
Non-current debt obligations net of hedging instruments (Note 20)	15,031	Less than 1 year	Between	
		Less than 1 year	Between 1 and 5 years	5 years
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20)	15,031 2,025	Less than 1 year 2,025	Between 1 and 5 years 13,064 —	<b>5 years</b> 1,967
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> )	15,031 2,025 291	Less than <u>1 year</u> 2,025 23	Between 1 and 5 years 13,064 — 142	5 years 1,967 — 126
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> ) Contractual obligations recorded in the balance sheet	15,031 2,025 291 4,500	Less than 1 year 	Between 1 and 5 years 13,064  142 653	5 years 1,967 
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> )	15,031 2,025 291 4,500 <b>21,847</b>	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 — 126 3,693 5,786
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> ) Contractual obligations recorded in the balance sheet Operating lease obligations ( <i>Note 22</i> )	15,031 2,025 291 4,500 <b>21,847</b> 2,027	Less than <u>1 year</u> 2,025 23 154 <b>2,202</b> 429	Between 1 and 5 years 13,064 	5 years 1,967  126 3,693 5,786 675
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> ) Contractual obligations recorded in the balance sheet Operating lease obligations Purchase obligations Contractual obligations not recorded in the balance sheet	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b>	Less than 1 year 	Between 1 and 5 years 13,064  142 653 13,859 923 13,127	5 years 1,967  126 3,693 5,786 675 42,679 43,354
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> ) Contractual obligations recorded in the balance sheet Operating lease obligations ( <i>Note 22</i> ) Purchase obligations not recorded in the balance sheet Total of contractual obligations	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b>	Less than 1 year  2,025 23 154 2,202 429 4,420 4,849 7,051	Between 1 and 5 years 13,064  142 653 13,859 923 13,127 14,050 27,909	5 years 1,967  126 3,693 5,786 675 42,679 43,354 49,140
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations (Note 19) Contractual obligations recorded in the balance sheet Operating lease obligations (Note 22) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720	Less than 1 year 	Between 1 and 5 years 13,064  142 653 13,859 923 13,127 14,050	5 years 1,967 
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations ( <i>Note 19</i> ) Contractual obligations recorded in the balance sheet Operating lease obligations ( <i>Note 22</i> ) Purchase obligations not recorded in the balance sheet Total of contractual obligations	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b>	Less than 1 year  2,025 23 154 2,202 429 4,420 4,849 7,051	Between 1 and 5 years 13,064 	5 years 1,967  126 3,693 5,786 675 42,679 43,354 49,140
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations (Note 19) Contractual obligations recorded in the balance sheet Operating lease obligations (Note 22) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given against borrowings	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations (Note 19) Contractual obligations recorded in the balance sheet Operating lease obligations (Note 22) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given for excise taxes Guarantees given for excise taxes Indemnities related to sales of businesses	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870 39	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations (Note 19) Contractual obligations recorded in the balance sheet Operating lease obligations (Note 22) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given for excise taxes Guarantees of current liabilities	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870 39 315	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations recorded in the balance sheet Operating lease obligations (Note 22) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given against borrowings Indemnities related to sales of businesses Guarantees of current liabilities Guarantees to customers / suppliers	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870 39 315 2,866	Less than 1 year 	Between 1 and 5 years 13,064  142 653 13,859 923 13,127 14,050 27,909 58 519 1 164 148	5 years 1,967 
Non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Current portion of non-current debt obligations net of hedging instruments ( <i>Note 20</i> ) Finance lease obligations ( <i>Note 22</i> ) Asset retirement obligations recorded in the balance sheet Operating lease obligations ( <i>Note 22</i> ) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given against borrowings Indemnities related to sales of businesses Guarantees to curson liabilities Guarantees to customers / suppliers Letters of credit	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870 39 315 2,866 1,080	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations (Note 19) Contractual obligations recorded in the balance sheet Operating lease obligations Contractual obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given against borrowings Indemnities related to sales of businesses Guarantees to cursent liabilities Guarantees of current liabilities	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870 39 315 2,866 1,080 648	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 
Non-current debt obligations net of hedging instruments (Note 20) Current portion of non-current debt obligations net of hedging instruments (Note 20) Finance lease obligations (Note 22) Asset retirement obligations (Note 19) Contractual obligations recorded in the balance sheet Operating lease obligations (Note 22) Purchase obligations not recorded in the balance sheet Total of contractual obligations Guarantees given for excise taxes Guarantees given against borrowings Indemnities related to sales of businesses Guarantees to customers / suppliers Letters of credit Other operating commitments Total of other commitments given	15,031 2,025 291 4,500 <b>21,847</b> 2,027 60,226 <b>62,253</b> <b>84,100</b> 1,720 2,870 39 315 2,866 1,080 648 <b>9,538</b>	Less than 1 year 	Between 1 and 5 years 13,064 	5 years 1,967 

F-60

		Maturity	and installments	
		Less than	Between	More than
As of December 31, 2007 (€ million)	Total	1 year	1 and 5 years	5 years
Non-current debt obligations net of hedging instruments (Note 20)	14,099	—	11,251	2,848
Current portion of non-current debt obligations net of hedging instruments (Note 20)	1,669	1,669	_	_
Finance lease obligations (Note 22)	343	26	173	144
Asset retirement obligations (Note 19)	4,206	189	503	3,514
Contractual obligations recorded in the balance sheet	20,317	1,884	11,927	6,506
Operating lease obligations (Note 22)	1,921	427	1,002	492
Purchase obligations	61,794	3,210	15,419	43,165
Contractual obligations not recorded in the balance sheet	63,715	3,637	16,421	43,657
Total of contractual obligations	84,032	5,521	28,348	50,163
Guarantees given for excise taxes	1,796	590	58	1,148
Guarantees given against borrowings	781	9	624	148
Indemnities related to sales of businesses	40	_	3	37
Guarantees of current liabilities	97	16	48	33
Guarantees to customers / suppliers	1,197	23	6	1,168
Letters of credit	1,677	1,677	—	_
Other operating commitments	1,280	207	151	922
Total of other commitments given	6,868	2,522	890	3,456
Mortgages and liens received	353	7	69	277
Other commitments received	3,887	2,781	377	729
Total of commitments received	4,240	2,788	446	1,006

#### A. CONTRACTUAL OBLIGATIONS

#### Debt obligations

"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. It includes the non-current portion of swaps hedging bonds, and excludes non-current finance lease obligations of €260 million.

The current portion of non-current debt is included in the items "Current borrowings", "Current financial assets" and "Other current financial liabilities" of the Consolidated Balance Sheet. It includes the current portion of swaps hedging bonds, and excludes the current portion of finance lease obligations of €22 million.

The information regarding contractual obligations linked to indebtedness is presented in Note 20 to the Consolidated Financial Statements.

#### Lease contracts

The information regarding operating and finance leases is presented in Note 22 to the Consolidated Financial Statements.

#### Asset retirement obligations

This item represents the discounted present value of Upstream asset retirement obligations, primarily asset removal costs at the completion date. The information regarding contractual obligations linked to asset retirement obligations is presented in Notes 1Q and 19 to the Consolidated Financial Statements.

#### Purchase obligations

Purchase obligations are obligations under contractual agreements to purchase goods or services, including capital projects. These obligations are enforceable and legally binding on the company 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.

#### **B. OTHER COMMITMENTS GIVEN**

#### Guarantees given for excise taxes

They consist of guarantees given to other oil and gas companies in order to comply with French tax authorities' requirements for oil and gas imports in France. A payment would be triggered by a failure of the guaranteed party with respect to the French tax authorities. The default of the guaranteed parties is however considered to be highly remote by the Group.

#### Guarantees given against borrowings

The Group guarantees bank debt and finance lease obligations of certain nonconsolidated subsidiaries and equity affiliates. Maturity dates vary, and guarantees will terminate on payment and/or cancellation of the obligation. A payment would be triggered by failure of the guaranteed party to fulfill its obligation covered by the guarantee, and no assets are held as collateral for these guarantees. As of December 31, 2009, the maturities of these guarantees are up to 2023.

#### Indemnities related to sales of businesses

In the ordinary course of business, the Group executes contracts involving standard indemnities in oil industry and indemnities specific to transactions such as sales of businesses. These indemnities might include claims against any of the following: environmental, tax and shareholder matters, intellectual property rights, governmental regulations and employment-related matters, dealer, supplier, and other commercial contractual relationships. Performance under these indemnities would generally be triggered by a breach of terms of the contract or by a third party claim. The Group regularly evaluates the probability of having to incur costs associated with these indemnities.

The guarantees related to antitrust investigations granted as part of the agreement relating to the spin-off of Arkema are described in Note 32 to the Consolidated Financial Statements.

#### Other guarantees given

#### Non-consolidated subsidiaries

The Group also guarantees the current liabilities of certain non-consolidated subsidiaries. Performance under these guarantees would be triggered by a financial default of the entity.

#### **Operating agreements**

As part of normal ongoing business operations and consistent with generally and accepted recognized industry practices, the Group enters into numerous agreements with other parties. These commitments are often entered into for commercial purposes, for regulatory purposes or for other operating agreements.

## 24) RELATED PARTIES

The main transactions and balances with related parties (principally nonconsolidated subsidiaries and equity affiliates) are detailed as follows:

Balance sheet			
As of December 31, (€million)	2009	2008	2007
Receivables			
Debtors and other debtors	293	244	277
Loans (excl. loans to equity affiliates)	438	354	378
Payables			
Creditors and other creditors	386	136	460
Debts	42	50	28
Statement of income			
For the year ended			
December 31, (€ million)	2009	2008	2007
Sales	2,183	3,082	2,635
Purchases	2,958	4,061	3,274
Financial expense	1	_	_
Financial income	68	114	29

# Compensation for the administration and management bodies

The aggregate amount paid directly or indirectly by the French and foreign affiliates of the Company as compensation to the executive officers of TOTAL (the members of the Management Committee and the Treasury) and to the members of the Board of Directors who are employees of the Group, is detailed as follows:

For the year ended December 31,			
(€ million)	2009	2008	2007
Number of people	27	30	30
Direct or indirect compensation	19.4	20.4	19.9
Share-based payments expense (IFRS 2) <sup>(a)</sup>	11.2	16.6	18.4
Pension expenses <sup>(b)</sup>	10.6	11.9	12.2

(a) Share-based payments expense computed for the executive officers and the members of the Board of Directors who are employees of the Group as described in Note 25 paragraph E to the Consolidated Financial Statements and based on the principles of IFRS 2 "Share-based payments" described in Note 1 paragraph E to the Consolidated Financial Statements.

(b) The benefits provided for executive officers and certain members of the Board of Directors, employees and former employees of the Group, include severance to be paid on retirement, supplementary pension schemes and insurance plans, which represent €96.6 million provisioned as of December 31, 2009, against €98.0 million as of December 31, 2008 and €102.9 million as of December 31, 2007.

# **25) SHARE-BASED PAYMENTS**

A. TOTAL SHARE SUBSCRIPTION OPTION PLANS

	Plan 2003	Plan 2004	Plan 2005	Plan 2006	Plan 2007	Plan 2008	Plan 2009	Total	Weighted Average Exercise Price
Date of the shareholders' meeting	May 17,	May 14,	May 14,	May 14,	May 11,	May 11,	May 11,		
	2001	2004	2004	2004	2007	2007	2007		
Date of the award <sup>(a)</sup>	July 16,	July 20,	July 19,	July 18,	July 17,	October 9,	September 15,		
	2003	2004	2005	2006	2007	2008	2009		
Exercise price until May 23, 2006									
included <sup>(b)</sup>	33.30	39.85	49.73						
Exercise price since May 24, 2006 <sup>(b)</sup>	32.84	39.30	49.04	50.60	60.10	42.90	39.90		
Expiry date	July 16,	July 20,	July 19,	July 18,	July 17,	October 9,	September 15,		
	2011	2012	2013	2014	2015	2016	2017		
Number of options <sup>(c)</sup>									
Existing options as of January 1, 2007	10,608,590	13,430,372	6,275,757	5,726,160	—	_	—	36,040,879	40.89
Granted	_	_	_	_	5,937,230	_	_	5,937,230	60.10
Cancelled	(22,138)	(20,093)	(11,524)	(13,180)	(17,125)	_	_	(84,060)	44.94
Exercised	(2,218,074)	(213,043)	(20,795)	(1,920)	_	_	_	(2,453,832)	33.55
Existing options as of January 1, 2008	8,368,378	13,197,236	6,243,438	5,711,060	5,920,105	_	_	39,440,217	44.23
Granted	_	_	_	_	_	4,449,810	_	4,449,810	42.90
Cancelled	(25,184)	(118,140)	(34,032)	(53,304)	(34,660)	(6,000)	_	(271,320)	44.88
Exercised	(841,846)	(311,919)	(17,702)	(6,700)	—	—	_	(1,178,167)	34.89
Existing options as of January 1, 2009	7,501,348	12,767,177	6,191,704	5,651,056	5,885,445	4,443,810	_	42,440,540	44.35
Granted	_	_	_	_	_	_	4,387,620	4,387,620	39.90
Cancelled	(8,020)	(18,387)	(6,264)	(5,370)	(13,780)	(2,180)	(10,610)	(64,611)	45.04
Exercised	(681,699)	(253,081)						(934,780)	34.59
Existing options as of December 31,									
2009	6,811,629	12,495,709	6,185,440	5,645,686	5,871,665	4,441,630	4,377,010	45,828,769	44.12

(a) The grant date corresponds to the date of the Board of Directors meeting that awarded the options, except for the options awarded by the Board of Directors at their

(a) The grant date corresponds to the date of the Board of Directors meeting that awarded the options, except for the options awarded by the Board of Directors at their meeting of September 9, 2008, and granted on October 9, 2008.
(b) Exercise price in euro. The exercise prices of TOTAL subscription shares of the plans in force at that date were multiplied by 0.25 to take into account the four-for-one stock split on May 18, 2006. Moreover, following the spin-off of Arkema, the exercise prices of TOTAL subscription shares of these plans were multiplied by an adjustment factor equal to 0.986147 with effect as of May 24, 2006.
(c) The number of options awarded, outstanding, cancelled or exercised before May 23, 2006 included, was multiplied by four to reflect the four-for-one stock split approved by the shareholders' meeting on May 12, 2006.

The options, subject to a continued employment condition, are exercisable only after a 2-year period from the date of the Board meeting awarding the options and must be exercised within eight years from this date. Underlying shares may not be sold for four years from the date of grant. For the options of the 2007, 2008 and 2009 Plans, beneficiaries working for a non-French subsidiary as of the grant date are authorized to transfer the shares issued upon exercise of options starting after a 2-year period from the grant date.

The continued employment condition states that the termination of the employment contract will result in the employee losing the right to exercise the options.

For the 2009 Plan, the Board of Directors decided that for each beneficiary other than the CEO of more than 25,000 stock options, one third of the options in excess of this number finally awarded following the 2-year vesting period will be subject to a performance condition. This condition is based on the average of the Return On Equity (ROE) of the Group. The average ROE is calculated based on the consolidated accounts published by TOTAL for fiscal years 2009 and 2010. The acquisition rate:

- is equal to zero if the average ROE is less than or equal to 7%;
- varies on straight-line basis between 0% and 100% if the average ROE is greater than 7% and less than 18%; and
- is equal to 100% if the average ROE is greater than or equal to 18%.

Furthermore, the Board of Directors decided that the number of options awarded to the CEO is subject to two performance conditions:

 For 50% of the options granted, the performance condition states that the number of options finally granted is based on the average ROE of the Group. The average ROE is calculated based on the consolidated accounts published by TOTAL for fiscal years 2009 and 2010. The acquisition rates equal to zero if the average ROE is less than or equal to 7%; varies on a straight-line basis between 0% and 100% if the average ROE is greater than 7% and less than 18%; and is equal to 100% if the average ROE is greater than or equal to 18%.

 For the other 50% of the options granted, the performance condition states that the number of options finally granted is based on the average of the Return On Average Capital Employed (ROACE) of the Group. The average ROACE is calculated based on the consolidated accounts published by TOTAL for fiscal years 2009 and 2010. The acquisition rate is equal to zero if the average ROACE is less than or equal to 6%; varies on a straight-line basis between 0% and 100% if the average ROACE is greater than 6% and less than 15%; and is equal to 100% if the average ROACE is greater than or equal to 15%.

For the 2007 and 2008 Plans, the Board of Directors decided that for each beneficiary of more than 25,000 stock options, one third of the options in excess of this number finally awarded following the 2-year vesting period will be subject to a performance condition. This condition states that the number of subscription options finally granted is based on the ROE of the Group. The ROE is calculated based on the consolidated accounts published by TOTAL for the fiscal year preceding the final grant. The acquisition rate:

- is equal to zero if the ROE is less than or equal to 10%;
- varies on a straight-line basis between 0% and 80% if the ROE is greater than 10% and less than 18%;
- varies on a straight-line basis between 80% and 100% if the ROE is greater than or equal to 18% and less than 30%; and
- is equal to 100% if the ROE is greater than or equal to 30%.

For the 2007 Plan, the acquisition rate of the options, linked to the performance condition, amounted to 100%.

#### **B. TOTAL SHARE PURCHASE OPTION PLANS**

	1999 Plan <sup>(a)</sup>	2000 Plan <sup>(b)</sup>	2001 Plan <sup>(c)</sup>	2002 Plan <sup>(d)</sup>	Total	Weighted Average Exercise Price
Date of the shareholders' meeting	May 21, 1997	May 21, 1997	May 17, 2001	May 17, 2001	Total	11100
Date of the award <sup>(e)</sup>	June 15, 1999	July 11, 2000	July 10, 2001	July 9, 2002		
Exercise price until May 23, 2006 included <sup>(f)</sup>	28.25	40.68	42.05	39.58		
Exercise price since May 24, 2006 <sup>(f)</sup>	27.86	40.11	41.47	39.03		
Expiry date	June 15, 2007	July 11, 2008	July 10, 2009	July 9, 2010		
Number of options <sup>(g)</sup>						
Existing options as of January 1, 2007	1,370,424	4,928,505	6,861,285	9,280,716	22,440,930	39.33
Granted	_	_	_	_	_	
Cancelled	(138,023)	(3,452)	(7,316)	(7,104)	(155,895)	29.28
Exercised	(1,232,401)	(1,782,865)	(1,703,711)	(2,210,429)	(6,929,406)	37.92
Existing options as of January 1, 2008	_	3,142,188	5,150,258	7,063,183	15,355,629	40.07
Granted	_	_	_	_	_	
Cancelled	_	(480,475)	(3,652)	(13,392)	(497,519)	40.09
Exercised	—	(2,661,713)	(455,180)	(598,934)	(3,715,827)	40.10
Existing options as of January 1, 2009	—	_	4,691,426	6,450,857	11,142,283	40.06
Granted	_	_	_	_	_	_
Cancelled	—	—	(4,650,446)	(7,920)	(4,658,366)	41.47
Exercised	—	—	(40,980)	(507,676)	(548,656)	39.21
Existing options as of December 31, 2009	_	_		5,935,261	5,935,261	39.03

(a) The options, subject to a continued employment condition, were exercisable only after a 5-year period from the date of the Board meeting awarding the options and had to be exercised within eight years from the grant date. This plan expired on June 15, 2007.

(b) The options, subject to a continued employment condition, were exercisable only after a 4-year period from the date of the Board meeting awarding the options and had to be exercised within eight years from the grant date. The shares arising from the exercise of options may not be sold for five years from the grant date. This plan expired on July 11, 2008.

(c) The options, subject to a continued employment condition, were exercisable only after a 3.5-year period from the date of the Board meeting awarding the options and had to be exercised within eight years from the grant date. The shares arising from the exercise of options may not be sold for four years from the grant date. This plan expired on July 10, 2009.

(d) The options, subject to a continued employment condition, are exercisable only after a 2-year period from the date of the Board meeting awarding the options and must be exercised within eight years from the grant date. Underlying shares may not be sold for four years from the grant date.

(e) The date of award is the date of the Board of Directors meeting that awarded the options.

(f) Exercise price in euro. The exercise prices of TOTAL share purchase options of the plans at that date were multiplied by 0.25 to take into account the four-for-one stock split on May 18, 2006. Moreover, following the spin-off of Arkema, the exercise prices of TOTAL share purchase options of these plans were multiplied by an adjustment factor equal to 0.986147 with effect as of May 24, 2006.

(g) The number of options awarded, outstanding, cancelled or exercised before May 23, 2006 included, was multiplied by four to reflect the four-for-one stock split approved by the shareholders' meeting on May 12, 2006.

#### C. EXCHANGE GUARANTEE GRANTED TO THE HOLDERS OF ELF AQUITAINE SHARE SUBSCRIPTION OPTIONS

Pursuant to the public exchange offer for Elf Aquitaine shares which was made in 1999, the Group made a commitment to guarantee the holders of Elf Aquitaine share subscription options, at the end of the period referred to in Article 163 bis C of the French Tax Code (CGI), and until the end of the period for the exercise of the options, the possibility to exchange their future Elf Aquitaine shares for TOTAL shares, on the basis of the exchange ratio of the offer (nineteen TOTAL shares for thirteen Elf Aquitaine shares). In order to take into account the spin-off of S.D.A. (Société de Développement Arkema) by Elf Aquitaine, the spin-off of Arkema by TOTAL S.A. and the fourfor-one TOTAL stock split, the Board of Directors of TOTAL S.A., in accordance with the terms of the share exchange undertaking, approved on March 14, 2006 to adjust the exchange ratio described above (see pages 24 and 25 of the "Prospectus for the purpose of listing Arkema shares on Euronext Paris in connection with the allocation of Arkema shares to TOTAL S.A. shareholders"). Following the approval by Elf Aquitaine shareholders' meeting on May 10, 2006 of the spin-off of S.D.A. by Elf Aquitaine, the approval by TOTAL S.A. shareholders' meeting on May 12, 2006 of the spin-off of Arkema by TOTAL S.A. and the four-for-one TOTAL stock split, the exchange ratio was adjusted to six TOTAL shares for one Elf Aquitaine share on May 22, 2006.

During 2009, 75,699 options were exercised and 80,005 Elf Aquitaine shares were exchanged based on the exchange ratio of six TOTAL shares for one Elf Aquitaine share as adjusted on May 22, 2006.

As of December 31, 2009, this exchange guarantee is not in effect and all Elf Aquitaine subscription plans have expired. Therefore, no Elf Aquitaine shares are covered by the exchange guarantee.

Elf Aquitaine subscription plan <sup>(a)</sup>	1999 Plan n°1	1999 Plan n°2	Total	Weighted- average exercise price <sup>(b)</sup>
			TOLAI	exercise price."
Exercise price until May 23, 2006 included <sup>(b)</sup>	115.60	171.60		
Exercise price since May 24, 2006 <sup>(b)</sup>	114.76	170.36		
Expiration date	03/30/2009	09/12/2009		
Outstanding position as of January 1, 2009	90,342	6,044	96,386	118.25
Outstanding Elf Aquitaine shares covered by the exchange guarantee as of				
January 1, 2009	5,295	—	5,295	
Number of options exercised in 2009	69,655	6,044	75,699	119.20
Number of shares exchanged in 2009	73,961	6,044	80,005	
Outstanding position as of December 31, 2009	_	_	_	
Total of Elf Aquitaine shares, either outstanding or to be created, covered by the				
exchange guarantee for TOTAL shares as of December 31, 2009	—	—		
TOTAL shares likely to be created within the scope of the application of the				
exchange guarantee as of December 31, 2009	_	_		

(a) Adjustments of the number of options approved by the Board of Directors of Elf Aquitaine on March 10, 2006 in application of articles 174-9, 174-12 and 174-13 of the decree No. 67-236 of March 23, 1967 in force on March 10, 2006 and during Elf Aquitaine shareholders' meeting on May 10, 2006, as part of the spin-off of SDA. These adjustments have been made on May 22, 2006 with effect as of May 24, 2006.

(b) Exercise price in euro. To take into account the spin-off of S.D.A., the exercise prices of Elf Aquitaine share subscription options were multiplied by an adjustment factor equal to 0.992769 with effect on May 24, 2006.

#### D. TOTAL RESTRICTED SHARE GRANTS

	2005 Plan <sup>(a)</sup>	2006 Plan	2007 Plan	2008 Plan	2009 Plan	Total
Date of the shareholders' meeting	May 17, 2005	May 17, 2005	May 17, 2005	May 16, 2008	May 16, 2008	
Date of the award <sup>(b)</sup>				October 9,	September 15,	
	July 19, 2005	July 18, 2006	July 17, 2007	2008	2009	
Date of the final award (end of the vesting period)				October 10,	September 16,	
	July 20, 2007	July 19, 2008	July 18, 2009	2010	2011	
Transfer authorized as from				October 10,	September 16,	
	July 20, 2009	July 19, 2010	July 18, 2011	2012	2013	
Number of restricted shares						
Outstanding as of January 1, 2007	2,267,096	2,272,296	—	—	—	4,539,392
Notified	_	_	2,366,365	_	_	2,366,365
Cancelled	(38,088)	(6,212)	(2,020)	_	—	(46,320)
Finally granted <sup>(c)</sup>	(2,229,008)	(2,128)	(1,288)	_	—	(2,232,424)
Outstanding as of January 1, 2008	—	2,263,956	2,363,057	—	—	4,627,013
Notified	_	_	_	2,791,968	_	2,791,968
Cancelled <sup>(d)</sup>	2,840	(43,822)	(29,504)	(19,220)	_	(89,706)
Finally granted <sup>(c)(d)</sup>	(2,840)	(2,220,134)	(336)		—	(2,223,310)
Outstanding as of January 1, 2009	—	—	2,333,217	2,772,748	—	5,105,965
Notified	_	_		_	2,972,018	2,972,018
Cancelled	1,928	2,922	(12,418)	(9,672)	(5,982)	(23,222)
Finally granted <sup>(c)(d)</sup>	(1,928)	(2,922)	(2,320,799)	(600)	—	(2,326,249)
Outstanding as of December 31, 2009	_	_	_	2,762,476	2,966,036	5,728,512

(a) The number of restricted shares was multiplied by four on May 18, 2006, to take into account the four-for-one stock split approved by the shareholders' meeting.
 (b) The grant date corresponds to the date of the Board of Directors meeting that awarded the options, except for the options awarded by the Board of Directors at their meeting of September 9, 2008, and granted on October 9, 2008.

(c) Restricted shares finally granted following the death of their beneficiaries (2005, 2006 and 2007 Plans for fiscal year 2007, 2007 Plan for fiscal year 2008, 2008 Plan for fiscal year 2009).

(d) For the 2005 Plan and 2006 Plan: final restricted share grants for which entitlement right had been cancelled erroneously.

The grant of restricted shares, which are bought back by the Company on the market, becomes final after a 2-year vesting period (acquisition of the right to restricted shares). The final grant of these shares is subject to a continued employment condition and a performance condition. Moreover, the transfer of the restricted shares, that were definitely granted, will not be permitted between the date of final grant and the end of a two-year mandatory holding period.

The continued employment condition states that the termination of the employment contract during the vesting period will also terminate the grantee's right to a restricted share grant.

For the 2009 Plan, the performance condition approved by the Board of Directors states that the half of the number of restricted shares finally granted above 100 shares is based on the average ROE of the Group. The average ROE is calculated based on the consolidated accounts published by TOTAL for fiscal years 2009 and 2010. The acquisition rate:

- is equal to zero if the average ROE is less than or equal to 7%;
- varies on a straight-line basis between 0% and 100% if the average ROE is greater than 7% and less than 18%; and
- is equal to 100% if the average ROE is greater than or equal to 18%.

For the 2007 and 2008 Plans, the performance condition approved by the Board of Directors states that the number of restricted shares finally granted is based on the ROE of the Group. The ROE is calculated based on the consolidated accounts published by TOTAL for the fiscal year preceding the final grant. This acquisition rate:

- is equal to zero if the ROE is less than or equal to 10%;
- varies on a straight-line basis between 0% and 80% if the ROE is greater than 10% and less than 18%:
- varies on a straight-line basis between 80% and 100% if the ROE is
- greater than or equal to 18% and less than 30%; and
- is equal to 100% if the ROE is more than or equal to 30%.

For the 2005, 2006 and 2007 Plans, the acquisition rate of the granted shares, linked to the performance condition, amounted to 100%.

#### E. SHARE-BASED PAYMENT EXPENSE

Share-based payment expense before tax for the year 2009 amounts to €106 million and can be broken down as follows:

- €38 million for TOTAL share subscription plans; and
- €68 million for TOTAL restricted shares plans.

Share-based payment expense before tax for the year 2008 amounted to  ${\ensuremath{\in}}$ 154 million and can be broken down as follows:

- €61 million for TOTAL share subscription plans;
- €105 million for TOTAL restricted shares plans; and
- €(12) million for the adjustment to the expense booked in 2007 related to TOTAL capital increase reserved for employees (see Note 17 to the Consolidated Financial Statements).

Share-based payment expense before tax for the year 2007 amounted to €196 million and can be broken down as follows:

- €65 million for TOTAL share subscription plans; €109 million for TOTAL restricted shares plans; and
- €22 million for TOTAL capital increase reserved for employees (see Note 17 to the Consolidated Financial Statements).

The fair value of the options granted in 2009, 2008 and 2007 has been measured according to the Black- Scholes method and based on the following assumptions:

For the year ended December 31,	2009	2008	2007
Risk free interest rate (%) <sup>(a)</sup>	2.9	4.3	4.9
Expected dividends (%) <sup>(b)</sup>	4.8	8.4	3.9
Expected volatility (%) <sup>(c)</sup>	31.0	32.7	25.3
Vesting period (years)	2	2	2
Exercise period (years)	8	8	8
Fair value of the granted options (€ per option)	8.4	5.0	13.9

(a) Zero coupon Euro swap rate at 6 years.

- (b) The expected dividends are based on the price of TOTAL share derivatives traded on the markets.
- (c) The expected volatility is based on the implied volatility of TOTAL share options and of share indices options traded on the markets.

The cost of capital increases reserved for employees is reduced to take into account the nontransferability of the shares that could be subscribed by the employees over a period of five years. The valuation method of nontransferability of the shares is based on a strategy cost in two steps consisting, first, in a five years forward sale of the nontransferable shares, and second, in purchasing the same number of shares in cash with a loan financing reimbursable "in fine". During the year 2007, the main assumptions used for the valuation of the cost of capital increase reserved for employees were the following:

For the year ended December 31,	2007
Date of the Board of Directors meeting that decided	
the issue	November 6, 2007
Subscription price (€)	44.4
Share price at the date of the Board meeting (€)	54.6
Number of shares (in millions) <sup>(a)</sup>	10.6
Risk free interest rate (%) <sup>(b)</sup>	4.1
Employees loan financing rate (%) <sup>(c)</sup>	7.5
Non transferability cost (% of the share price at the	
date of the Board meeting)	14.9
Expense amount (€ per share)	2.1

(a) The estimated expense as of December 31, 2007 was based on a subscription of the capital increase reserved for employees for 10.6 million shares. The subscription was opened from March 10 to 28, 2008 included. leading to the creation of 4,870,386 TOTAL shares in 2008 (see Note 17 to the Consolidated Financial Statements)

(b) The risk-free interest rate is based on the French Treasury bonds rate for the appropriate maturity.

(c) The employees loan financing rate is based on a 5 year consumer's credit rate.

## 26) PAYROLL AND STAFF

For the year ended			
December 31, (€million)	2009	2008	2007
Personnel expenses <sup>(a)</sup>			
Wages and salaries (including social			
charges)	6,177	6,014	6,058
Group employees <sup>(a)</sup>			
France			
Management	10,906	10,688	10,517
• Other	25,501	26,413	26,779
International			
Management	15,243	14,709	14,225
Other	44,737	45,149	44,921
Total	96,387	96,959	96,442

 (a) Number of employees and personnel expenses of fully consolidated subsidiaries.

## 27) STATEMENT OF CASH FLOWS

A) Cash flow from operating activities

The following table gives additional information on cash paid or received in the cash flow from operating activities:

For the year ended			
December 31, (€ million)	2009	2008	2007
Interests paid	(678)	(958)	(1,680)
Interests received	148	505	1,277
Income tax paid	(6,202)	(10,631)	(9,687)
Dividends received	1,456	1,590	1,109

Changes in working capital are detailed as follows:

For the year ended			
December 31, (€million)	2009	2008	2007
Inventories	(4,217)	4,020	(2,706)
Accounts receivable	(344)	3,222	(2,963)
Other current assets	1,505	(982)	(1,341)
Accounts payable	571	(3,056)	4,508
Other creditors and accrued liabilities	(831)	(633)	1,026
Net amount	(3,316)	2,571	(1,476)

#### B) Cash flow used in financing activities

Changes in non-current financial debt are detailed in the following table under a net value due to the high number of multiple drawings:

For the year ended			
December 31, (€million)	2009	2008	2007
Issuance of non-current debt	6,309	5,513	3,313
Repayment of non-current debt	(787)	(2,504)	(93)
Net amount	5,522	3,009	3,220

#### C) Cash and cash equivalents

Cash and cash equivalents are detailed as follows:

For the year ended			
December 31, (€ million)	2009	2008	2007
Cash	2,448	1,836	1,930
Cash equivalents	9,214	10,485	4,058
Total	11,662	12,321	5,988

Cash equivalents are mainly composed of deposits less than three months deposited in government institutions or deposit banks selected in accordance with strict criteria.

### 28) FINANCIAL ASSETS AND LIABILITIES ANALYSIS PER INSTRUMENTS CLASS AND STRATEGY

The financial assets and liabilities disclosed on the face of the balance sheet are detailed as follows:

As of December 31, 2009 (€million)								Other financial		
Assets/(Liabilities)	Amortized	Financia	Instrumer	its related to	financing and tr	ading activit	ies	instruments	Total	Fair value
	cost				Fair value					
		Available for sale (a)	Held for trading	Financial debt <sup>(b)</sup>	Hedging of financial debt	Cash flow hedge	Net investment hedge and other			
Equity affiliates: loans Other investments Hedging instruments	2,367	1,162							2,367 1,162	2,367 1,162
of non-current financial debt Other non-current					889	136			1,025	1,025
assets Accounts	1,284								1,284	1,284
receivable, net Other operating								15,719	15,719	15,719
receivables Current financial			1,029					4,116	5,145	5,145
assets Cash and cash	55		53		197		6		311	311
equivalents								11,662	11,662	11,662
Total financial assets	3,706	1,162	1,082	_	1,086	136	6	31,497	38,675	38,675
Total non-financial assets <b>Total assets</b>								-	89,078 <b>127,753</b>	
Non-current financial debt Accounts payable Other operating	(389)			(18,807)	(241)			(15,383)	(19,437) (15,383)	(19,437) (15,383)
liabilities Current borrowings Other current financial	(4,849)		(923)	(2,145)				(3,783)	(4,706) (6,994)	(4,706) (6,994)
liabilities			(25)		(97)		(1)		(123)	(123)
Total financial liabilities	(5,238)		(948)	(20,952)	(338)	_	(1)	(19,166)	(46,643)	(46,643)
Total non-financial liabilities Total liabilities									(81,110) (127,753)	

(a) Financial assets available for sale are measured at their fair value except for unlisted securities (see Note 1 paragraph M(ii) and Note 13 to the Consolidated Financial

(b) The financial debt is adjusted to the hedged risks value (currency and interest rate) as part of hedge accounting (see Note 1 paragraph M(iii) to the Consolidated Financial Statements).

As of December 31, 2008 (€million) Assets/(Liabilities)		Financia	l instrumer	its related to	financing and tr	ading activit	ies	Other financial instruments	Total	Fair value
	Amortized				<b>Fair value</b>					
-	cost	Available			Fair value					
		for sale (a)	Held for trading	Financial debt <sup>(b)</sup>	Hedging of financial debt	Cash flow hedge	Net investment hedge and other			
Equity affiliates: loans Other investments Hedging instruments	2,005	1,165							2,005 1,165	2,005 1,165
of non-current financial debt Other non-current					892				892	892
assets Accounts receivable,	1,403								1,403	1,403
net			—					15,287	15,287	15,287
Other operating receivables Current financial			1,664					4,544	6,208	6,208
assets Cash and cash	1		86		100		—		187	187
equivalents								12,321	12,321	12,321
Total financial assets	3,409	1,165	1,750	_	992	_	_	32,152	39,468	39,468
Total non-financial assets Total assets								-	78,842 118,310	
Non-current financial debt Accounts payable	(414)		_	(15,337)	(440)			(14,815)	(16,191) (14,815)	(16,191) (14,815)
Other operating liabilities Current borrowings Other current financial	(5,721)		(1,033)	(2,001)				(3,264)	(4,297) (7,722)	(4,297) (7,722)
liabilities			(146)		(12)				(158)	(158)
Total financial liabilities	(6,135)		(1,179)	(17,338)	(452)	_	_	(18,079)	(43,183)	(43,183)
Total non-financial liabilities Total liabilities								-	(75,127) (118,310)	

(a) Financial assets available for sale are measured at their fair value except for unlisted securities (see Note 1 paragraph M(ii) and Note 13 to the Consolidated Financial Statements).

(b) The financial debt is adjusted to the hedged risks value (currency and interest rate) as part of hedge accounting (see Note 1 paragraph M(iii) to the Consolidated Financial Statements).

As of December 31, 2007 (€million)		Financia	Lingtrumor		financian and fr	adina activit		Other financial	Total	
Assets / (Liabilities)	Amortized	Financia	i instrumer	its related to	financing and tr	ading activit	les	instruments	Total	Fair value
_	cost				Fair value					
		Available for sale (a)	Held for trading	Financial debt <sup>(b)</sup>	Hedging of financial debt	Cash flow hedge	Net investment hedge and other			
Equity affiliates: loans Other investments Hedging instruments of non-current	2,575	1,291							2,575 1,291	2,575 1,291
financial debt Other non-current					460				460	460
assets Accounts receivable,	851								851	851
net Other operating			464					18,665	19,129	19,129
receivables Current financial			519					3,911	4,430	4,430
assets Cash and cash	850		12		388		14		1,264	1,264
equivalents								5,988	5,988	5,988
Total financial assets	4,276	1,291	995	_	848		14	28,564	35,988	35,988
Total non-financial assets Total assets								-	77,553 113,541	
Non-current financial debt Accounts payable Other operating	(532)		(243)	(13,975)	(369)			(17,940)	(14,876) (18,183)	(14,876) (18,183)
liabilities Current borrowings Other current financial	(2,655)		(490)	(1,958)				(3,410)	(3,900) (4,613)	(3,900) (4,613)
liabilities			(59)		(1)				(60)	(60)
Total financial liabilities	(3,187)		(792)	(15,933)	(370)			(21,350)	(41,632)	(41,632)
Total non-financial liabilities Total liabilities								-	(71,909) (113,541)	

(a) Financial assets available for sale are measured at their fair value except for unlisted securities (see Note 1 paragraph M(ii) and Note 13 to the Consolidated Financial Statements).

(b) The financial debt is adjusted to the hedged risks value (currency and interest rate) as part of hedge accounting (see Note 1 paragraph M(iii) to the Consolidated Financial Statements).

#### 29) FAIR VALUE OF FINANCIAL INSTRUMENTS (EXCLUDING COMMODITY CONTRACTS)

A) IMPACT ON THE STATEMENT OF INCOME PER NATURE OF FINANCIAL INSTRUMENTS

#### **Operating assets and liabilities**

The impact on the statement of income is detailed as follows:

For the year ended December 31,			
(€ million)	2009	2008	2007
Assets available for sale (investments):			
<ul> <li>— dividend income on non-</li> </ul>			
consolidated subsidiaries	210	238	218
<ul> <li>gains (losses) on disposal of assets</li> </ul>	6	15	170
— other	(18)	(15)	(63)
Loans and receivables	41	100	(2)
Impact on net operating income	239	338	323

The impact in the statement of income mainly includes:

- Dividends and gains or losses on disposal of other investments classified as "Other investments";
- Financial gains and depreciation on loans related to equity affiliates, nonconsolidated companies and on receivables reported in "Loans and receivables".

### Assets and liabilities from financing activities

The impact on the statement of income of financing assets and liabilities is detailed as follows:

For the year ended December 31,			
(€ million)	2009	2008	2007
Loans and receivables	158	547	1,135
Financing liabilities and associated hedging			
instruments	(563)	(996)	(1,721)
Fair value hedge (ineffective portion)	33	(4)	(26)
Assets and liabilities held for trading	(26)	(74)	73
Impact on the cost of net debt	(398)	(527)	(539)

The impact on the statement of income mainly includes:

- Financial income on cash, cash equivalents, and current financial assets (notably current deposits beyond three months) classified as "Loans and receivables";
- Financial expense of long term subsidiaries financing, associated hedging instruments (excluding ineffective portion of the hedge detailed below) and financial expense of short term financing classified as "Financing liabilities and associated hedging instruments";
- Ineffective portion of bond hedging; and
- Financial income, financial expense and fair value of derivative instruments used for cash management purposes classified as "Assets and liabilities held for trading".

Financial derivative instruments used for cash management purposes (interest rate and foreign exchange) are considered to be held for trading. Based on practical documentation issues, the Group did not elect to set up hedge accounting for such instruments. The impact on income of the derivatives is offset by the impact of loans and current liabilities they are related to. Therefore these transactions taken as a whole do not have a significant impact on the Consolidated Financial Statements.

#### **B) IMPACT OF THE HEDGING STRATEGIES**

#### Fair value hedge

The impact on the statement of income of the bond hedging instruments which is recorded in the item "Financial interest on debt" in the Consolidated Statement of Income is detailed as follows:

For the year ended December 31,			
(€million)	2009	2008	2007
Revaluation at market value of bonds	(183)	(66)	137
Swap hedging of bonds	216	62	(163)
Ineffective portion of the fair value hedge	33	(4)	(26)

The ineffective portion is not representative of the Group's performance considering the Group's objective to hold swaps to maturity. The current portion of the swaps valuation is not subject to active management.

### Net investment hedge

These instruments are recorded directly in shareholders' equity under "Currency translation adjustments". The variations of the period are detailed in the table below:

For the year ended December 31, (€ million)	As of January 1,	Variations	Disposals	As of December 31,
2009	124	(99)	—	25
2008	29	95	—	124
2007	(188)	217	—	29

As of December 31, 2009, the fair value of the open instruments amounts to €5 million compared to zero in 2008 and €14 million in 2007.

## Cash flow hedge

The impact on the statement of income and on equity of the bond hedging instruments qualified as cash flow hedges is detailed as follows:

For the year ended December 31, (€ million)	2009	2008	2007
Profit (Loss) recorded in equity during the period	128	_	
Recycled amount from equity to the income statement during the period	221	_	

As of December 31, 2009, the ineffective portion of these financial instruments is equal to zero.

### C) MATURITY OF DERIVATIVE INSTRUMENTS

The maturity of the notional amounts of derivative instruments, excluding the commodity contracts, is detailed in the following table:

As of December 31, 2009 (€million)				Notio	nal valu	e <sup>(a)</sup>		
Assets/(Liabilities)	Fair value	Total	2010	2011	2012	2013	2014	2015 and after
Fair value hedge								
Swaps hedging fixed-rates bonds (liabilities)	(241)	4,615						
Swaps hedging fixed-rates bonds (assets)	889	11,076						
Total swaps hedging fixed-rates bonds (assets and liabilities)	648	15,691	_	3,345	2,914	3,450	1,884	4,098
Swaps hedging fixed-rates bonds (current portion) (liabilities)	(97)	912						
Swaps hedging fixed-rates bonds (current portion) (assets)	197	1,084						
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)	100	1,996	1,996					
Cash flow hedge								
Swaps hedging fixed-rates bonds (liabilities)								
Swaps hedging fixed-rates bonds (assets)	136	1,837			295			1,542
Total swaps hedging fixed-rates bonds (assets and liabilities)	136	1,837			295			1,542
Swaps hedging fixed-rates bonds (current portion) (liabilities)								
Swaps hedging fixed-rates bonds (current portion) (assets)								
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)								
Net investment hedge								
Currency swaps and forward exchange contracts (assets)	6	701						
Currency swaps and forward exchange contracts (liabilities)	(1)	224						
Total swaps hedging net investments	5	925	925					
Held for trading								
Other interest rate swaps (assets)		1,459						
Other interest rate swaps (liabilities)	(1)	10,865						
Total other interest rate swaps (assets and liabilities)	(1)	12,324	12,208	114				2
Currency swaps and forward exchange contracts (assets)	53	4,017						
Currency swaps and forward exchange contracts (liabilities)	(24)	3,456						
Total currency swaps and forward exchange contracts (assets and liabilities)	29	7,473	7,224		52	50	47	100

(a) These amounts set the levels of notional commitment and are not indicative of a contingent gain or loss.

As of December 31, 2008 (€million)				Notio	nal valu	ie <sup>(a)</sup>		
ASSETS/(LIABILITIES)	Fair value	Total	2009	2010	2011	2012	2013	2014 and after
Fair value hedge								
Swaps hedging fixed-rates bonds (liabilities)	(440)	9,309						
Swaps hedging fixed-rates bonds (assets)	892	4,195						
Total swaps hedging fixed-rates bonds								
(assets and liabilities)	452	13,504		2,048	3,373	3,233	3,032	1,818
Swaps hedging fixed-rates bonds								
(current portion) (liabilities)	(12)	92						
Swaps hedging fixed-rates bonds								
(current portion) (assets)	100	1,871						
Total swaps hedging fixed-rates bonds								
(current portion) (assets and liabilities)	88	1,963	1,963					
Net investment hedge								
Currency swaps and forward exchange contracts								
(liabilities)	—	1,347	1,347					
Held for trading								
Other interest rate swaps (assets)	_	2,853						
Other interest rate swaps (liabilities)	(4)	5,712						
Total other interest rate swaps (assets and liabilities)	(4)	8,565	8,559	4				2
Currency swaps and forward exchange contracts (assets)	86	5,458						
Currency swaps and forward exchange contracts								
(liabilities)	(142)	2,167						
Total currency swaps and forward exchange contracts								
(assets and liabilities)	(56)	7,625	6,595	483	114	67	76	290

(a) These amounts set the levels of notional commitment and are not indicative of a contingent gain or loss.

As of December 31, 2007 (€million)				Notion	nal valu	e(a)		
	Fair							2013 and
ASSETS/(LIABILITIES)	value	Total	2008	2009	2010	2011	2012	after
Fair value hedge								
Swaps hedging fixed-rates bonds (liabilities)	(369)	7,506						
Swaps hedging fixed-rates bonds (assets)	460	3,982						
Total swaps hedging fixed-rates bonds								
(assets and liabilities)	91	11,488		1,910	1,836	2,725	2,437	2,580
Swaps hedging fixed-rates bonds								
(current portion) (liabilities)	(1)	306						
Swaps hedging fixed-rates bonds								
(current portion) (assets)	388	1,265						
Total swaps hedging fixed-rates bonds								
(current portion) (assets and liabilities)	387	1,571	1,571					
Net investment hedge								
Currency swaps and forward exchange contracts (assets)	14	695	695					
Held for trading								
Other interest rate swaps (assets)	1	8,249						
Other interest rate swaps (liabilities)	_	3,815						
Total other interest rate swaps (assets and liabilities)	1	12,064	12,058	_	4	_	_	2
Currency swaps and forward exchange contracts (assets)	11	2,594						
Currency swaps and forward exchange contracts		,						
(liabilities)	(59)	3,687						
Total currency swaps and forward exchange contracts	\$ ¥	· · · ·						
(assets and liabilities)	(48)	6,281	6,207	42	2	6	8	16

(a) These amounts set the levels of notional commitment and are not indicative of a contingent gain or loss.

#### D) FAIR VALUE HIERARCHY

The fair value hierarchy for financial instruments excluding commodity contracts is as follows:

As of December 31, 2009 (€ million)	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Fair value hedge instruments	_	748	_	748
Cash flow hedge instruments	—	136	_	136
Net investment hedge instruments	—	5		5
Assets and liabilities held for trading	—	28	_	28
Assets available for sale	232	_		232
Total	232	917	—	1,149

The description of each fair value level is presented in Note 1 paragraph M(v) to the Consolidated Financial Statements.

### 30) FINANCIAL INSTRUMENTS RELATED TO COMMODITY CONTRACTS

Financial instruments related to oil, gas and power activities as well as related currency derivatives are recorded at fair value under "Other current assets" or "Other creditors and accrued liabilities" depending on whether they are assets or liabilities.

#### As of December 31, 2009 (€ million)

Assets/(Liabilities)	Carrying amount	Fair value ( <sup>b)</sup>
Crude oil, petroleum products and freight rates activities		
Petroleum products and crude oil swaps	(29)	(29)
Freight rate swaps	<u> </u>	
Forwards <sup>(a)</sup>	(9)	(9)
Options	21	21
Futures	(17)	(17)
Options on futures	6	6
Total crude oil, petroleum products and freight rates	(28)	(28)
Gas & Power activities		
Swaps	52	52
Forwards <sup>(a)</sup>	78	78
Options	4	4
Futures	_	_
Total Gas & Power	134	134
Total	106	106
Total of fair value non recognized in the balance sheet		_

(a) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown.

(b) From 2008, when the fair value of derivatives listed on an organized exchange market (futures, options on futures and swaps) is offset with the margin call received or paid on the face of the balance sheet, this fair value is set to zero.

ASSETS/(LIABILITIES)	Carrying amount	Fair value (b)
Crude oil, petroleum products and freight rates activities	anoditt	(1)
Petroleum products and crude oil swaps	141	141
Freight rate swaps	8	
Forwards <sup>(a)</sup>	(120)	(120)
Options	(·===) 	(-==)
Futures	17	17
Options on futures	(7)	(7)
total crude oil, petroleum products and freight rates	39	39
Gas & Power activities		
Swaps	(48)	(48)
Forwards <sup>(a)</sup>	659	659
Options	_	_
Futures	(19)	(19)
Total Gas & Power	592	592
Total	631	631
Total of fair value non recognized in the balance sheet		_

of fair value

(a) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown.
 (b) From 2008, when the fair value of derivatives listed on an organized exchange market (futures, options on futures and swaps) is offset with the margin call received or paid on the face of the balance sheet, this fair value is set to zero.

As of December 31, 2007 (€million)		
ASSETS/(LIABILITIES)	Carrying amount	Fair value ( <sup>b)</sup>
Crude oil, petroleum products and freight rates activities		
Petroleum products and crude oil swaps	(149)	(149)
Freight rate swaps	(3)	(3)
Forwards <sup>(a)</sup>	(4)	(4)
Options	272	272
Futures	(97)	(97)
Options on futures	(1)	(1)
Total crude oil, petroleum products and freight rates	18	18
Gas & Power activities		
Swaps	4	4
Forwards <sup>(a)</sup>	213	213
Options	—	—
Futures	15	15
Total Gas & Power	232	232
Total	250	250
Total of fair value non recognized in the balance sheet		_

(a) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown.

(b) From 2008, when the fair value of derivatives listed on an organized exchange market (futures, options on futures and swaps) is offset with the margin call received or paid on the face of the balance sheet, this fair value is set to zero.

Most commitments on crude oil and refined products have a short term maturity (less than one year). The maturity of most Gas & Power energy derivatives is less than three years forward.

The changes in fair value of financial instruments related to commodity contracts are detailed as follows:

For the year ended December 31, (€million)	Fair value as of January 1,	Impact on income	Settled contracts	Other	Fair value as of December 31,
Crude oil, petroleum products and freight rates activities					
2009	39	1,713	(1,779)	(1)	(28)
2008	18	1,734	(1,715)	2	39
2007	102	1,381	(1,460)	(5)	18
Gas & Power activities					
2009	592	327	(824)	39	134
2008	232	787	(310)	(117)	592
2007	(79)	489	(163)	(15)	232

The fair value hierarchy for financial instruments related to commodity contracts is as follows:

As of December 31, 2009 (€million)	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Crude oil, petroleum products and freight rates activities	(45)	17		(28)
Gas & Power activities	140	(6)	—	134
Total	95	11		106

The description of each fair value level is presented in Note 1 paragraph M(v) to the Consolidated Financial Statements.

### 31) MARKET RISKS

#### Oil and gas market related risks

Due to the nature of its business, the Group has significant oil and gas trading activities as part of its day-to-day operations in order to optimize revenues from its oil and gas production and to obtain favorable pricing to supply its refineries.

In its international oil trading business, the Group follows a policy of not selling its future production. However, in connection with this trading business, the Group, like most other oil companies, uses energy derivative instruments to adjust its exposure to price fluctuations of crude oil, refined products, natural gas and electricity. The Group also uses freight rate derivative contracts in its shipping business to adjust its exposure to freight-rate fluctuations. To hedge against this risk, the Group uses various instruments such as futures, forwards, swaps and options on organized markets or over-the-counter markets. The list of the different derivatives held by the Group in these markets is detailed in Note 30 to the Consolidated Financial Statements.

The Trading & Shipping division measures its market risk exposure, *i.e.* potential loss in fair values, on its crude oil, refined products and freight rates trading activities using a value-at-risk technique. This technique is based on an historical model and makes an assessment of the market risk arising from possible future changes in market values over a 24-hour period. The calculation of the range of potential changes in fair values takes into account a snapshot of the end-of-day exposures and the set of historical price movements for the last 400 business days for all instruments and maturities in the global trading activities. Options are systematically reevaluated using appropriate models.

The potential movement in fair values corresponds to a 97.5% value-at-risk type confidence level. This means that the Group's portfolio result is likely to exceed the value-at-risk loss measure once over 40 business days if the portfolio exposures were left unchanged.

#### Trading & Shipping: value-at-risk with a 97.5% probability

As of December 31,				Year
(€ million)	High	Low	Average	end
2009	18.8	5.8	10.2	7.6
2008	13.5	2.8	6.9	11.8
2007	11.6	3.3	6.7	5.4

As part of its gas and power trading activity, the Group also uses derivative instruments such as futures,

forwards, swaps and options in both organized and over-the-counter markets. In general, the transactions are settled at maturity date through physical delivery. The Gas & Power division measures its market risk exposure, *i.e.* potential loss in fair values, on its trading business using a value-at-risk technique. This technique is based on an historical model and makes an assessment of the market risk arising from possible future changes in market values over a one-day period. The calculation of the range of potential changes in fair values takes into account a snapshot of the end-of-day exposures and the set of historical price movements for the past two years for all instruments and maturities in the global trading business.

#### Gas & Power trading: value-at-risk with a 97.5% probability

As of December 31,				Year
(€ million)	High	Low	Average	end
2009	9.8	1.9	5.0	4.8
2008	16.3	1.3	5.0	1.4
2007 <sup>(a)</sup>	18.2	3.2	7.9	4.3

(a) Data takes into account historical price movements over one year.

The Group has implemented strict policies and procedures to manage and monitor these market risks. These are based on the splitting of supervisory functions from operational functions and on an integrated information system that enables real-time monitoring of trading activities.

Limits on trading positions are approved by the Group's Executive Committee and are monitored daily. To increase flexibility and encourage liquidity, hedging operations are performed with numerous independent operators, including other oil companies, major energy producers or consumers and financial institutions. The Group has established counterparty limits and monitors outstanding amounts with each counterparty on an ongoing basis.

#### Financial markets related risks

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 principally interest rate and currency swaps. The Group may also use, on a less frequent basis, futures, caps, floors and options contracts. These operations and their accounting treatment are detailed in Notes 1 paragraph M, 20, 28 and 29 to the Consolidated Financial Statements.

Risks relative to cash management operations and to interest rate and foreign exchange financial instruments

are managed according to rules set by the Group's senior management, which provide for regular pooling of available cash balances, open positions and management of the financial instruments by the Treasury Department. Excess cash of the Group is deposited mainly in government institutions or deposit banks through deposits, reverse repurchase agreements and purchase of commercial paper. Liquidity positions and the management of financial instruments are centralized by the Treasury Department, where they are managed by a team specialized in foreign exchange and interest rate market transactions.

The Cash Monitoring-Management Unit within the Treasury Department monitors limits and positions per bank on a daily basis and reports results. This unit also prepares marked-to-market valuations and, when necessary, performs sensitivity analysis.

#### Counterparty risk

The Group has established standards for market transactions under which bank counterparties must be approved in advance, based on an assessment of the counterparty's financial soundness (multi-criteria analysis including a review of market prices and of the *Credit Default Swap* (CDS), its ratings with Standard & Poor's and Moody's, which must be of high quality, and its overall financial condition).

An overall authorized credit limit is set for each bank and is allotted among the subsidiaries and the Group's central treasury entities according to their needs.

To reduce the market values risk on its commitments, in particular for swaps set as part of bonds issuance, the Treasury Department also developed a system of margin call that is gradually implemented with significant counterparties.

#### Currency exposure

The Group seeks to minimize the currency exposure of each entity to its functional currency (primarily the euro, the dollar, the pound sterling and the Norwegian krone).

For currency exposure generated by commercial activity, the hedging of revenues and costs in foreign currencies is typically performed using currency operations on the spot market and, in some cases, on the forward market. The Group rarely hedges future cash flows, although it may use options to do so.

With respect to currency exposure linked to non-current assets booked in a currency other than the euro, the Group has a policy of reducing the related currency exposure by financing these assets in the same currency.

Net short-term currency exposure is periodically monitored against limits set by the Group's senior management.

The non-current debt described in Note 20 to the Consolidated Financial Statements is generally raised by the corporate treasury entities either directly in dollars or euros, or in other currencies which are then exchanged for dollars or euros through swaps issues to appropriately match general corporate needs. The proceeds from these debt issuances are loaned to affiliates whose accounts are kept in dollars or in euros. Thus, the net sensitivity of these positions to currency exposure is not significant.

The Group's short-term currency swaps, the notional value of which appears in Note 29 to the Consolidated Financial Statements, are used to attempt to optimize the centralized cash management of the Group. Thus, the sensitivity to currency fluctuations which may be induced is likewise considered negligible.

#### Short-term interest rate exposure and cash

Cash balances, which are primarily composed of euros and dollars, are managed according to the guidelines established by the Group's senior management (maintain an adequate level of liquidity, optimize revenue from investments considering existing interest rate yield curves, and minize the cost of borrowing) over a less than twelve-month horizon and on the basis of a daily interest rate benchmark, primarily through short-term interest rate swaps and short-term currency swaps, without modifying currency exposure.

#### Interest rate risk on non-current debt

The Group's policy consists of incurring non-current debt primarily at a floating rate, or, if the opportunity arises at the time of an issuance, at a fixed rate. Debt is incurred in dollars or in euros according to general corporate needs. Long-term interest rate and currency swaps may be used to hedge bonds at their issuance in order to create a variable or fixed rate synthetic debt. In order to partially modify the interest rate structure of the long-term debt, TOTAL may also enter into long-term interest rate swaps.

#### Sensitivity analysis on interest rate and foreign exchange risk

The tables below present the potential impact of an increase or decrease of 10 basis points on the interest rate yield curves for each of the currencies on the fair value of the current financial instruments as of December 31, 2009, 2008 and 2007.

			Change in fair change in int	
ASSETS/(LIABILITIES) As of December 31, 2009 (€million)	Carrying amount	Estimated fair value	+ 10 basis points	- 10 basis points
Bonds (non-current portion, before swaps)	(18,368)	(18,368)	75	(75)
Swaps hedging fixed-rates bonds (liabilities)	(241 )	(241 )		
Swaps hedging fixed-rates bonds (assets)	1,025	1,025		
Total swaps hedging fixed-rates bonds (assets and liabilities)	784	784	(57)	57
Current portion of non-current debt after swap				
(excluding capital lease obligations)	(2,111)	(2,111)	3	(3)
Other interest rates swaps	(1)	(1)	1	(1)
Currency swaps and forward exchange contracts	34	34	_	

			Change in fair change in int	
ASSETS/(LIABILITIES) As of December 31, 2008 (€ million)	Carrying amount	Estimated fair value	+ 10 basis points	- 10 basis points
Bonds (non-current portion, before swaps)	(14,119)	(14,119)	47	(43)
Swaps hedging fixed-rates bonds (liabilities)	(440)	(440)		
Swaps hedging fixed-rates bonds (assets)	892	892		
Total swaps hedging fixed-rates bonds (assets and liabilities)	452	452	(44)	44
Current portion of non-current debt after swap				
(excluding capital lease obligations)	(2,025)	(2,025)	3	(3)
Other interest rates swaps	(4)	(4)	1	(1)
Currency swaps and forward exchange contracts	(56)	(56)	—	

			Change in fair change in int	
ASSETS/(LIABILITIES) As of December 31, 2007 (€ million)	Carrying amount	Estimated fair value	+ 10 basis points	- 10 basis points
Bonds (non-current portion, before swaps)	(11,741)	(11,741)	37	(37)
Swaps hedging fixed-rates bonds (liabilities)	(369)	(369)		
Swaps hedging fixed-rates bonds (assets)	460	460		
Total swaps hedging fixed-rates bonds (assets and liabilities)	91	91	(39)	38
Current portion of non-current debt after swap				
(excluding capital lease obligations)	(1,669)	(1,669)	(1)	1
Other interest rates swaps	1	1		_
Currency swaps and forward exchange contracts	(34)	(34)	—	—

The impact of changes in interest rates on the cost of net debt before tax is as follows:

For the year ended December 31, (€ million)	2009	2008	2007
Cost of net debt	(398)	(527)	(539)
Interest rate translation of + 10 basis points	(11)	(11)	(12)
Interest rate translation of - 10 basis points	11	11	12
Interest rate translation of + 100 basis points	(108)	(113)	(116)
Interest rate translation of - 100 basis points	108	113	116

As a result of the policy for the management of currency exposure previously described, the Group's sensitivity to currency exposure is primarily influenced by the net equity of the subsidiaries whose functional currency is the dollar and, to a lesser extent, the pound sterling and the Norwegian krone.

This sensitivity is reflected in the historical evolution of the currency translation adjustment recorded in the statement of changes in shareholders' equity which, in the course of the last three fiscal years, is essentially related to the fluctuation of dollar and pound sterling and is set forth in the table below:

		Euro / Dolla change rate	-	Euro / Pound sterling exchange rates		
As of December 31, 2009 As of December 31, 2008 As of December 31, 2007 As of December 31, 2009 (€ million)		<u> </u>	<b>44</b> 39		<b>0.89</b> 0.95 0.73	
	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates	
Shareholders' equity at historical exchange rate Currency translation adjustment before net investment hedge Net investment hedge — open instruments	57,621 (5,074) 5	27,717	18,671 (3,027) 6	5,201 (1,465) (1)	6,032 (582)	
Shareholders' equity at exchange rate as of December 31, 2009	52,552	27,717	15,650	3,735	5,450	
As of December 31, 2008 (€ million)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates	
Shareholders' equity at historical exchange rate Currency translation adjustment before net investment hedge Net investment hedge — open instruments	53,868 (4,876)	25,084 —	15,429 (2,191)	5,587 (1,769)	7,768 (916)	
Shareholders' equity at exchange rate as of December 31, 2008	 48,992	25,084	13,238	3,818	6,852	
				Pound	Other currencies and equity	
As of December 31, 2007 (€ million)	Total	Euro	Dollar	sterling	affiliates	
Shareholders' equity at historical exchange rate	49,254	22,214	12,954	5,477	8,609	
Currency translation adjustment before net investment hedge	(4,410)	_	(3,501)	(289)	(620)	
Net investment hedge — open instruments	14		14			
Shareholders' equity at exchange rate as of December 31, 2007	44,858	22,214	9,467	5,188	7,989	

As a result of this policy, the impact of currency exchange rate fluctuations on consolidated income, as illustrated in Note 7 to the Consolidated Financial Statements, has not been significant over the last three years despite the considerable fluctuation of the dollar (loss of €32 million in 2009, gain of €112 million in 2008, gain of €35 million in 2007).

#### Stockmarket risk

The Group holds interests in a number of publicly-traded companies (see Notes 12 and 13 to the Consolidated Financial Statements). The market value of these holdings fluctuates due to various factors, including stock market trends, valuations of the sectors in which the companies operate, and the economic and financial condition of each individual company.

#### Liquidity risk

TOTAL S.A. has confirmed lines of credit granted by international banks, which are calculated to allow it to manage its short-term liquidity needs as required.

As of December 31, 2009, these lines of credit amounted to 9,322 million, of which 9,289 million

were unused. The agreements for the lines of credit granted to TOTAL S.A. do not contain conditions related to the Company's financial ratios, to its financial ratings from specialized agencies, or to the occurrence of events that could have a material adverse effect on its financial position. As of December 31, 2009, the aggregate amount of the principal confirmed lines of credit granted by international banks to Group companies, including TOTAL S.A., was \$10,084 million of which \$10,051 million were unused. The lines of credit granted to Group companies other than TOTAL S.A. are not intended to finance the Group's general needs; they are intended to finance either the general needs of the borrowing subsidiary or a specific project.

The following tables show the maturity of the financial assets and liabilities of the Group as of December 31, 2009, 2008 and 2007 (see Note 20 to the Consolidated Financial Statements).

ASSETS/(LIABILITIES)	Less than	Between 1 year	More than	
As of December 31, 2009 (€million)	one year	and 5 years	5 years	Total
Non-current financial debt (notional value excluding interests)	· · · · · · · · · · · · · · · · · · ·	(12,589)	(5,823)	(18,412)
Current borrowings	(6,994)			(6,994)
Other current financial liabilities	(123)			(123)
Current financial assets	311			311
Cash and cash equivalents	11,662			11,662
Net amount before financial expense	4,856	(12,589)	(5,823)	(13,556)
Financial expense on non-current financial debt	(768)	(2,007)	(1,112)	(3,887)
Interest differential on swaps	447	342	(55)	734
Net amount	4,535	(14,254)	(6,990)	(16,709)
	Less than	Between 1 year	More than	
As of December 31, 2008 (€million)	one year	and 5 years	5 years	Total
Non-current financial debt (notional value excluding interests)		(13,206)	(2,093)	(15,299)
Current borrowings	(7,722)			(7,722)
Other current financial liabilities	(158)			(158)
Current financial assets	187			187
Cash and cash equivalents	12,321			12,321
Net amount before financial expense	4,628	(13,206)	(2,093)	(10,671)
Financial expense on non-current financial debt	(554)	(1,431)	(174)	(2,159)
Interest differential on swaps	118	410	(7)	521
Net amount	4,192	(14,227)	(2,274)	(12,309)
	Less than	Between 1 year	More than	
As of December 31, 2007 (€ million)	one year	and 5 years	5 years	Total
Non-current financial debt (notional value excluding interests)		(11,424)	(2,992)	(14,416)
Current borrowings	(4,613)			(4,613)
Other current financial liabilities	(60)			(60)
Current financial assets	1,264			1,264
Cash and cash equivalents	5,988			5,988
Net amount before financial expense	2,579	(11,424)	(2,992)	(11,837)
Financial expense on non-current financial debt	(532)	(1,309)	(226)	(2,067)
Interest differential on swaps	(29)	(80)	(44)	(153)
Net amount	2,018	(12,813)	(3,262)	(14,057)

In addition, the Group guarantees bank debt and finance lease obligations of certain non-consolidated companies and equity affiliates. A payment would be triggered by failure of the guaranteed party to fulfill its obligation covered by the guarantee, and no assets are held as collateral for these guarantees. Maturity dates and amounts are set forth in Note 23 to the Consolidated Financial Statements ("Guarantees given against borrowings").

The Group also guarantees the current liabilities of certain non-consolidated companies. Performance under these guarantees would be triggered by a financial default of these entities. Maturity dates and amounts are set forth in Note 23 to the Consolidated Financial Statements ("Guarantees of current liabilities").

The following table sets forth financial assets and liabilities related to operating activities as of December 31, 2009, 2008 and 2007 (see Note 28 to the Consolidated Financial Statements).

As of December 31 (€ million)			
ASSETS/(LIABILITIES)	2009	2008	2007
Accounts payable	(15,383)	(14,815)	(18,183)
Other operating liabilities including financial instruments related to commodity	(4,706)	(4,297)	(3,900)
contracts	(923)	(1,033)	(733)
Accounts receivable, net	15,719	15,287	19,129
Other operating receivables including financial instruments related to commodity	5,145	6,208	4,430
contracts	1,029	1,664	983
Total	775	2,383	1,476

These financial assets and liabilities mainly have a maturity date below one year.

#### Credit risk

Credit risk is defined as the risk of the counterparty to a contract failing to perform or pay the amounts due.

The Group is exposed to credit risks in its operating and financing activities. The Group's maximum exposure to credit risk is partially related to financial assets recorded on its balance sheet, including energy derivative instruments that have a positive market value. The following table presents the Group's maximum credit risk exposure:

As of December 31,			
(€million)			
Assets/(Liabilities)	2009	2008	2007
Loans to equity affiliates			
(Note 12)	2,367	2,005	2,575
Loans and advances			
(Note 14)	1,284	1,403	851
Hedging instruments of non-current			
financial debt (Note 20)	1,025	892	460
Accounts receivable			
(Note 16)	15,719	15,287	19,129
Other operating receivables			
(Note 16)	5,145	6,208	4,430
Current financial assets			
(Note 20)	311	187	1,264
Cash and cash equivalents			
(Note 27)	11,662	12,321	5,988
Total	37,513	38,303	34,697

The valuation allowance on loans and advances and on accounts receivable and other operating receivables is detailed respectively in Notes 14 and 16 to the Consolidated Financial Statements.

As part of its credit risk management related to operating and financing activities, the Group has developed margin call contracts with certain counterparties. As of December 31, 2009, the net amount paid or received as part of these margin calls was €693 million.

Credit risk is managed by the Group's business segments as follows:

- Upstream Segment
  - Exploration & Production

Risks arising under contracts with government authorities or other oil companies or under long-term supply contracts necessary for the development of projects are evaluated during the project approval process. The long-term aspect of these contracts and the high-quality of the other parties lead to a low level of credit risk.

Risks related to commercial operations, other than those described above (which are, in practice, directly monitored by subsidiaries), are subject to procedures for establishing and reviewing credit.

Customer receivables are subject to provisions on a case-by-case basis, based on prior history and management's assessment of the facts and circumstances.

#### Gas & Power

The Gas & Power division deals with counterparties in the energy, industrial and financial sectors throughout the world, primarily in Europe and North America. Financial institutions providing credit risk coverage are highly rated international bank and insurance groups.

Potential counterparties are subject to credit assessment and approval before concluding transactions and are thereafter subject to regular review, including re-appraisal and approval of the limits previously granted.

The creditworthiness of counterparties is assessed based on an analysis of quantitative and qualitative data regarding financial standing and business risks, together with the review of any relevant third party and market information, such as data published by rating agencies. On this basis, credit limits are defined for each potential counterparty and, where appropriate, transactions are subject to specific authorizations.

Credit exposure, which is essentially an economic exposure or an expected future physical exposure, is permanently monitored and subject to sensitivity measures.

Credit risk is mitigated by the systematic use of industry standard contractual frameworks that permit netting, enable requiring added security in case of adverse change in the counterparty risk, and allow for termination of the contract upon occurrence of certain events of default.

- Downstream Segment
  - Refining & Marketing

Internal procedures for the Refining & Marketing division include rules on credit risk that describe the basis of internal control in this domain, including the separation of authority between commercial and financial operations. Credit policies are defined at the local level, complemented by the implementation of procedures to monitor customer risk (credit committees at the subsidiary level, the creation of credit limits for corporate customers, portfolio guarantees, etc.).

Each entity also implements monitoring of its outstanding receivables. Risks related to credit may be mitigated or limited by requiring security or guarantees.

Bad debts are provisioned on a case-by-case basis at a rate determined by management based on an assessment of the facts and circumstances.

Trading & Shipping

Trading & Shipping deals with commercial counterparties and financial institutions located throughout the world. Counterparties to physical and derivative transactions are primarily entities involved in the oil and gas industry or in the trading of energy commodities, or financial institutions. Credit risk coverage is concluded with financial institutions, international banks and insurance groups selected in accordance with strict criteria.

The Trading & Shipping division has a strict policy of internal delegation of authority governing establishment of country and counterparty credit limits and approval of specific transactions. Credit exposures contracted under these limits and approvals are monitored on a daily basis.

Potential counterparties are subject to credit assessment and approval prior to any transaction being concluded and all active counterparties are subject to regular reviews, including re-appraisal and approval of granted limits. The creditworthiness of counterparties is assessed based on an analysis of quantitative and qualitative data regarding financial standing and business risks, together with the review of any relevant third party and market information, such as ratings published by Standard & Poor's, Moody's Investors Service and other agencies.

Contractual arrangements are structured so as to maximize the risk mitigation benefits of netting between transactions wherever possible and additional protective terms providing for the provision of security in the event of financial deterioration and the termination of transactions on the occurrence of defined default events are used to the greatest permitted extent.

Credit risks in excess of approved levels are secured by means of letters of credit and other guarantees, cash deposits and insurance arrangements. In respect of derivative transactions, risks are secured by margin call contracts wherever possible.

Chemicals Segment

Credit risk in the Chemicals segment is primarily related to commercial receivables. Each division implements procedures for managing and provisioning credit risk that differ based on the size of the subsidiary and the market in which it operates. The principal elements of these procedures are:

 implementation of credit limits with different authorization procedures for possible credit overruns;

- use of insurance policies or specific guarantees (letters of credit);
- regular monitoring and assessment of overdue accounts (aging balance), including collection procedures; and
- provisioning of bad debts on a customer-by-customer basis, according to payment delays and local payment practices.

### 32) OTHER RISKS AND CONTINGENT LIABILITIES

TOTAL is not currently aware of any event, litigation, risks or contingent liabilities that could have a material impact on the assets and liabilities, results, financial position or operations of the Group.

### ANTITRUST INVESTIGATIONS

1. Following investigations into certain commercial practices in the chemicals industry in the United States, some subsidiaries of the Arkema<sup>(1)</sup> group have been involved in criminal investigations, closed as of today, and civil liability lawsuits in the United States for violations of antitrust laws. TOTAL S.A. has been named in certain of these suits as the parent company.

In Europe, the European Commission commenced investigations in 2000, 2003 and 2004 into alleged anti-competitive practices involving certain products sold by Arkema. In January 2005, under one of these investigations, the European Commission fined Arkema €13.5 million and jointly fined Arkema and Elf Aquitaine €45 million. The appeal from Arkema and Elf Aquitaine before the Court of First Instance of the European Union has been rejected on September 30, 2009. A recourse before the Court of Justice of the European Communities has been filed.

The Commission notified Arkema, TOTAL S.A. and Elf Aquitaine of complaints concerning two other product lines in January and August 2005, respectively. Arkema has cooperated with the authorities in these procedures and investigations. In May 2006, the European Commission fined Arkema €78.7 million and €219.1 million, as a result of, respectively, each of these two proceedings. Elf Aquitaine was held jointly and severally liable for, respectively, €65.1 million and €181.35 million of these fines while TOTAL S.A. was held jointly and severally liable, respectively, for €42 million and €140.4 million. TOTAL S.A., Arkema and Elf Aquitaine have appealed these decisions to the Court of First Instance of the European Union.

Arkema and Elf Aquitaine received a statement of objections from the European Commission in August 2007 concerning alleged anti-competitive practices related to another line of chemical products. As a result, in June 2008, Arkema and Elf Aquitaine have been jointly and severally fined in an amount of €22.7 million and individually in an amount of €20.43 million for Arkema and €15.89 million for Elf Aquitaine. The companies concerned appealed this decision to the relevant European court.

Arkema and Elf Aquitaine received a statement of objections from the European Commission in March 2009 concerning alleged anti-competitive practices related to another line of chemical products. The decision has been rendered by the Commission in November 2009. The companies have been jointly and severally fined in an amount of €11 million and individually in an amount of €9.92 million for Arkema and €7.71 million for Elf Aquitaine. The concerned companies will appeal this decision to the relevant European court.

No facts have been alleged that would implicate TOTAL S.A. or Elf Aquitaine in the practices questioned in these proceedings, and the fines received are based solely on their status as parent companies.

Arkema began implementing compliance procedures in 2001 that are designed to prevent its employees from violating antitrust provisions. However, it is not possible to exclude the possibility that the relevant authorities could commence additional proceedings involving Arkema, as well as TOTAL S.A. and Elf Aquitaine.

2. As part of the agreement relating to the spin-off of Arkema, TOTAL S.A. or certain other Group companies agreed to grant Arkema guarantees for certain risks related to antitrust proceedings arising from events prior to the spin-off.

These guarantees cover, for a period of ten years that began in 2006, 90% of amounts paid by Arkema related to (i) fines imposed by European authorities or European member-states for competition law violations, (ii) fines imposed by U.S. courts or antitrust authorities for federal antitrust violations or violations of the competition laws of U.S. states, (iii) damages awarded in civil proceedings related to the government proceedings mentioned above, and (iv) certain costs related to these proceedings.

The guarantee covering the risks related to anticompetition violations in Europe applies to amounts above a €176.5 million threshold.

<sup>(1)</sup> Arkema is used in this section to designate those companies of the Arkema group whose ultimate parent company is Arkema S.A. Arkema became an independent company after being spun-off from Total S.A. in May 2006.

If one or more individuals or legal entities, acting alone or together, directly or indirectly holds more than one-third of the voting rights of Arkema, or if Arkema transfers more than 50% of its assets (as calculated under the enterprise valuation method, as of the date of the transfer) to a third party or parties acting together, irrespective of the type or number of transfers, these guarantees will become void.

On the other hand, the agreements provide that Arkema will indemnify TOTAL S.A. or any Group company for 10% of any amount that TOTAL S.A. or any Group company are required to pay under any of the proceedings covered by these guarantees.

3. The Group has recorded provisions amounting to €43 million in its consolidated financial statements as of December 31, 2009 to cover the risks mentioned above.

4. Moreover, as a result of investigations started by the European Commission in October 2002 concerning certain Refining & Marketing subsidiaries of the Group, Total Nederland N.V. and TOTAL S.A. received a statement of objections in October 2004. These proceedings resulted, in September 2006, in Total Nederland N.V. being fined €20.25 million and in TOTAL S.A. as its parent company being held jointly responsible for €13.5 million of this amount, although no facts implicating TOTAL S.A. in the practices under investigation were alleged. TOTAL S.A. and Total Nederland N.V. have appealed this decision to the Court of First Instance of the European Union.

In addition, in May 2007, Total France and TOTAL S.A. received a statement of objections regarding alleged antitrust practices concerning another product line of the Refining & Marketing division. These proceedings resulted, in October 2008, in Total France being fined €128.2 million and in TOTAL S.A., as its parent company, being held jointly responsible although no facts implicating TOTAL S.A. in the practices under investigation were alleged. TOTAL S.A. and Total Raffinage Marketing (the new corporate name of Total France) have appealed this decision to the Court of First Instance of the European Union.

Furthermore, in July 2009, the French antitrust Authority sent to TotalGaz and Total Raffinage Marketing a statement of objections regarding alleged antitrust practices concerning another product line of the Refining & Marketing division.

5. Given the discretionary powers granted to antitrust Authorities for determining fines, it is not currently possible to determine with certainty the ultimate outcome of these investigations and proceedings. TOTAL S.A. and Elf Aquitaine are contesting their liability

and the method of determining these fines. Although it is not possible to predict the outcome of these proceedings, the Group believes that they will not have a material adverse effect on its financial condition or results.

### BUNCEFIELD

On December 11, 2005, several explosions, followed by a major fire, occurred at an oil storage depot at Buncefield, north of London. This depot is operated by Hertfordshire Oil Storage Limited (HOSL), a company in which the British subsidiary of TOTAL holds 60% and another oil group holds 40%.

The explosion caused minor injuries to a number of people and caused property damage to the depot and the buildings and homes located nearby. The official Independent Investigation Board has indicated that the explosion was caused by the overflow of a tank at the depot. The Board's final report was released on December 11, 2008. The civil procedure for claims, which had not yet been settled, took place between October and December 2008. The Court's decision of March 20, 2009, declared the British subsidiary of TOTAL responsible for the accident and solely liable for indemnifying the victims. TOTAL's British subsidiary has appealed this decision. The appeal trial took place in January 2010 and a decision is expected during the first-half 2010.

With respect to civil liability the provision recorded in the Group's consolidated financial statements as of December 31, 2009 amounts to €295 million after payments already completed.

The Group carries insurance for damage to its interests in these facilities, business interruption and civil liability claims from third parties. The residual amount to be received from insurers amounts to  $\notin$ 211 million as of December 31, 2009.

The Group believes that, based on the information currently available, on a reasonable estimate of its liability and on provisions recognized, this accident should not have a significant impact on the Group's financial situation or consolidated results.

On December 1, 2008, the Health and Safety Executive (HSE) and the Environment Agency (EA) issued a Notice of prosecution against five companies, including the British subsidiary of TOTAL. In November 2009, the British subsidiary of TOTAL, pleaded guilty to charges brought by the prosecution and intends to claim/raise, into this framework, a number of elements likely to mitigate the impact of the charges brought against it.

## ERIKA

Following the sinking in December 1999 of the Erika, a tanker that was transporting products belonging to one of the Group companies, the *Tribunal de grande instance* of Paris convicted TOTAL S.A. of marine pollution pursuant to a judgment issued on January 16, 2008, finding that TOTAL S.A. was negligent in its vetting procedure for vessel selection. TOTAL S.A. was fined €375,000. The court also ordered compensation to be paid to the victims of pollution from the Erika up to an aggregate amount of €192 million, declaring TOTAL S.A. jointly and severally liable for such payments together with the Erika's inspection and classification firm, the Erika's owner and the Erika's manager.

TOTAL believes that the finding of negligence and the related conviction for marine pollution are without substance as a matter of fact and as a matter of law. TOTAL also considers that this verdict is contrary to the intended aim of enhancing maritime transport safety.

TOTAL has appealed the verdict of January 16, 2008. In the meantime, it has nevertheless proposed to pay third parties who so request definitive compensation as determined by the court. To date, forty-one third parties have received compensation payments, representing an aggregate amount of €171.5 million.

The appeal was heard end of 2009 by the Court of Appeal in Paris. The decision of the Court is expected during the first-half 2010.

TOTAL S.A. believes that, based on a reasonable estimate of its liability, the case will not have a material impact on the Group's financial situation or consolidated results.

# **33) OTHER INFORMATION**

### A) RESEARCH AND DEVELOPMENT COSTS

Research and development costs incurred by the Group in 2009 amounted to 650 million (612 million in 2008 and 594 million in 2007), corresponding to 0.5% of the sales.

The staff dedicated in 2009 to these research and development activities are estimated at 4,016 people (4,285 in 2008 and 4,216 in 2007).

#### B) TAXES PAID TO MIDDLE EAST OIL-PRODUCING COUNTRIES FOR THE PORTION WHICH TOTAL HELD HISTORICALLY AS CONCESSIONS

Taxes paid for the portion that TOTAL held historically as concessions (Abu Dhabi offshore and onshore, Dubai offshore, Oman and Abu Al Bu Khoosh) included in operating expenses amounted to €1,871 million in 2009 (€3,301 million in 2008 and €2,505 million in 2007).

### C) CARBON DIOXIDE EMISSION RIGHTS

The principles governing the accounting for emission rights are presented in Note 1 paragraph T to the Consolidated Financial Statements.

As of December 31, 2009, the Group sites' position for emission rights is balanced between delivered/acquired emission rights and emissions for the year 2009.

# 34) POST-CLOSING EVENTS

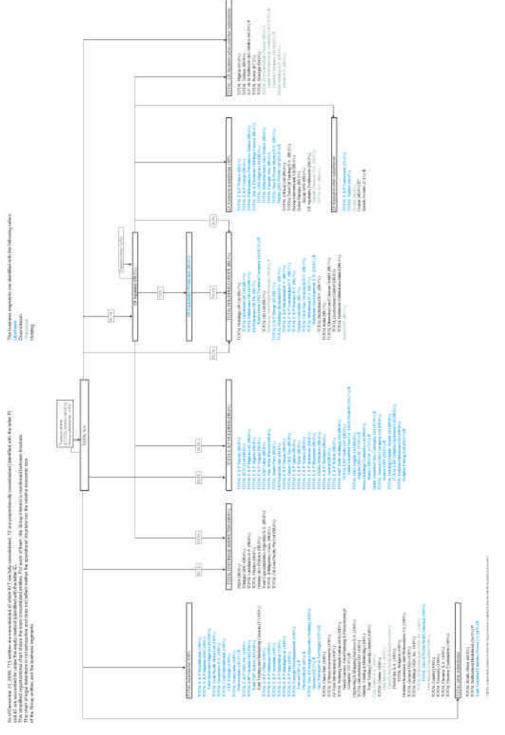
### A) DEVALUATION OF THE BOLIVAR

In January 2010, the President of Venezuela announced a devaluation of the Bolivar and the establishment of a dual exchange rate. Subsidiaries of the Group in this country operate mostly in the Upstream segment and are dollar functional currency entities. In this context, the devaluation of the Bolivar should not have any material effect on the Group's consolidated balance sheet, statement of income and shareholders' equity.

### **B) CREATION OF TOTALERG**

On January 27, 2010, TOTAL and ERG signed an agreement to create a joint venture in the Italian marketing and refining business. The shareholder pact calls for joint governance as well as operating independence for the new entity. TOTAL and ERG will hold equity stakes of, respectively, 49% and 51%. Created through the merger of TOTAL Italia and ERG Petroli, the joint venture will be called "TotalErg" and will operate under both the TOTAL and ERG brands. TotalErg will become one of the largest marketing operators in Italy, with a retail market share of nearly 13% and over 3,400 service stations. The joint venture will also be active in the refining business, with a total capacity of around 8% of national demand. The transaction will be submitted to competition authorities for approval. Until then, TOTAL Italia and ERG Petroli will remain as separate, competing entities.

# **35) CONSOLIDATION SCOPE**



# TOTAL

### SUPPLEMENTAL OIL AND GAS INFORMATION (Unaudited)

#### New rules

The amendments to Securities and Exchange Commission (SEC) Rule 4-10 of Regulation S-X set forth in the "Modernization of Oil and Gas Reporting" release (SEC Release nº 33-8995) and the Financial Accounting Standards Board (FASB) Accounting Standards Update regarding Extractive Activities Oil and Gas (ASC 932) change a number of reserves estimation and disclosure requirements. In terms of reserves estimation, the main changes are: the use of an average price instead of a single year-end price; the use of new reliable technologies to assess proved reserves; and the inclusion, under certain conditions, of non traditional sources as oil and gas producing activities. The revised rules form the basis of the 2009 year-end estimation of proved reserves and their application resulted in an immaterial increase in TOTAL's proved reserves. In particular, positive revisions were made possible in 2009 on a limited number of proved properties due to the integration of reliable technologies such as seismic and wireline pressure data in the proved reserves evaluation workflow. These revisions represent less than 2% of the Group's proved reserves portfolio. Bitumen was included in 2008 and 2007 in the crude oil reserves and is disclosed separately for 2009 pursuant to the SEC requirements, as amended.

#### **Preparation of reserves estimates**

The estimation of reserves is an ongoing process which is done within affiliates by experienced geoscientists, engineers and economists under the supervision of each affiliate's General Management. Persons involved in reserves evaluation are trained to follow SEC-compliant internal guidelines and policies regarding criteria that must be met before reserves can be considered as proved.

The technical validation process involves a Reservoir Committee that is responsible for approving proved reserves changes above a certain threshold and technical evaluations of reserves associated with any investment decision that requires approval from the Exploration & Production Executive Committee. The Chairman of the Reservoir Committee and its members are appointed by the President of Exploration & Production and represent expertise in reservoir engineering, production geology, production geophysics, drilling, and predevelopment projects.

An internal control process related to reserves estimation is well established within TOTAL and involves the following elements:

- A central Reserve Entity whose responsibility is: to consolidate, document and archive the Group's reserves; to ensure coherency of evaluations worldwide; to maintain the Corporate Reserves Guidelines Standards in line with SEC guidelines and policies; to deliver training on reserves evaluation and classification; and to conduct periodically in-depth technical review of reserves for each affiliate.
- An annual review of reserves conducted by an internal group of specialists selected for their expertise in geosciences and engineering or their knowledge of the affiliate. All members of this group chaired by the Geoscience Reserve Manager and composed of at least three Reservoir Committee members are knowledgeable in the SEC guidelines for proved reserves evaluation. Their responsibility is to provide an independent review of reserves changes proposed by affiliates and ensure that reserves are estimated using appropriate standards and procedures.
- At the end of the annual review carried out by the Geoscience Division, a SEC Reserves Committee chaired by the Exploration & Production Finance Senior Vice President and comprised of the Geoscience, Strategy and Legal Senior Vice Presidents, or their representatives, as well as the Chairman of the Reservoir Committee and the Geoscience Reserves Manager, approves the SEC reserve booking proposals as regards to criteria that are not depending upon reservoir and geoscience techniques. The results of the annual review and the proposals for including revisions or additions of SEC Proved Reserves are presented to the Exploration & Production Executive Committee for approval before final validation by the Group Executive Management.

The reserves evaluation and control process is audited periodically by the Group internal auditors who verify the effectiveness of the reserves evaluation process and control procedures.

The Geosciences Reserves Manager (GRM) is the technical person responsible for preparing the reserves estimates for the Group. The GRM supervises the Reserve Entity, chairs the annual review of reserves, and is a member of the Reservoir Committee and the SEC Reserves Committee. The GRM has a solid background in the fields of reservoir engineering and geosciences, a strong experience of reserve evaluation, audit and control processes and a good knowledge in economics and finance.

## Proved developed reserves

At year-end 2009, proved developed reserves of oil and gas were 5,835 Mboe and represented 56% of proved reserves. At the end of 2008, proved developed reserves were 5,243 Mboe and represented 50% of proved reserves. Over the past three years, the level of proved developed reserves has remained above 5.2 Bboe and over 50% of proved reserves, illustrating TOTAL's ability to consistently transfer proved undeveloped reserves into developed status.

## Proved undeveloped reserves

As of December 31, 2009, TOTAL's combined proved undeveloped reserves of oil and gas were 4,648 Mboe as compared to 5,215 Mboe at the end of 2008. The reduction of proved undeveloped reserves reflects primarily the progress made in converting proved undeveloped reserves into proved developed reserves in particular with the successful production start up of

large projects in Nigeria, Angola, United States, Qatar and Yemen. The reduction of proved undeveloped reserves associated with the transfer into developed reserves has been partially offset by the addition of undeveloped reserves mainly in Canada and Argentina.

More than 60% of the proved undeveloped reserves are associated with producing fields and are located for the most part in Canada, Nigeria, Yemen, UAE, Venezuela and Norway. These reserves are expected to be developed over time as part of initial field development plans or additional development phases. The timing to bring these proved reserves into production will depend upon several factors including reservoir performance, surface facilities or plant capacity constraints and contractual limitations on production level.

The remaining proved undeveloped reserves correspond to undeveloped fields or assets for which a development has been sanctioned or is in progress. These proved undeveloped reserves are located primarily in Kazakhstan, Angola and Nigeria. For some of the major developments we anticipate it may take more than five years from the time of recording proved reserves to the start of production due to the complexity and the size of the projects.

Development costs for the year 2009 were €8.1 billion. A large part of the investments was allocated to major development projects in Kazakhstan, Angola, Nigeria, United States, Qatar and Yemen and contributed to convert proved undeveloped reserves into proved developed reserves.

Information shown in the following tables is presented in accordance with FASB's ASC 932 and the requirements of the SEC Regulation S-K (Items 1200 to 1208).

The tables included provided below are presented by the following geographic areas: Europe, Africa, the Americas, Middle East and Asia (including CIS). Certain previously reported amounts for 2008 and 2007 have been reclassified to conform to the current year presentation.

### ESTIMATED PROVED RESERVES OF OIL, BITUMEN AND GAS RESERVES

The following tables present, for oil, bitumen and gas reserves, an estimate of the Group's oil and gas quantities by geographic areas as of December 31, 2009, 2008 and 2007.

Quantities shown concern proved developed and undeveloped reserves together with changes in quantities for 2009, 2008 and 2007.

The definitions used for proved, proved developed and proved undeveloped oil and gas reserves are in accordance with the revised Rule 4-10 of SEC Regulation S-X.

All references in the following tables to reserves or production are to the Group's entire share of such reserves or production. TOTAL's worldwide proved reserves include the proved reserves of its consolidated subsidiaries as well as its proportionate share of the proved reserves of equity affiliates and of two companies accounted for by the cost method.

# Changes in oil, bitumen and gas reserves

Proved developed and undeveloped reserves		C	onsolidated su			·
				Middle		
(in millions of barrels of oil equivalent)	Europe	Africa	Americas	East	Asia	Total
Balance as of December 31, 2006	1,903	3,430	1,823	532	1,288	8,976
Revisions of previous estimates	196	280	(531)	(23)	(16)	(94)
Extensions, discoveries and other	50	93	2	1	51	197
Acquisitions of reserves in place	_	—	_	_	—	—
Sales of reserves in place	(3)		(465)	_	—	(470)
Production for the year	(246)		(92)	(36)	(99)	(758)
Balance as of December 31, 2007	1,900	3,516	737	474	1,224	7,851
Revisions of previous estimates	41	374	50	106	144	715
Extensions, discoveries and other	82	110	_	_	19	211
Acquisitions of reserves in place	17	_	_	_	_	17
Sales of reserves in place	_	(74)	_	_	(46)	(120)
Production for the year	(225)	(280)	(55)	(50)	(99)	(709)
Balance as of December 31, 2008	1,815	3,646	732	530	1,242	7,965
Revisions of previous estimates	46	76	14	(7)	25	154
Extensions, discoveries and other	18	53	284	76	_	431
Acquisitions of reserves in place	12	_	130	_	_	142
Sales of reserves in place	(2)	(43)	(14)	_	_	(59)
Production for the year	(224)	(266)	(56)	(55)	(101)	(702)
Balance as of December 31, 2009	1,665	3,466	1,090	544	1,166	7,931
Minority interest in proved developed and undeveloped reserves as of						
December 31, 2007	30	135	_	_	_	165
December 31, 2008	27	100	_	_	_	127
December 31, 2009	26	98	_	—	—	124
Proved developed and undeveloped reserves		Equity &	non-consolida	ated affiliat	tes	
· · · · · · · · · · · · · · · · · · ·				Middle		
(in millions of barrels of oil equivalent)	Europe	Africa	Americas	East	Asia	Total
Balance as of December 31, 2006	_	60	_	2,084	_	2,144
Revisions of previous estimates	_	(3)	554	(3)		548
Extensions, discoveries and other	_	30	_		_	30
Acquisitions of reserves in place	_	_	_	_	_	_
Sales of reserves in place	_	(9)	_	_	_	(9)
Production for the year	_	(9)	_	(106)		(115)

Sales of reserves in place	_	(9)	_	_	_	(9)
Production for the year	—	(9)	_	(106)	_	(115)
Balance as of December 31, 2007	_	69	554	1,975	—	2,598
Revisions of previous estimates	—	22	—	(2)	_	20
Extensions, discoveries and other	—	14	_	3	—	17
Acquisitions of reserves in place	_	_	6	_	—	6
Sales of reserves in place	_	_	_	—	—	_
Production for the year	_	(7)	(33)	(108)	—	(148)
Balance as of December 31, 2008	_	98	527	1,868	—	2,493
Revisions of previous estimates	—	10	(7)	51	_	54
Extensions, discoveries and other	—	—	_	136	—	136
Acquisitions of reserves in place	_	_	_	_	—	_
Sales of reserves in place	_	_	_	—	—	_
Production for the year	_	(8)	(18)	(105)	—	(131)
Balance as of December 31, 2009	_	100	502	1,950	_	2,552

Proved developed and undeveloped reserves of consolidated subsidiaries and equity & non-consolidated						
affiliates						
(in millions of barrels of oil equivalent)	Europe	Africa	Americas	Middle East	Asia	Total
December 31, 2007						
Proved developed and undeveloped	1,900	3,585	1,291	2,449	1,224	10,449
Consolidated subsidiaries	1,900	3,516	737	474	1,224	7,851
Equity and non-consolidated affiliates		69	554	1,975	—	2,598
Proved developed	1,229	1,917	508	1,242	487	5,383
Consolidated subsidiaries	1,229	1,884	360	452	487	4,412
Equity and non-consolidated affiliates	_	33	148	790	_	971
Proved undeveloped	671	1,668	783	1,207	737	5,066
Consolidated subsidiaries	671	1,632	377	22	737	3,439
Equity and non-consolidated affiliates	_	36	406	1,185	_	1,627
December 31, 2008						
Proved developed and undeveloped	1,815	3,744	1,259	2,398	1,242	10,458
Consolidated subsidiaries	1,815	3,646	732	530	1,242	7,965
Equity and non-consolidated affiliates	_	98	527	1,868	_	2,493
Proved developed	1,252	1,801	515	1,194	481	5,243
Consolidated subsidiaries	1,252	1,754	381	504	481	4,372
Equity and non-consolidated affiliates	_	47	134	690	_	871
Proved undeveloped	563	1,943	744	1,204	761	5,215
Consolidated subsidiaries	563	1,892	351	26	761	3,593
Equity and non-consolidated affiliates	_	51	393	1,178	_	1,622
December 31, 2009						
Proved developed and undeveloped	1,665	3,566	1,592	2,494	1,166	10,483
Consolidated subsidiaries	1,665	3,466	1,090	544	1,166	7,931
Equity and non-consolidated affiliates		100	502	1,950	—	2,552
Proved developed	1,096	1,775	631	1,918	415	5,835
Consolidated subsidiaries	1,096	1,745	503	482	415	4,241
Equity and non-consolidated affiliates		30	128	1,436	—	1,594
Proved undeveloped	569	1,791	961	576	751	4,648
Consolidated subsidiaries	569	1,721	587	62	751	3,690
Equity and non-consolidated affiliates		70	374	514	—	958

### Changes in oil reserves

The oil reserves include crude oil, natural gas liquids (condensates, LPG) and bitumen reserves as of December 31, 2007 and 2008 and only crude oil and natural gas liquids reserves as of December 31, 2009.

Bitumen reserves as of December 31, 2009 are shown separately.

Proved developed and undeveloped reserves	Consolidated subsidiar							
	-			Middle		<b>T</b>		
(in millions of barrels)	Europe	Africa	Americas	East	Asia	Total		
Balance as of December 31, 2006	893	2,502	1,345	237	539	5,516		
Revisions of previous estimates	108	149	(549)	(5)	(1)	(298)		
Extensions, discoveries and other	4	90	2	1	6	103		
Acquisitions of reserves in place	(2)	(2)	(465)	_	_	(470)		
Sales of reserves in place	(3)	(2)	(465)	(30)		(470)		
Production for the year	(122)	(241)	(48)		(14)	(455)		
Balance as of December 31, 2007	880	2,498	285	203	530	4,396		
Revisions of previous estimates	15	297	(17)	54	64	413		
Extensions, discoveries and other	12	107	_	—	3	122		
Acquisitions of reserves in place	2	<u> </u>	_	—		2		
Sales of reserves in place		(74)			(43)	(117)		
Production for the year	(111)	(231)	(16)	(32)	(16)	(406)		
Balance as of December 31, 2008	798	2,597	252	225	538	4,410		
Revisions of previous estimates	34	92	(170)	(4)	51	3		
Extensions, discoveries and other	8	38	22	1	_	69		
Acquisitions of reserves in place	1	_	_	—	—	1		
Sales of reserves in place	_	(44)	(1)	—	—	(45)		
Production for the year	(108)	(223)	(15)	(34)	(17)	(397)		
Balance as of December 31, 2009	733	2,460	88	188	572	4,041		
Minority interest in proved developed and undeveloped reserves as of December 31, 2007 December 31, 2008 December 31, 2009	15 12 <b>12</b>	116 89 <b>88</b>				131 101 <b>100</b>		
Proved developed and undeveloped reserves		Equity 8	non—consoli	dated affili	ates			
				Middle				
(in millions of barrels)								
	Europe	Africa	Americas	East	Asia	Total		
Balance as of December 31, 2006	Europe —	56	_	East 899	Asia —	955		
Revisions of previous estimates		56 (3)		East		955 525		
Revisions of previous estimates Extensions, discoveries and other		56	_	East 899	—	955		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place		56 (3) 7	_	East 899	—	955 525 7 —		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place		56 (3) 7 — (9)	_	East 899 (5) — —	—	955 525 7 — (9)		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year		56 (3) 7 — (9) (8)	533 	East 899 (5) — — (88)		955 525 7 — (9) (96)		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place		56 (3) 7 (9) (8) 43		East 899 (5)   (88) 806		955 525 7 — (9)		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates		56 (3) 7 — (9) (8)	533 	East 899 (5) — — (88)		955 525 7 — (9) (96)		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007		56 (3) 7 (9) (8) 43		East 899 (5)   (88) 806		955 525 7 — (9) (96) 1,382		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates		56 (3) 7 (9) (8) 43 22		East 899 (5)  (88) 806 (2)		955 525 7 (9) (96) 1,382 21		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other		56 (3) 7 (9) (8) 43 22		East 899 (5)  (88) 806 (2)		955 525 7 (9) (96) 1,382 21 3		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place		56 (3) 7 (9) (8) 43 22		East 899 (5)  (88) 806 (2) 3 		955 525 7 (9) (96) 1,382 21 3		
Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2007         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Sales of reserves in place		56 (3) 7 (9) (8) 43 22 		East 899 (5)  (88) 806 (2) 3  (2) 3 		955 525 7 (9) (96) 1,382 21 3 6 —		
Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year		56 (3) 7 (9) (8) 43 22   (7)		East 899 (5)  (88) 806 (2) 3  (2) 3  (88)		955 525 7  (9) (96) 1,382 21 3 6 - (127)		
Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2007         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Sales of reserves in place         Balance as of December 31, 2008		56 (3) 7 (9) (8) 43 22   (7) 58		East 899 (5)  (88) 806 (2) 3  (88) 719		955 525 7  (9) (96) 1,382 21 3 6  (127) 1,285		
Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2007         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2008         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2008         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place		56 (3) 7 (9) (8) 43 22   (7) 58		East 899 (5)  (88) 806 (2) 3  (88) 719 (15)		955 525 7  (9) (96) 1,382 21 3 6  (127) 1,285 (34)		
Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2007         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2008         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Balance as of December 31, 2008         Revisions of previous estimates         Extensions, discoveries and other		56 (3) 7 (9) (8) 43 22   (7) 58		East 899 (5)  (88) 806 (2) 3  (88) 719 (15) 136		955 525 7  (9) (96) 1,382 21 3 6  (127) 1,285 (34) 136		
Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2007         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2008         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place         Sales of reserves in place         Production for the year         Balance as of December 31, 2008         Revisions of previous estimates         Extensions, discoveries and other         Acquisitions of reserves in place		56 (3) 7 (9) (8) 43 22   (7) 58		East 899 (5)  (88) 806 (2) 3  (88) 719 (15) 136		955 525 7  (9) (96) 1,382 21 3 6  (127) 1,285 (34) 136		

Proved developed and undeveloped reserves of consolidated subsidiaries and equity & non-consolidated affiliates (in millions of barrels)	Europe	Africa	Americas	Middle East	Asia	Total
December 31, 2007	Europe	Antica	Americas	Lasi	Asia	Total
Proved developed and undeveloped	880	2,541	818	1.009	530	5.778
Consolidated subsidiaries	880	2,498	285	203	530	4,396
Equity and non-consolidated affiliates		43	533	806		1,382
Proved developed	560	1.419	213	744	59	2,995
Consolidated subsidiaries	560	1,389	70	182	59	2,260
Equity and non-consolidated affiliates	_	30	143	562	_	735
Proved undeveloped	320	1.122	605	265	471	2,783
Consolidated subsidiaries	320	1,109	215	21	471	2.136
Equity and non-consolidated affiliates	_	13	390	244	_	647
December 31, 2008						
Proved developed and undeveloped	798	2,655	760	944	538	5,695
Consolidated subsidiaries	798	2,597	252	225	538	4,410
Equity and non-consolidated affiliates	_	58	508	719	_	1,285
Proved developed	516	1,357	183	681	65	2,802
Consolidated subsidiaries	516	1,313	56	201	65	2,151
Equity and non-consolidated affiliates	—	44	127	480	—	651
Proved undeveloped	282	1,298	577	263	473	2,893
Consolidated subsidiaries	282	1,284	196	24	473	2,259
Equity and non-consolidated affiliates		14	381	239	_	634
December 31, 2009						
Proved developed and undeveloped	733	2,497	573	949	572	5,324
Consolidated subsidiaries	733	2,460	88	188	572	4,041
Equity and non-consolidated affiliates	_	37	485	761	_	1,283
Proved developed	457	1,331	187	728	65	2,768
Consolidated subsidiaries	457	1,303	66	174	65	2,065
Equity and non-consolidated affiliates	_	28	121	554	—	703
Proved undeveloped	276	1,166	386	221	507	2,556
Consolidated subsidiaries	276	1,157	22	14	507	1,976
Equity and non-consolidated affiliates	—	9	364	207	_	580

### Changes in bitumen reserves

Bitumen reserves as of December 31, 2007 and 2008 are included in the table "Changes in oil reserves" above.

Proved developed and undeveloped reserves		C	onsolidated sub	sidiaries		
				Middle		
(in millions of barrels)	Europe	Africa	Americas	East	Asia	Total
Balance as of December 31, 2008	_	_	_	_	_	
Revisions of previous estimates	_	_	176	_	_	176
Extensions, discoveries and other	_	_	192	_	_	192
Acquisitions of reserves in place	—	—	_	—	—	_
Sales of reserves in place	_	_	_	_	—	_
Production for the year	—	—	(3)	—	_	(3)
Balance as of December 31, 2009	_	_	365	_	-	365
December 31, 2009						
Proved developed reserves	_	_	19	_	_	19
Proved undeveloped reserves	_	_	346	_	_	346

There are no bitumen reserves for equity and non-consolidated affiliates.

There are no minority interests for bitumen reserves.

# Changes in gas reserves

Proved developed and undeveloped reserves	Consolidated subsidiari					
				Middle		
(in billions of cubic feet)	Europe	Africa	Americas	East	Asia	Total
Balance as of December 31, 2006	5,452	4,787	2,711	1,769	4,347	19,066
Revisions of previous estimates	487	805	88	(163)	(79)	1,138
Extensions, discoveries and other	265	12	3	_	263	543
Acquisitions of reserves in place	_	_	_	_	—	_
Sales of reserves in place	_	(1)	_	_	—	(1)
Production for the year	(673)	(232)	(238)	(34)	(486)	(1,663)
Balance as of December 31, 2007	5,531	5,371	2,564	1,572	4,045	19,083
Revisions of previous estimates	145	381	366	300	458	1,650
Extensions, discoveries and other	377	17	_	_	90	484
Acquisitions of reserves in place	76	_	_	_	_	76
Sales of reserves in place	_	_	_	_	(15)	(15)
Production for the year	(622)	(240)	(216)	(103)	(480)	(1,661)
Balance as of December 31, 2008	5,507	5,529	2,714	1,769	4,098	19,617
Revisions of previous estimates	73	(127)	25	(18)	(165)	(212)
Extensions, discoveries and other	55	61	382	399		897
Acquisitions of reserves in place	58	_	752	_	_	810
Sales of reserves in place	(13)	_	(64)	_	_	(77)
Production for the year	(633)	(217)	(212)	(122)	(467)	(1,651)
Balance as of December 31, 2009	5,047	5,246	3,597	2,028	3.466	19,384
December 31, 2008 December 31, 2009	75 <b>73</b>	64 60			_	139 <b>133</b>
Proved developed and undeveloped reserves		Equity	& non-conso		liates	
	_			Middle		
(in billions of cubic feet)	Europe	Africa	Americas	East		
Balance as of December 31, 2006				0.450	Asia	Total
Revisions of previous estimates	-	20		6,453	—	6,473
		_	125	30	_	6,473 155
Extensions, discoveries and other	 	— 126	125 —			6,473 155 126
Acquisitions of reserves in place	_	 126 	125 — —	30 		6,473 155 126 —
Acquisitions of reserves in place Sales of reserves in place			125 — — —	30 — — —	 	6,473 155 126 — (4)
Acquisitions of reserves in place Sales of reserves in place Production for the year		— 126 — (4) (2)	125 — — — —	30 — — — (101)	  	6,473 155 126 — (4) (103)
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007			125 — — — — — 125	30 — — (101) 6,382		6,473 155 126  (4) (103) 6,647
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates			125 — — — —	30 — — — (101)	  	6,473 155 126  (4) (103) 6,647 (13)
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other			125 — — — — — 125	30 — — (101) 6,382		6,473 155 126  (4) (103) 6,647
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place			125 — — — — — 125 (13)	30 — — (101) 6,382 —		6,473 155 126  (4) (103) 6,647 (13)
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place			125 — — — — 125 (13) — — —	30 — — (101) 		6,473 155 126 (4) (103) 6,647 (13) 76 —
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year			125 — — — — — — (13) — — — — (2)	30 — — — — — — — — — — — — — — — — — — —		6,473 155 126  (4) (103) 6,647 (13) 76   (109)
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2008			125 — — — — — — (13) — — — — — (13) — — — — (13) — — — — — — — — — — — — — — — — — — —	30 — (101) 6,382 — — — (106) 6,276		6,473 155 126  (4) (103) 6,647 (13) 76   (109) 6,601
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2008 Revisions of previous estimates			125 — — — — — — (13) — — — — (2)	30 — — — — — — — — — — — — — — — — — — —		6,473 155 126  (4) (103) 6,647 (13) 76   (109)
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2008 Revisions of previous estimates Extensions, discoveries and other			125 — — — — — — (13) — — — — — (13) — — — — (13) — — — — — — — — — — — — — — — — — — —	30 — (101) 6,382 — — — (106) 6,276		6,473 155 126  (4) (103) 6,647 (13) 76   (109) 6,601
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2008 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place			125   125 (13)   (2) 110 (13)	30  (101) 6,382   (106) 6,276 363          -		6,473 155 126 (4) (103) 6,647 (13) 76 — (109) 6,601 477 — —
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2008 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Sales of reserves in place			125 — — 125 (13) — — (13) — (13) — (13) — (13) — — — — — — — — — — — — —	30 		6,473 155 126 (4) (103) 6,647 (13) 76 (13) 76 (109) 6,601 477      
Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2007 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place Sales of reserves in place Production for the year Balance as of December 31, 2008 Revisions of previous estimates Extensions, discoveries and other Acquisitions of reserves in place			125 — — — 125 (13) — — (13) — (13) (13) — — —	30  (101) 6,382   (106) 6,276 363          -		6,473 155 126 (4) (103) 6,647 (13) 76 — (109) 6,601 477 — —

Proved developed and undeveloped reserves of consolidated subsidiaries and equity & non-consolidated affiliates	<b>F</b>		•	Middle East	A	<b>T</b> - 4 -
(in billions of cubic feet)	Europe	Africa	Americas	East	Asia	Tota
December 31, 2007	5 504	E E44	0.000	7 05 4	4.045	05 700
Proved developed and undeveloped Consolidated subsidiaries	5,531 5,531	5,511 5,371	2,689 2,564	7,954 1.572	4,045 4,045	25,730 19,083
Equity and non-consolidated affiliates	5,551	140	2,564	6,382	4,045	6,647
Proved developed	3.602	2.574	1.647	2.797	2,487	13,107
Consolidated subsidiaries	3,602	2,574 2,560	1,647	2,797	2,487 2,487	11,840
Equity and non-consolidated affiliates	3,002	2,560	28	1,372	2,407	1,267
		2,937		5,157		/
Proved undeveloped Consolidated subsidiaries	1,929 1,929	2,937 2,811	1,042 945	5,157	1,558 1,558	12,623 7,243
Equity and non-consolidated affiliates	1,929	2,811	945 97	 5,157	1,558	
		120	97	5,157	_	5,380
December 31, 2008 Proved developed and undeveloped	5,507	5,744	2,824	8,045	4,098	26,218
Consolidated subsidiaries	5,507	5,744	2,024 2,714	8,045 1,769	4,098	19,617
Equity and non-consolidated affiliates	5,507	215	2,714	6.276	4,096	6,601
Proved developed	3,989	2,292	1.849	2,893	2,440	13,463
Consolidated subsidiaries	3,989	2,292	1,849	1,766	2,440	12,282
Equity and non-consolidated affiliates	3,989	2,200	42	1,127	2,440	1.181
Proved undeveloped	1,518	3,452	975	5,152	1,658	12,755
Consolidated subsidiaries	1,518	3,452	907	3,152	1.658	7.335
Equity and non-consolidated affiliates	1,518	203	68	5,149	1,050	5,420
December 31, 2009		200	00	5,145		5,420
Proved developed and undeveloped	5,047	5.587	3,692	8,526	3,466	26,318
Consolidated subsidiaries	5,047	5,246	3,597	2,028	3,466	19,384
Equity and non-consolidated affiliates		341	95	6,498		6,934
Proved developed	3,463	2,272	2,388	6.606	2.059	16.788
Consolidated subsidiaries	3,463	2,272	2,343	1,773	2,059	11,899
Equity and non-consolidated affiliates		2,201	2,345	4,833	2,000	4,889
Proved undeveloped	1,584	3,315	1,304	1,920	1,407	9,530
Consolidated subsidiaries	1,584	2,985	1,254	255	1,407	7,485
Equity and non-consolidated affiliates		330	50	1.665		2,045

### **RESULTS OF OPERATIONS FOR OIL AND GAS PRODUCING ACTIVITIES**

The following tables do not include revenues and expenses related to oil and gas transportation activities and LNG liquefaction and transportation activities.

			Co	onsolidated s		es	
		<b>F</b>	A (	A	Middle	A	Tatal
(M€) Year ended December 31, 2007		Europe	Africa	Americas	East	Asia	Total
Revenues	Non-Group sales	3,715	2,497	1,869	1,180	2,150	11,411
	Group sales	5,484	9,724	417	321	558	16,504
Total Revenues		9,199	12,221	2,286	1,501	2,708	27,915
Production costs		(1,102)	(906)	(248)	(192)	(240)	(2,688)
Exploration expenses		(113)	(480)	(145)	(9)	(129)	(876)
Depreciation, depletion and amortization and valuation allowances Other expenses <sup>(1)</sup>		(1,287) (244)	(932) (1,238)	(379) (544)	(318) (273)	(395) (50)	(3,311) (2,349)
Pre-tax income from producing activities		6,453	8,665	970	709	1,894	18,691
Income tax		(4,180)	(5,772)	(576)	(421)	(934)	(11,883)
Results of oil and gas producing activities		2,273	2,893	394	288	960	6,808
Year ended December 31, 2008							
Revenues	Non-Group sales	4,521	2,930	707	1,558	2,819	12,535
	Group sales	6,310	11,425	360	409	626	19,130
Total Revenues		10,831	14,355	1,067	1,967	3,445	31,665
Production costs		(1,280)	(1,055)	(213)	(249)	(263)	(3,060)
Exploration expenses Depreciation, depletion and amortization and valuation allowances		(185) (1,266)	(209) (1,195)	(130) (318)	(4) (364)	(236) (471)	(764) (3,614)
Other expenses <sup>(1)</sup>		(1,200)	(1,193)	(225)	(304)	(471)	(2,116)
Pre-tax income from producing activities		7.840	10,682	181	993	2,415	22,111
Income tax		(5,376)	(7,160)	(109)	(481)	(1,212)	(14,338)
Results of oil and gas producing activities		2,464	3,522	72	512	1,203	7,773
Year ended December 31, 2009							
Revenues	Non-Group sales	2,499	1,994	583	859	1,926	7,861
	Group sales	4,728	7,423	310	556	597	13,614
Total Revenues		7,227	9,417	893	1,415	2,523	21,475
Production costs Exploration expenses		(1,155) (160)	(1,122) (265)	(193) (121)	(204) (81)	(243) (70)	(2,917) (697)
Depreciation, depletion and amortization and valuation allowances		(1,489)	(1,471)	(121)	(314)	(613)	(4,149)
Other expenses <sup>(1)</sup>		(261)	(895)	(181)	(170)	(56)	(1,563)
Pre-tax income from producing activities		4,162	5,664	136	646	1,541	12,149
Income tax		(2,948)	(3,427)	(103)	(309)	(747)	(7,534)
Results of oil and gas producing activities		1,214	2,237	33	337	794	4,615
Group's share of equity affiliates' results of oil and gas producing activities							
Year ended December 31, 2007		_	95	_	179	_	274
Year ended December 31, 2008		_	49	245	287	_	581

(1) Including production taxes and IAS 37 accretion expense (€169 million in 2007, €223 million in 2008 and €271 million in 2009).

		Equity affiliates					
					Middle		
<u>(</u> M€)		Europe	Africa	Americas	East	Asia	Total
Year ended December 31, 2009							
Revenues	Non-Group sales	_	203	528	231	_	962
	Group sales	_	_	_	3,382	_	3,382
Total Revenues		_	203	528	3,613	_	4,344
Production costs		_	(31)	(41)	(271)	_	(343)
Exploration expenses		_	_	(17)		_	(17)
Depreciation, depletion and amortization and valuation allowances		_	(42)	(73)	(247)	_	(362)
Other expenses		_	(9)	(205)	(2,800)	_	(3,014)
Pre-tax income from producing activities		_	121	192	295	_	608
Income tax		_	(93)	(74)	(101)	_	(268)
Results of oil and gas producing activities		_	28	118	`194 <sup>´</sup>	_	`340 <sup>´</sup>

599

647

### **Table of Contents**

### COSTS INCURRED IN OIL AND GAS PROPERTY ACQUISITION, EXPLORATION AND DEVELOPMENT ACTIVITIES

The following tables do not include costs incurred related to oil and gas transportation and LNG liquefaction and transportation activities.

		Consolidated Subsidiaries							
		Middle							
(M€)	Europe	Africa	Americas	East	Asia	Total			
Year ended December 31, 2007									
Proved property acquisition	—	50	—	7	4	61			
Jnproved property acquisition	_	265	9	10	18	302			
Exploration costs	230	586	126	9	244	1,195			
Development costs <sup>(1)</sup>	1,762	2,853	615	320	1,275	6,825			
Total cost incurred	1,992	3,754	750	346	1,541	8,383			
Year ended December 31, 2008									
Proved property acquisition	269	78	_	8	18	373			
Unproved property acquisition	24	143	22	5	3	197			
Exploration costs	228	493	155	11	312	1,199			
Development costs <sup>(1)</sup>	2,035	3,121	408	281	1,596	7,441			
Total cost incurred	2,556	3,835	585	305	1,929	9,210			
Year ended December 31, 2009									
Proved property acquisition	71	45	1,551	105	_	1,772			
Unproved property acquisition	26	8	403	_	21	458			
Exploration costs	284	475	222	87	123	1,191			
Development costs <sup>(1)</sup>	1,658	3,288	618	250	1,852	7,666			
Total cost incurred	2,039	3,816	2,794	442	1,996	11,087			

Group's share of equity affiliates' costs of property acquisition, exploration and development Year ended December 31, 2007 - 48

Year ended December 31, 2008	_	360	85	527	_	972		
	Equity affiliates							
				Middle				
<u>(M€)</u>	Europe	Africa	Americas	East	Asia	Total		
Year ended December 31, 2009								
Proved property acquisition	_	_	_	_	—	_		
Unproved property acquisition	—		—	—	—	—		
Exploration costs	_	_	22	3	—	25		
Development costs <sup>(1)</sup>	—	28	93	293	23	437		
Total cost incurred	_	28	115	296	23	462		

(1) Including asset retirement costs capitalized during the year and any gains or losses recognized upon settlement of asset retirement obligation during the year.

### CAPITALIZED COST RELATED TO OIL AND GAS PRODUCING ACTIVITIES

The following tables do not include capitalized cost related to oil and gas transportation and LNG liquefaction and transportation activities.

		Consolidated Subsidiaries							
	Middle								
<u>(</u> M€)	Europe	Africa	Americas	East	Asia	Total			
As of December 31, 2007									
Proved properties	29,263	20,035	4,032	4,266	6,951	64,547			
Unproved properties	215	993	153	12	395	1,768			
Total capitalized costs	29,478	21,028	4,185	4,278	7,346	66,315			
Accumulated depreciation, depletion and amortization	(21,092)	(10,484)	(1,683)	(2,861)	(2,005)	(38,125)			
Net capitalized costs	8,386	10,544	2,502	1,417	5,341	28,190			
As of December 31, 2008									
Proved properties	26,030	25,136	4,508	4,824	8,836	69,334			
Unproved properties	132	1,145	204	25	410	1,916			
Total capitalized costs	26,162	26,281	4,712	4,849	9,246	71,250			
Accumulated depreciation, depletion and amortization	(18,382)	(12,339)	(2,051)	(3,420)	(2,598)	(38,790)			
Net capitalized costs	7,780	13,942	2,661	1,429	6,648	32,460			
As of December 31, 2009									
Proved properties	30,613	27,557	7,123	5,148	10,102	80,543			
Unproved properties	337	1,138	839	30	555	2,899			
Total capitalized costs	30,950	28,695	7,962	5,178	10,657	83,442			
Accumulated depreciation, depletion and amortization	(21,870)	(13,510)	(2,214)	(3,325)	(3,085)	(44,004)			
Net capitalized costs	9,080	15,185	5,748	1,853	7,572	39,438			
Group's share of equity affiliates' net capitalized costs <sup>(1)</sup>									
As of December 31, 2007	_	233		403	_	636			
As of December 31, 2008	_	403	288	638	_	1,329			
		Equity affiliates							
				Middle					
<u>(M€)</u>	Europe	Africa	Americas	East	Asia	Total			
As of December 31, 2009									
Proved properties	_	610	726	2,404		3,740			
Unproved properties		_	135	_	62	197			
Total capitalized costs	—	610	861	2,404	62	3,937			
Accumulated depreciation, depletion and amortization		(387)	(171)	(1,723)		(2,281)			
Net capitalized costs		223	690	681	62	1,656			

(1) Capitalized costs previously reported for equity affiliates have been restated to be consistent with the methods used for consolidated subsidiaries

### STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS (EXCLUDING TRANSPORTATION)

The standardized measure of discounted future net cash flows relating to proved oil, bitumen and gas reserve quantities was developed as follows:

- 1. Estimates of proved reserves and the corresponding production profiles are based on existing technical and economic conditions;
- 2. The estimated future cash flows are determined based on prices used in estimating the Group's proved oil and gas reserves;
- 3. The future cash flows incorporate estimated production costs (including production taxes), future development costs and asset retirement costs. All

cost estimates are based on year-end technical and economic conditions;

- Future income taxes are computed by applying the year-end statutory tax rate to future net cash flows after consideration of permanent differences and future income tax credits; and
- 5. Future net cash flows are discounted at a standard discount rate of 10%.

These principles applied are those required by ASC 932 and do not reflect the expectations of real revenues from these reserves, nor their present value; hence, they do not constitute criteria for investment decisions. An estimate of the fair value of reserves should also take into account, among other things, the recovery of reserves not presently classified as proved, anticipated future changes in prices and costs and a discount factor more representative of the time value of money and the risks inherent in reserves estimates.

		5					
				Middle			
<u>(</u> M€)	Europe	Africa	Americas	East	Asia	Total	
As of December 31, 2007							
Future cash inflows	87,540	157,199	15,000	13,377	46,758	319,874	
Future production costs	(12,897)	(23,109)	(6,702)	(3,342)	(5,519)	(51,569)	
Future development costs	(10,764)	(19,012)	(2,157)	(693)	(7,541)	(40,167)	
Future income taxes	(43,851)	(75,557)	(1,475)	(3,460)	(11,436)	(135,779)	
Future net cash flows, after income taxes	20,028	39,521	4,666	5,882	22,262	92,359	
Discount at 10%	(8,070)	(17,474)	(2,087)	(2,673)	(13,591)	(43,895)	
Standardized measure of discounted future net cash flows	11,958	22,047	2,579	3,209	8,671	48,464	
As of December 31, 2008							
Future cash inflows	42,749	67,761	7,963	7,047	19,745	145,265	
Future production costs	(8,593)	(15,372)	(4,040)	(1,942)	(5,224)	(35,171)	
Future development costs	(10,423)	(21,594)	(1,863)	(733)	(7,497)	(42,110)	
Future income taxes	(15,651)	(14,571)	(367)	(1,577)	(2,545)	(34,711)	
Future net cash flows, after income taxes	8,082	16,224	1,693	2,795	4,479	33,273	
Discount at 10%	(3,645)	(8,144)	(715)	(1,333)	(3,450)	(17,287)	
Standardized measure of discounted future net cash flows	4,437	8,080	978	1,462	1,029	15,986	
As of December 31, 2009		- /		, -	/	- /	
Future cash inflows	50,580	107,679	18.804	9.013	32.004	218.080	
Future production costs	(11,373)	(23,253)	(8,286)	(2,831)	(6,996)	(52,739)	
Future development costs	(12,795)	(21,375)	(5,728)	(698)	(6,572)	(47,168)	
Future income taxes	(17,126)	(36,286)	(1,293)	(2,041)	(5,325)	(62,071)	
Future net cash flows, after income taxes	9,286	26,765	3,497	3,443	13,111	56,102	
Discount at 10%	(3,939)	(13,882)	(2,696)	(1,558)	(8,225)	(30,300)	
Standardized measure of discounted future net cash flows	5,347	12,883	801	1,885	4,886	25,802	
Minority interests in future net cash flows as of	407	054				4 004	
December 31, 2007	407	654	_	_	_	1,061	
December 31, 2008	217	(50)	_	—	_	167	
December 31, 2009	212	60	_	_	_	272	
Group's share of equity affiliates' future net cash flows as of							
December 31, 2007	_	526	2,998	6,554	_	10,078	
December 31, 2008	_	418	608	4,275	_	5,301	
		Equity affiliates					
(M€)	Europe	Africa	Americas	Middle East	Asia	Total	
As of December 31, 2009	Europe	Antica	AIIICIICAS	Lasi	Aaid	TUIDI	
Future cash inflows		1 422	16 750	48,486		66.668	
Future cash inflows Future production costs	_	1,432 (624)	16,750		_	/	
	_	( /	(6,993)	(30,739)		(38,356)	
Future development costs	_	(26)	(1,924)	(3,891)	_	(5,841)	
Future income taxes		(245)	(3,650)	(1,843)		(5,738)	
Future net cash flows, after income taxes	—	537	4,183	12,013	—	16,733	
Discount at 10%	—	(239)	(2,816)	(6,383)	_	(9,438)	
Standardized measure of discounted future net cash flows	—	298	1,367	5,630	_	7,295	

S-15

## CHANGES IN THE STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS

(M€)	2009	2008	2007
Consolidated subsidiaries			
Beginning of year	15,986	48,464	35,048
Sales and transfers, net of production costs	(17,266)	(26,109)	(19,095)
Net change in sales and transfer prices and in production costs and other expenses	35,738	(81,358)	56,678
Extensions, discoveries and improved recovery	(267)	556	2,895
Changes in estimated future development costs	(4,847)	(2,227)	(6,491)
Previously estimated development costs incurred during the year	7,552	6,960	6,581
Revisions of previous quantity estimates	164	2,693	(6,521)
Accretion of discount	1,599	4,846	3,505
Net change in income taxes	(12,455)	63,611	(22,585)
Purchases of reserves in place	230	50	_
Sales of reserves in place	(632)	(1,500)	(1,551)
End of year	25,802	15,986	48,464
Equity affiliates			
Beginning of year	5,301		
Sales and transfers, net of production costs	(987)		
Net change in sales and transfer prices and in production costs and other expenses	2,789		
Extensions, discoveries and improved recovery	407		
Changes in estimated future development costs	(88)		
Previously estimated development costs incurred during the year	854		
Revisions of previous quantity estimates	(790)		
Accretion of discount	530		
Net change in income taxes	(721)		
Purchases of reserves in place			
Sales of reserves in place			
End of year	7,295		

### **OTHER INFORMATION**

### Net gas production, production prices and production costs

		Consolidated subsidiaries							
	Middle								
	Europe	Africa	Americas	East	Asia	Total			
Year ended December 31, 2009									
Natural gas production available for sale (Mcf/d) <sup>(1)</sup>	1,643	480	545	297	1,224	4,189			
Production prices <sup>(2)</sup>									
Oil (∉b)	40.76	40.77	36.22	39.94	37.66	40.38			
Bitumen (€/b)	—	_	23.17	_	_	23.17			
Natural gas (€/kcf)	4.81	1.33	1.56	0.72	4.47	3.70			
Production costs per unit of production (€/boe) <sup>(3)</sup>									
Total liquids and natural gas	5.16	4.22	3.43	3.69	2.42	4.16			
Bitumen	—	—	25.45	—	_	25.45			

The reported volumes are different from those shown in the reserves table due to gas consumed in operations.
 The volumes used for calculation of the average sales prices are the ones sold from the Group's own production.
 The volumes of liquids used for this computation are shown in the proved reserves tables of this report. The reported volumes for natural gas are different from those shown in the reserves table due to gas consumed in operations.