Registration Document 2012

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including the annual financial report

This translation is a non binding translation into English of the Chairman and Chief Executive Officer's certification issued in French and is provided solely for the convenience of English-speaking readers.

"I certify, after having taken all reasonable measures to this purpose and to the best of my knowledge, that the information contained in this *Document de référence* (Registration Document) is in accordance with the facts and makes no omission likely to affect its import.

I certify, to the best of my knowledge, that the statutory and consolidated financial statements of TOTAL S.A. (the Company) have been prepared in accordance with applicable accounting standards and give a fair view of the assets, liabilities, financial position and results of the Company and of all the entities taken as a whole included in the consolidation, and that the *rapport de gestion* (Management Report) of the Board of Directors as referenced in the cross reference list included on page 367 of this *Document de référence* (Registration Document) presents a fair view of the development and performance of the business and financial position of the Company and of all the entities taken as a whole included in the consolidation, as well as a description of the main risks and uncertainties they are exposed to.

I have received a completion letter from the statutory auditors in which they state that they have audited the information related to the financial situation and the financial statements included in this *Document de référence* (Registration Document), as well as read this *Document de référence* (Registration Document) in its entirety.

The statutory auditors have reviewed the historical financial information contained in this *Document de référence* (Registration Document). The statutory auditors' report on the consolidated financial statements for the year ended December 31, 2012, is included on page 188 of this *Document de référence* (Registration Document). The statutory auditors' report on the consolidated financial statements for the year ended December 31, 2010, included on page 166 of the 2010 *Document de référence* (Registration Document), filed with the French Financial Markets Authority (*Autorité des marchés financiers*) on March 28, 2011 contains a technical remark."

Christophe de Margerie
Chairman and Chief Executive Officer

AUTORITÉ DES MARCHÉS FINANCIERS

The French language version of this *Document de référence* (Registration Document) was filed with the French Financial Markets Authority (*Autorité des marchés financiers*) on March 28, 2013 pursuant to Article 212-13 of its general regulations. It may be used in connection with a financial operation if supplemented by a prospectus which will have received the visa of the French Financial Markets Authority. This document has been drawn up by the issuer and is binding for its signatories.

Abbreviations

b: barrel
cf: cubic feet
/d: per day
/y: per year
€: euro
$ and/or dollar: U.S. dollar
t: metric ton
boe: barrel of oil equivalent
kboe/d: thousand boe/d
kb/d: thousand barrel/d
Btu: British thermal unit
M: million
B: billion
MW: megawatt
MWp: megawatt peak (direct current)
TWh: terawatt hour
AMF: French Financial Markets Authority
API: American Petroleum Institute
ERMI: *European Refining Margin Indicator*. ERMI is an indicator intended to represent the margin after variable costs for a hypothetical complex refinery located around Rotterdam in Northern Europe. 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.
FEED: Front-End Engineering and Design
FPSO: Floating Production Storage and Offloading
IFRS: International Financial Reporting Standards
LNG: liquefied natural gas
LPG: liquefied petroleum gas
ROE Return on Equity
ROACE: Return on Average Capital Employed
SEC: United States Securities and Exchange Commission
SAGD: Steam Assisted Gravity Drainage

Conversion table

1 boe = 1 barrel of crude oil = approx. 5,434 cf of gas* in 2012.
1 b/d = approx. 50 t/y
1 t = approx. 7.5 b (for a gravity of 37° API)
1 Bm^3/y = approx. 0.1 Bcf/d
1 m^3 = approx. 35.3 cf
1 t of LNG = approx. 48 kcf of gas
1 Mt/y of LNG = approx. 131 Mcf/d

* This ratio is calculated based on the actual average equivalent energy content of TOTAL's natural gas reserves and is subject to change.

Definitions

The terms "TOTAL" and "Group" as used in this Registration Document refer to TOTAL S.A. collectively with all of its direct and indirect consolidated subsidiaries located in, or outside of France.

© TOTAL S.A. March 2013

Key figures

1. Operating and market data

	2012	2011	2010
Brent ($/b)	111.7	111.3	79.5
Exchange rate (€-$)	1.28	1.39	1.33
European Refinery Margin Indicator (ERMI) ($/t)	36.0	17.4	27.4
Hydrocarbon production (kboe/d)	2,300	2,346	2,378
Liquids (kb/d)	1,220	1,226	1,340
Gas (Mcf/d)	5,880	6,098	5,648
Refinery throughput (kb/d)[a]	1,786	1,863	2,009
Refined products sales (kb/d)[b]	3,403	3,639	3,776

(a) Includes share of CEPSA through July 31, 2011, and, starting October 2010, of TotalErg.
(b) Includes Trading.

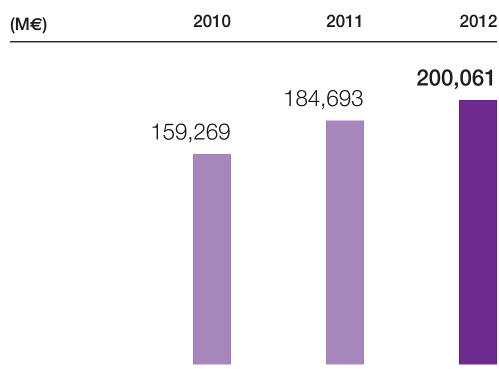
2. Selected financial information

Consolidated data in million euros, except for earnings per share, dividends, number of shares and percentages

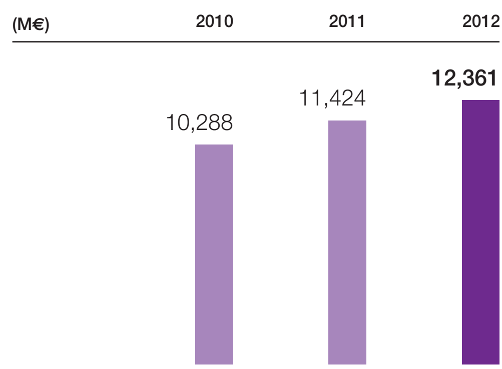
(M€)	2012	2011	2010
Sales	200,061	184,693	159,269
Adjusted operating income from business segments[(a)]	24,986	24,409	19,797
Adjusted net operating income from business segments[(a)]	13,437	12,263	10,622
Net income (Group share)	10,694	12,276	10,571
Ajusted net income (Group share)[(a)]	12,361	11,424	10,288
Fully-diluted weighted-average shares (millions)	2,267	2,257	2,244.5
Adjusted fully-diluted earnings per share (euros)[(a)(b)]	5.45	5.06	4.58
Dividend per share (euros)[(c)]	2.34	2.28	2.28
Net-debt-to-equity ratio (as of December 31)	21%	23%	22%
Return on Average Capital Employed (ROACE)[(d)]	16%	16%	16%
Return on Equity (ROE)	18%	18%	19%
Cash flow from operations	22,462	19,536	18,493
Investments[(e)]	22,943	24,541	16,273
Divestments	5,871	8,578	4,316

(a) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes for fair value from January 1, 2011, and, through June 30, 2010, excluding TOTAL's equity share of adjustments related to Sanofi.
(b) Based on fully-diluted weighted-average number of common shares oustanding during the period.
(c) Dividend 2012: pending approval at the May 17, 2013 Annual Shareholders' Meeting.
(d) Based on adjusted net operating income and average capital employed at replacement cost (excluding after-tax inventory effect).
(e) Including acquisitions.

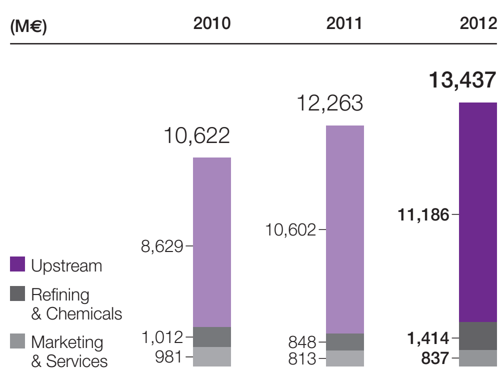
Sales



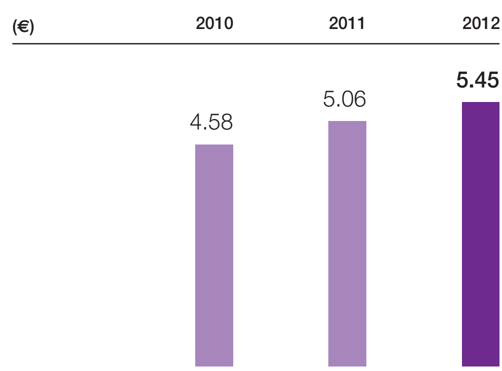
Adjusted net income (Group share)



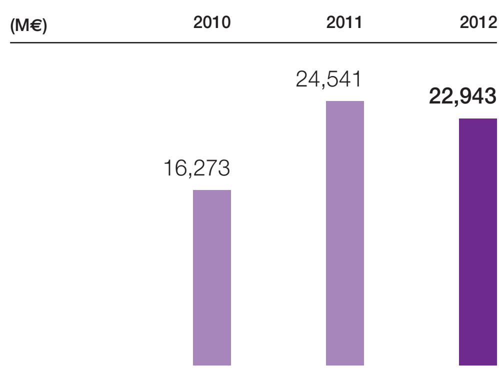
Adjusted net operating income from business segments



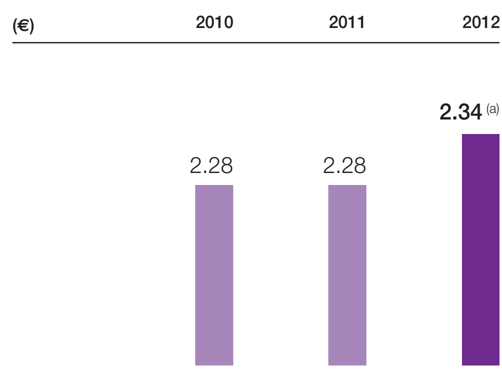
Adjusted fully-diluted earnings per share



Investments



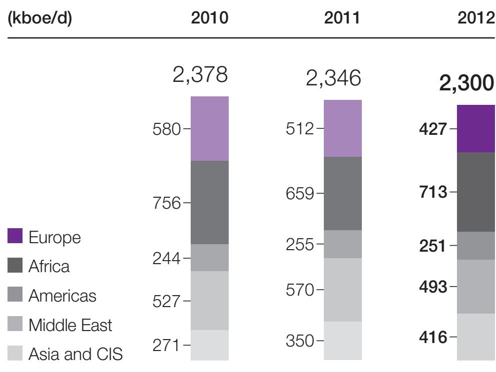
Dividend per share



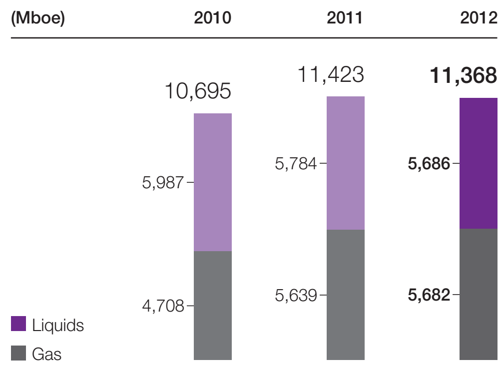
(a) Subject to the approval by the Shareholders' Meeting of May 17, 2013.

Upstream

Oil and gas production



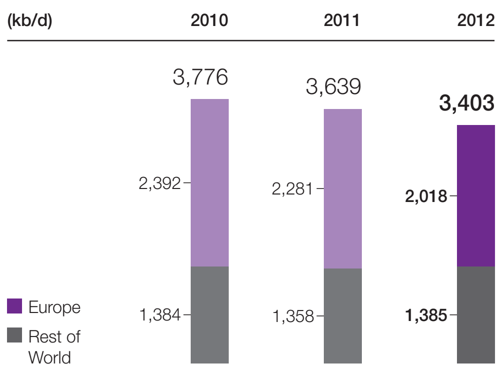
Liquids and gas reserves



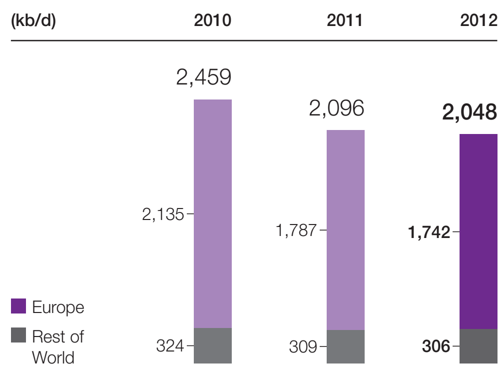
Refining & Chemicals and Marketing & Services

Refined product sales

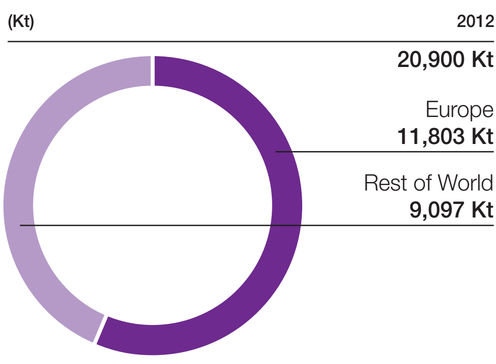
including Trading



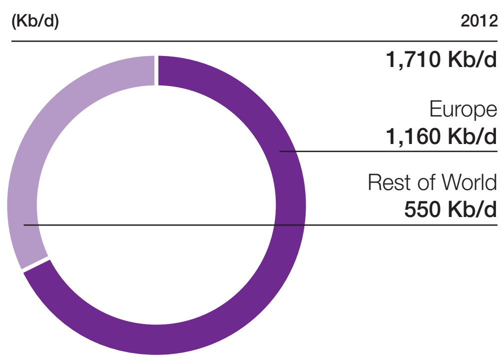
Refining capacity at year-end



Petrochemicals production capacity by geographic area at year end

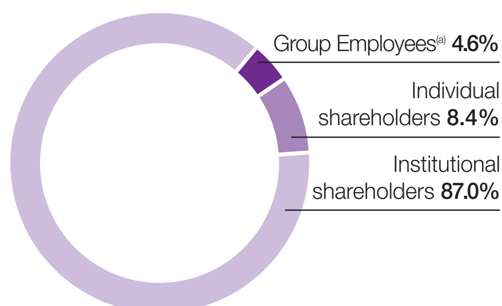


Marketing & Services refined products sales by geographic area in 2012



Shareholder base

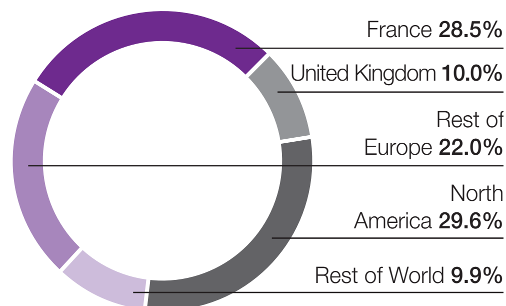
Estimate as of December 31, 2012, excluding treasury shares



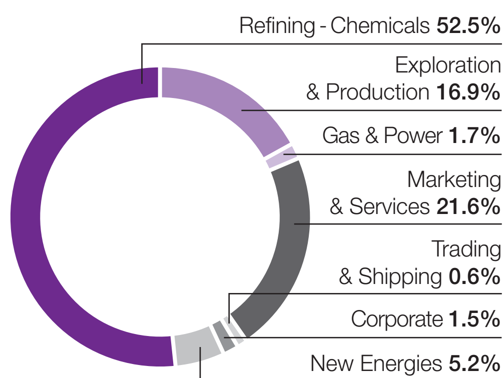
(a) Based on the definition of employee shareholding pursuant to Article L. 225-102 of the French Commercial code.

Shareholder base by region

Estimate as of December 31, 2012, excluding treasury shares

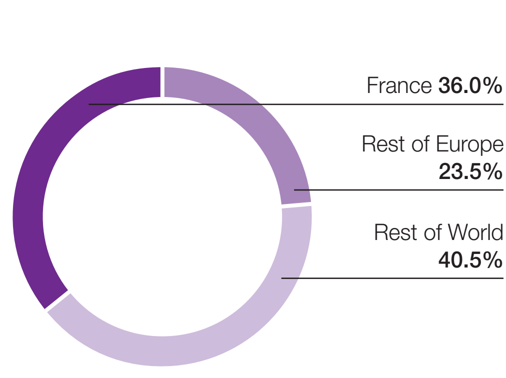


Employees by business segment[a]



(a) Consolidated companies.
Workforce as of December 31, 2012: 97,126 employees.

Employees by region[a]



(a) Consolidated companies.
Workforce as of December 31, 2012: 97,126 employees.

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1. History and strategy of TOTAL

1.1. 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[1].

With operations in more than 130 countries, TOTAL has activities in every sector of the oil industry: including in the upstream (oil and gas exploration, development and production, liquefied natural gas) and downstream (refining, petrochemicals, specialty chemicals, the trading and shipping of crude oil and petroleum products, marketing). In addition, TOTAL has equity stakes in coal mines and operates in the power generation and renewable energy sectors.

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. (hereafter referred to as “PetroFina” or “Fina”) and in early 2000, the Company acquired control of Elf Aquitaine S.A. (hereafter referred to as “Elf Aquitaine” or “Elf”).

The Company’s Corporate name is TOTAL S.A.

The Company’s registered office is 2, place Jean Millier, La Défense 6, 92400 Courbevoie, France.

The telephone number is +33 1 47 44 45 46 and the website address is total.com.

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

1.2. Strategy

TOTAL’s activities lie at the heart of the two biggest challenges facing the world now and in future: energy supply and environmental protection. The Group’s responsibility as an energy producer is to provide optimum, sustainable management of these twin imperatives.

TOTAL’s strategy, the implementation of which is based on a model for sustainable growth combining the acceptability of operations with a sustained, profitable investment program, aims at:

– expanding hydrocarbon exploration and production activities and strengthening its worldwide position as one of the global leaders in the natural gas and LNG markets;

– progressively expanding energy solutions and developing new energies to complement oil and gas;

– adapting its refining and petrochemical base to market changes, focusing on a small number of large, competitive platforms and maximizing the advantages of integration;

– developing its petroleum product marketing business, in particular in Africa, Asia and the Middle East, while maintaining the competitiveness of its operations in mature areas; and

– pursuing research and development to develop “clean” sources of energy, contributing to the moderation of the demand for energy, and participating in the effort against climate change.

(1) Based on market capitalization (in dollars) as of December 31, 2012.

2. Upstream segment

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

Effective July 1, 2012, the Upstream segment no longer includes the activities of New Energies, which are now reported with Marketing & Services. As a result, certain information has been restated according to the new organization.

- **2.3** Mboe/d of hydrocarbons produced in 2012
- **11.4** Bboe of proved reserves as of December 31, 2012[(1)]
- Capital expenditure for 2012: **€19.6** billion
- **18,045** employees

Upstream segment financial data

(M€)	2012	2011	2010
Non-Group sales	22,143	22,211	18,526
Adjusted operating income	22,108	22,609	17,694
Adjusted net operating income	11,186	10,602	8,629

For the full year 2012, adjusted net operating income from the Upstream segment was €11,186 million compared with €10,602 million in 2011, an increase of 6%. Expressed in dollars, adjusted net operating income from the Upstream segment was $14.4 billion, a decrease of 3% compared with 2011, explained mainly by the decrease in hydrocarbon production, since the increase in technical costs (as discussed below) was largely offset by the decrease in the effective tax rate for the Upstream segment.

Technical costs[(2)] for consolidated subsidiaries, in accordance with ASC 932[(3)], were 22.8 $/boe[(4)] in 2012, compared with 18.9 $/boe in 2011.

The Return on Average Capital Employed (ROACE[(5)]) for the Upstream segment was 18% in 2012 compared with 21% in 2011.

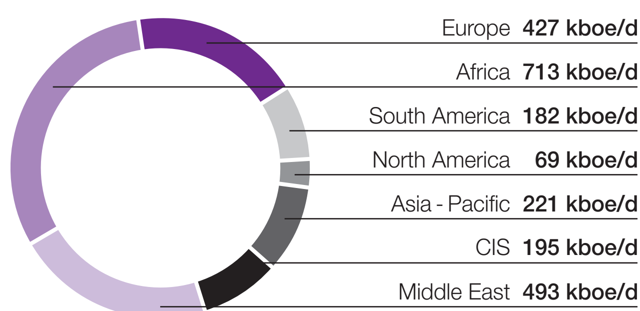
Price realizations[(a)]	2012	2011	2010
Average liquids price ($/b)	107.7	105.0	76.3
Average gas price ($/Mbtu)	6.74	6.53	5.15

(a) Consolidated subsidiaries, excluding fixed margins. Effective first quarter 2012, over/under-lifting valued at market prices.

TOTAL's average liquids price and average gas price increased by 3% in 2012 compared with 2011.

Production

Hydrocarbon production	2012	2011	2010
Combined production (kboe/d)	2,300	2,346	2,378
Liquids (kb/d)	1,220	1,226	1,340
Gas (Mcf/d)	5,880	6,098	5,648

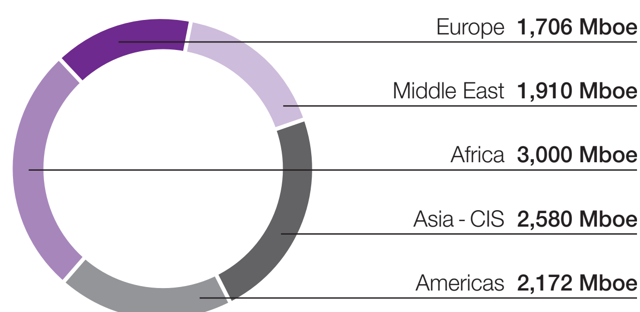


Hydrocarbon production was 2,300 kboe/d in 2012, a decrease of 2% compared with 2011, essentially as a result of:

- +4.5% for start-ups and ramp-ups from new projects;
- -4% for normal decline;
- +1.5% for changes in the portfolio, comprised essentially of an increased share of Novatek production and the impact of the sale of CEPSA and assets in the UK, France, Nigeria, and Cameroon;
- -2% for incidents at Elgin in the UK North Sea and Ibewa in Nigeria;
- -1.5% for disruptions related to security conditions in Yemen and the production shut-down in Syria, net of the positive effect of the return of production in Libya; and
- -0.5% for price effect[(6)].

Reserves

As of December 31,	2012	2011	2010
Hydrocarbon reserves (Mboe)	11,368	11,423	10,695
Liquids (Mb)	5,686	5,784	5,987
Gas (Bcf)	30,877	30,717	25,788



Proved reserves based on SEC rules (based on Brent at 111.13 $/b) were 11,368 Mboe at December 31, 2012. Based on the 2012 average rate of production, the reserve life is 13 years. The 2012 proved reserve replacement rate[(7)], based on SEC rules, was 93%. The 2012 organic proved reserve replacement rate[(8)] was 100% in a constant price environment. At year-end 2012, TOTAL had a solid and diversified portfolio of proved and probable reserves[(9)] representing more than 20 years of reserve life based on the 2012 average production rate, and resources[(10)] representing more than 45 years of production.

(1) Based on a Brent crude price of $111.13/b.
(2) (Production costs + exploration expenses + depreciation, depletion and amortization and valuation allowances)/production of the year.
(3) FASB Accounting Standards Codification 932, Extractive industries – Oil and Gas.
(4) Excluding IAS 36 (impairment of assets).
(5) Calculated based on adjusted net operating income and average capital employed, using replacement cost.
(6) Impact of changing hydrocarbon prices on entitlement volumes.
(7) Change in reserves excluding production i.e. (revisions + discoveries, extensions + acquisitions – divestments) / production for the period.
(8) The reserve replacement rate would be 100% in an environment with a constant 110.96 $/b oil price, excluding acquisitions and divestments.
(9) Limited to proved and probable reserves covered by E&P contracts on fields that have been drilled and for which technical studies have demonstrated economic development in a 100 $/b Brent environment, including projects developed by mining.
(10) Proved and probable reserves plus contingent resources (potential average recoverable reserves from known accumulations - Society of Petroleum Engineers - 03/07).

2.1. Exploration & Production

2.1.1. Exploration and development

TOTAL's Upstream segment aims at continuing to combine long-term growth and profitability at the level 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 77% of the 2,016 Mboe added to the Upstream segment's proved reserves during the three-year period ended December 31, 2012 (before deducting production and sales of reserves in place and adding any acquisitions of reserves in place during this period). The remaining 23% comes from revisions of previous estimates. The level of revisions during this three-year period was significantly impacted by the effects of the increase of the reference oil price (from $59.91/b in 2009 to $111.13/b in 2012 for Brent crude) and the decrease of the U.S. onshore gas price (from $4.21/MBtu in 2011 to $2.85/MBtu in 2012 for Henry Hub), which together induced a substantial negative revision.

In 2012, the exploration investments of consolidated subsidiaries amounted to €2,634 million (including exploration bonuses included in the unproved property acquisition costs). Exploration investments were made primarily in Angola, the United Kingdom, the United States, Norway, Iraq, Nigeria, Brazil, Malaysia, the Republic of Congo and French Guiana. In 2011, the exploration investments of consolidated subsidiaries amounted to €1,629 million (including exploration bonuses included in the unproved property acquisition costs). The main exploration investments were made in Norway, the United Kingdom, Angola, Brazil, Azerbaijan, Indonesia, Brunei, Kenya, French Guiana and Nigeria. In 2010, the exploration investments of consolidated subsidiaries amounted to €1,472 million (including exploration bonuses included in the unproved property acquisition costs) notably in Angola, Norway, Brazil, the United Kingdom, the United States, Indonesia, Nigeria and Brunei.

The Group's consolidated Exploration & Production subsidiaries' development investments amounted to €14 billion in 2012, primarily in Angola, Norway, Canada, Australia, Nigeria, the United Kingdom, Gabon, Kazakhstan, Indonesia, the Republic of the Congo, the United States and Russia. The Group's consolidated Exploration & Production subsidiaries' development investments amounted to €10 billion in 2011, primarily in Angola, Nigeria, Norway, Kazakhstan, the United Kingdom, Australia, Canada, Gabon, Indonesia, the Republic of the Congo, the United States and Thailand. The Group's consolidated Exploration & Production subsidiaries' development investments amounted to €8 billion in 2010, mostly in Angola, Nigeria, Kazakhstan, Norway, Indonesia, the Republic of the Congo, the United Kingdom, the United States, Canada, Thailand, Gabon and Australia.

2.1.2. 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 reassessments, 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. For further information concerning changes in TOTAL's proved reserves for the years ended December 31, 2012, 2011 and 2010, see "Supplemental Oil and Gas Information (Unaudited)" in Chapter 10.

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 booking process requires, among other things:

- internal peer reviews of technical evaluations to ensure that the SEC definitions and guidance are followed; and
- that management makes significant funding commitments towards the development of the reserves prior to booking.

For further information regarding the preparation of reserves estimates, see "Supplemental Oil and Gas Information (Unaudited)" in Chapter 10.

2.1.3. Proved reserves

In accordance with the amended Rule 4-10 of Regulation S-X, proved reserves for the years ended on or after December 31, 2009, are calculated using a 12-month average price determined as the unweighted arithmetic average of the first-day-of-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 prices for 2012, 2011 and 2010 were, respectively, $111.13/b, $110.96/b, and $79.02/b for Brent crude.

As of December 31, 2012, TOTAL's combined proved reserves of oil and gas were 11,368 Mboe (51% of which were proved developed reserves). Liquids (crude oil, condensates, natural gas liquids and bitumen) represented approximately 50% of these reserves and natural gas the remaining 50%. 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 Qatar, the United Arab Emirates and Yemen), and in Asia (mainly in Australia, Kazakhstan and Russia).

As of December 31, 2011, TOTAL's combined proved reserves of oil and gas were 11,423 Mboe (53% of which were proved developed reserves). Liquids (crude oil, natural gas liquids and bitumen) represented approximately 51% of these reserves and natural gas the remaining 49%. These reserves were located in Europe (mainly in Italy, 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 Qatar, the United Arab Emirates and Yemen), and in Asia (mainly in Australia, Indonesia, Kazakhstan and Russia).

As of December 31, 2010, TOTAL's combined proved reserves of oil and gas were 10,695 Mboe (53% of which were proved developed reserves). Liquids (crude oil, natural gas liquids and bitumen) represented approximately 56% of these reserves and natural gas the remaining 44%. 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 Qatar, the United Arab Emirates and Yemen), and in Asia (mainly in Indonesia and Kazakhstan).

2.1.4. 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 risked service contracts (which together represent approximately 25% of TOTAL's reserves as of December 31, 2012). 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 production, the rate of return on investment or the income-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 risked service contracts due to such higher prices. As a result, higher prices lead to a decrease in TOTAL's reserves.

Furthermore, changes in the price used as a reference for the proved reserves estimation impact the volume of royalties in Canada and thus TOTAL's share of proved reserves.

Lastly, for any type of contract, a decrease of the reference price of petroleum products may involve a significant reduction of proved reserves.

2.1.5. Production

For the full year 2012, average daily oil and gas production was 2,300 kboe/d compared to 2,346 kboe/d in 2011. Liquids accounted for approximately 53% and natural gas for approximately 47% of TOTAL's combined liquids and natural gas production in 2012.

The table on the next page sets forth by geographic area TOTAL's average daily production of liquids and natural 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, state-owned 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 2011 and 2010, substantially all of the liquids production from TOTAL's Upstream segment in 2012 was marketed by the Trading & Shipping division of TOTAL's Refining & Chemicals segment (see table "Trading division's supply and sales of crude oil" on paragraph 3.2.1. of the present Chapter).

The majority of TOTAL's natural gas production is sold under long term contracts. However, its North American production, and part of 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.

Some of TOTAL's long-term contracts, notably in Argentina, Indonesia, Nigeria, Norway, Qatar and Russia, specify the delivery of quantities of natural gas that may or may not be fixed and determinable. Such delivery commitments vary substantially, both in duration and in scope, from contract to contract throughout the world. For example, in some cases, contracts require delivery of natural gas on an as-needed basis, and, in other cases, contracts call for the delivery of varied amounts of natural gas over different periods of time. Nevertheless, TOTAL estimates the fixed and determinable quantity of gas to be delivered over the period 2013-2015 to be 4,070 Bcf. The Group expects to satisfy most of these obligations through the production of its proved reserves of natural gas, with, if needed, additional sourcing from spot market purchases (see Chapter 10, "Supplemental Oil and Gas Information (Unaudited)" of this Registration Document).

2.1.6. Production by region

	2012			2011			2010		
	Liquids kb/d	Natural gas Mcf/d	Total kboe/d	Liquids kb/d	Natural gas Mcf/d	Total kboe/d	Liquids kb/d	Natural gas Mcf/d	Total kboe/d
Africa	**574**	**705**	**713**	**517**	**715**	**659**	**616**	**712**	**756**
Algeria	6	90	23	16	94	33	25	87	41
Angola	172	44	179	128	39	135	157	34	163
Cameroon	-	-	-	2	1	3	9	2	9
Gabon	54	19	57	55	17	58	63	20	67
Libya	62	-	62	20	-	20	55	-	55
Nigeria	173	521	279	179	534	287	192	542	301
The Congo, Republic of	107	31	113	117	30	123	115	27	120
North America	**25**	**246**	**69**	**27**	**227**	**67**	**30**	**199**	**65**
Canada[(a)]	12	-	12	11	-	11	10	-	10
United States	13	246	57	16	227	56	20	199	55
South America	**59**	**682**	**182**	**71**	**648**	**188**	**76**	**569**	**179**
Argentina	12	394	83	14	397	86	14	381	83
Bolivia	3	124	27	3	118	25	3	94	20
Colombia	1	23	6	5	27	11	11	34	18
Trinidad & Tobago	4	70	16	4	47	12	3	2	3
Venezuela	39	71	50	45	59	54	45	58	55
Asia-Pacific	**27**	**1,089**	**221**	**27**	**1,160**	**231**	**28**	**1,237**	**248**
Australia	-	29	5	-	25	4	-	6	1
Brunei	2	54	12	2	56	13	2	59	14
China	-	7	1	-	-	-	-	-	-
Indonesia	16	605	132	18	757	158	19	855	178
Myanmar	-	127	16	-	119	15	-	114	14
Thailand	9	267	55	7	203	41	7	203	41
CIS	**27**	**909**	**195**	**22**	**525**	**119**	**13**	**56**	**23**
Azerbaijan	4	64	16	4	57	14	3	54	13
Russia	23	845	179	18	468	105	10	2	10
Europe	**197**	**1,259**	**427**	**245**	**1,453**	**512**	**269**	**1,690**	**580**
France	2	58	13	5	69	18	5	85	21
The Netherlands	1	184	33	1	214	38	1	234	42
Norway	159	622	275	172	619	287	183	683	310
United Kingdom	35	395	106	67	551	169	80	688	207
Middle East	**311**	**990**	**493**	**317**	**1,370**	**570**	**308**	**1,185**	**527**
United Arab Emirates	233	70	246	226	72	240	207	76	222
Iran	-	-	-	-	-	-	2	-	2
Iraq	6	-	6	-	-	-	-	-	-
Oman	24	61	37	24	62	36	23	55	34
Qatar	38	560	139	44	616	155	49	639	164
Syria	-	-	-	11	218	53	14	130	39
Yemen	10	299	65	12	402	86	13	285	66
Total production	**1,220**	**5,880**	**2,300**	**1,226**	**6,098**	**2,346**	**1,340**	**5,648**	**2,378**
Including production share of equity affiliates	**308**	**1,635**	**611**	**316**	**1,383**	**571**	**300**	**781**	**444**
Algeria	-	-	-	10	3	10	19	4	20
Colombia	-	-	-	4	-	4	7	-	7
Venezuela	38	7	40	44	7	45	45	6	46
United Arab Emirates	225	61	237	219	62	231	199	66	212
Oman	23	60	34	22	62	34	22	55	32
Qatar	7	364	74	8	382	78	8	367	75
Russia	15	844	171	9	465	95	-	-	-
Yemen	-	299	55	-	402	74	-	283	52

(a) The Group's production in Canada consists of bitumen only. All of the Group's bitumen production is in Canada.

2.1.7. Presentation of production activities by region

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, 2012[a]

	Year of entry into the country	Operated (Group share in %)	Non-operated (Group share in %)
Africa			
Algeria	1952		
			Tin Fouye Tabankort (35.00%)
Angola	1953		
		Girassol, Jasmim, Rosa, Dalia, Pazflor (Block 17) (40.00%)	
			Cabinda Block 0 (10.00%)
			Kuito, BBLT, Tombua-Landana (Block 14) (20.00%)
			Oombo (Block 3/91) (50.00%)
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%)	
		Barbier (100.00%)	
		Baudroie Marine (50.00%)	
		Baudroie Nord Marine (50.00%)	
		Coucal (57.50%)	
		Girelle (100.00%)	
		Gonelle (100.00%)	
		Grand Anguille Marine (100.00%)	
		Grondin (100.00%)	
		Hylia Marine (75.00%)	
		Lopez Nord (100.00%)	
		Mandaros (100.00%)	
		M'Boumba (100.00%)	
		Mérou Sardine Sud (50.00%)	
		Pageau (100.00%)	
		Port Gentil Océan (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		
			zones 15, 16 & 32 (75.00%)[b]
			zones 70 & 87 (75.00%)[b]
			zones 129 & 130 (30.00%)[b]
			zones 130 & 131 (24.00%)[b]
Nigeria	1962		
		OML 58 (40.00%)	
		OML 99 Amenam-Kpono (30.40%)	
		OML 100 (40.00%)	
		OML 102 (40.00%)	OML 102-Ekanga (40.00%)
		OML 130 (24.00%)	
		OML 138 (20,00%)	
			Shell Petroleum Development Company (SPDC 10.00%)
			OML 118 - Bonga (12.50%)

	Year of entry into the country	Operated (Group share in %)	Non-operated (Group share in %)
The Congo, Republic of	1928		
		Kombi-Likalala-Libondo (65.00%)	
		Moho Bilondo (53.50%)	
		Nkossa (53.50%)	
		Nsoko (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%)
North America			
Canada	1999		
			Surmont (50.00%)
United States	1957		
			Several assets in the Barnett Shale area (25.00%)[c]
			Several assets in the Utica Shale area (25.00%)[c]
			Chinook (33.33%)
			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%)
			Itaú (41.00%)
Trinidad & Tobago	1996		
			Angostura (30.00%)
Venezuela	1980		
			PetroCedeño (30.323%)
			Yucal Placer (69.50%)
Asia-Pacific			
Australia	2005		
			Several assets in UJV GLNG (27.50%)[d]
Brunei	1986		
		Maharaja Lela Jamalulalam (37.50%)	
China	2006		
			South Sulige (49.00%)

	Year of entry into the country	Operated (Group share in %)	Non-operated (Group share in %)
Indonesia	1968		
		Bekapai (50.00%)	
		Handil (50.00%)	
		Peciko (50.00%)	
		Sisi-Nubi (47.90%)	
		South Mahakam (50.00%)	
		Tambora (50.00%)	
		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%)
Commonwealth of Independant States			
Azerbaijan	1996		
			Shah Deniz (10.00%)
Russia	1991		
		Kharyaga (40.00%)	
			Several fields through the participation in Novatek (15.34%)
Europe			
France	1939		
		Lacq (100.00%)	
		Meillon (100.00%)	
		Pécorade (100.00%)	
		Lagrave (100.00%)	
		Lanot (100.00%)	
Norway	1965		
		Atla (40.00%)	
		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%)
			Huldra (24.33%)
			Islay (5.51%)[e]
			Kristin (6.00%)
			Kvitebjørn (5.00%)
			Mikkel (7.65%)
			Morvin (6.00%)
			Oseberg (14.70%)
			Oseberg East (14.70%)
			Oseberg South (14.70%)

	Year of entry into the country	Operated (Group share in %)	Non-operated (Group share in %)
Norway	**1965**		
			Sleipner East (10.00%)
			Sleipner West (9.41%)
			Snøhvit (18.40%)
			Tor (48.20%)
			Troll I (3.69%)
			Troll II (3.69%)
			Tune (10.00%)
			Tyrihans (23.18%)
			Vale (24.24%)
			Vilje (24.24%)
			Visund (7.70%)
			Visund South (7.70%)
			Yttergryta (24.50%)
The Netherlands	**1964**		
		F6a gaz (55.66%)	
		F6a huile (65.68%)	
		F15a Jurassic (38.20%)	
		F15a/F15d Triassic (32.47%)	
		F15d (32.47%)	
		J3a (30.00%)	
		K1a (40.10%)	
		K1b/K2a (54.33%)	
		K2c (54.33%)	
		K3b (56.16%)	
		K3d (56.16%)	
		K4a (50.00%)	
		K4b/K5a (36.31%)	
		K5b (45.27%)	
		K6/L7 (56.16%)	
		L1a (60.00%)	
		L1d (60.00%)	
		L1e (55.66%)	
		L1f (55.66%)	
		L4a (55.66%)	
		L4d (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%)[f]	
		Forvie Nord (100.00%)	
		Glenelg (49.47%)	
		Islay (94.49%)[e]	
		Jura (100.00%)	
		West Franklin (EFOG 46.17%)[f]	
			Bruce (43.25%)
			Markham unitized fields (7.35%)
			Keith (25.00%)

	Year of entry into the country	Operated (Group share in %)	Non-operated (Group share in %)
Middle East			
U.A.E.	1939		
		Abu Dhabi-Abu Al Bu Khoosh (75.00%)	
			Abu Dhabi offshore (13.33%)(g)
			Abu Dhabi onshore (9.50%)(h)
			GASCO (15.00%)
			ADGAS (5.00%)
Irak	1920		
			Halfaya (18,75%)(i)
Oman	1937		
			Various fields onshore (Block 6) (4.00%)(j)
			Mukhaizna field (Block 53) (2.00%)(k)
Qatar	1936		
		Al Khalij (100.00%)	
			North Field-Bloc NF Dolphin (24.50%)
			North Field-Bloc 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%)(l)	
Yemen	1987		
		Kharir/Atuf (Block 10) (28.57%)	
			Various fields onshore (Block 5) (15.00%)

(a) The Group's interest in the local entity is approximately 100% in all cases except for Total Gabon (58.28%) and certain entities in Abu Dhabi and Oman (see notes (b) through (l) below).
(b) TOTAL's stake in the foreign consortium.
(c) TOTAL's interest in the joint venture with Chesapeake.
(d) TOTAL's interest in the uncorporated Joint Venture.
(e) The field of Islay extends partially in Norway. Total E&P UK holds a 94.49% interest and Total E&P Norge holds a 5.51% interest.
(f) TOTAL has a 46.17% indirect interest in Elgin Franklin through its interest in EFOG.
(g) Through ADMA (equity affiliate), TOTAL has a 13.33% interest and participates in the operating company, Abu Dhabi Marine Operating Company.
(h) Through ADPC (equity affiliate), TOTAL has a 9.50% interest and participates in the operating company, Abu Dhabi Company for Onshore Oil Operation.
(i) TOTAL has an interest of 18.75% in the consortium.
(j) 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).
(k) TOTAL has a direct interest of 2.00% in Block 53.
(l) Operated by DEZPC, which is 50% owned by TOTAL and 50% owned by GPC. Following the extension of European Union sanctions against Syria on December 1, 2011, TOTAL has ceased its activities that contribute to oil and gas production in Syria. For further information on U.S and European restrictions relevant to TOTAL's activities in Syria, see Chapter 4 "Risk factors".

2.1.7.1 Africa

In 2012, TOTAL's production in Africa was 713 kboe/d, representing 31% of the Group's overall production, compared to 659 kboe/d in 2011 and 756 kboe/d in 2010.

In **Algeria**, TOTAL's production was 23 kboe/d in 2012, compared to 33 kboe/d in 2011 and 41 kboe/d in 2010. These declines in production were mainly due to the sale in July 2011 of TOTAL's 48.83% share in CEPSA. All of the Group's production in Algeria now comes from the Tin Fouyé Tabenkort (TFT) field (35%). TOTAL also has stakes of 37.75% and 47% in the Timimoun and Ahnet gas development projects, respectively.

- On the TFT field, plateau production was maintained at 170 kboe/d.
- Pursuant to the ALNAFT national agency approval, at end 2010, of the development plan, the Timimoun Group, the operator of the development and the exploitation of the field, has been created. The answers for the main tendering for the construction of the facility are being processed. A 3D seismic survey has started at year end 2012. Commercial gas production is scheduled to start up by the end of 2016, with anticipated plateau production of 1.6 Bm^3/y (160 Mcf/d).
- Under the Ahnet project, the technical section of a development plan was submitted to the authorities in July 2011. Discussions are underway with the project partners and the authorities. The anticipated plateau production is 4 Bm^3/y (400 Mcf/d) as from the end of 2017.

In **Angola**, the Group's production was 179 kboe/d in 2012, compared with 135 kboe/d in 2011 and 163 kboe/d in 2010. Production comes mainly from Blocks 0, 14 and 17. Highlights of 2010 to 2012 included the launch of the CLOV project in August 2010, the start-up of production on Pazflor in August 2011, several discoveries on Blocks 15/06 and 17/06 and, finally, the acquisition of interests in Blocks 25, 39 and 40 in the Kwanza basin.

- Deep-offshore Block 17 (40%, operator) is TOTAL's principal asset in Angola. It is composed of four major zones: Girassol, Dalia, Pazflor, which are all in production, and CLOV, which is currently being developed.

  Production on Pazflor, which comprises the Perpetua, Zinia, Hortensia and Acacia fields and which started in August 2011, was 196 kb/d in 2012.

  The development of CLOV started in 2010 and will result in the installation of a fourth floating production, storage and offloading units (FPSOs) with a production capacity of 160 kb/d. Start-up of production is expected in 2014.
- On Block 14 (20%), production on the Tombua-Landana field started in 2009 and adds to production from the Benguela-Belize-Lobito-Tomboco and Kuito fields.
- The development of the Lianzi (10%) field was approved in 2012. Located in the offshore unitization zone between Angola and the Republic of Congo, this field will be developed by a connection with the existing Benguela-Belize-Lobito-Tomboco platform (Block 14). Production start-up is expected in 2015.
- On Block 0, the development of Mafumeira Sul (10%) was approved by the partners and the authorities. This project is the second phase of the development of the Mafumeira field. The first oil is expected in 2015.
- On the ultra-deep offshore Block 32 (30%, operator), exploration work continues and the basic engineering studies are underway for the Kaombo project. These studies are expected to permit the development of the discoveries made in the southeast portion of the block through two FPSOs with an estimated capacity of 100 kb/d each. The calls for tender have been issued and the final decision on investment should be made in 2013.
- On Block 15/06 (15%), the development of a first production hub including the discoveries located in the northwest portion of the block began in early 2012.

TOTAL has operations on exploration Blocks 33 (55%, operator), 17/06 (30%, operator), 25 (35%, operator), 39 (15%) and 40 (50%, operator). The Group plans to drill for pre-salt targets in Blocks 25, 39 and 40.

TOTAL is also developing in LNG through the Angola LNG project (13.6%), which includes a gas liquefaction plant near Soyo. The plant will be supplied in particular by the gas associated with production from Blocks 0, 14, 15, 17 and 18. Construction work is now complete and start-up is expected mid-2013.

In **Cameroon**, TOTAL finalized in April 2011 the sale of its entire 75.8% stake in its Upstream subsidiary Total E&P Cameroun. Since that time, the Group no longer owns any exploration or production assets in the country. Production was 3 kboe/d in 2011 and 9 kboe/d in 2010.

In **Côte d'Ivoire**, TOTAL is active in four deep offshore exploration licenses.

TOTAL is the operator of the CI-100 (60%) license and, since February 2012, the CI-514 (54%) license and also holds, since February 2012, a stake in the CI-515 (45%) and CI-516 (45%) licenses. A comprehensive 3D seismic survey was conducted on the CI-100 license, and the first exploration drilling started at the beginning of January 2013. The 2,000 km^2 license is located approximately 100 km southeast of Abidjan in water depths ranging from 1,500 m to 3,100 m.

A 3D seismic survey campaign, covering the whole of the three licenses CI-514, CI-515 and CI-516, was completed in December 2012. The data are currently being interpreted.

In **Egypt**, TOTAL signed a concession agreement in 2010 and became operator of Block 4 (East El Burullus Offshore). In January 2013, TOTAL sold a 40% interest in Block 4, but continues to operate this license with a 50% stake. The license, located in the Nile river basin where a number of gas discoveries have been made, covers a 4-year initial exploration period and includes a commitment to carrying out 3D seismic work and drilling exploration wells. Following the 3,374 km^2 3D seismic survey shot in 2011, drilling is under preparation and should start in 2013.

In **Gabon**, the Group's production was 57 kboe/d in 2012 compared to 58 kboe/d in 2011 and 67 kboe/d in 2010. The Group's exploration and production activities in Gabon are mainly carried out by Total Gabon(1), one of the Group's oldest subsidiaries in sub-Saharan Africa.

- Under the Anguille field redevelopment project, the AGM North platform, from which twenty-one additional development wells are to be drilled, was installed in January 2012. The drilling campaign started early in the second quarter of 2012 and production from this platform, which should represent 20 kboe/d, is expected to start in 2013.

(1) Total Gabon is a Gabonese company whose shares are listed on Euronext Paris. TOTAL holds 58.28%, the Republic of Gabon holds 25% and the public float is 16.72%.

– On the deep-offshore Diaba license, Total Gabon, the operator, sold off in June 2012 part of its interest, which now stands at 42.5%. A 6,000 km² 3D seismic survey was shot, processed and interpreted in 2010. Initial exploration drilling is planned for the first half of 2013.

– Total Gabon farmed into the onshore Mutamba-Iroru (50%), DE7 (30%), and Nziembou (20%) exploration licenses in 2010. Following negative exploration drilling on license DE7, Total Gabon relinquished the license in 2011. After reprocessing the existing seismic data, the Nguongui-updip well was drilled on the Mutamba-Iroru license in 2012 and revealed the presence of hydrocarbons. The commercial viability of this discovery will be investigated further. A 2D seismic survey was made on the Nziembou license in 2012, and an exploration well is due to be drilled in 2014.

In **Kenya**, TOTAL acquired in September 2011 a 40% stake in five offshore licenses in the Lamu basin (L5, L7, L11a, L11b and L12), representing a total surface area of more than 30,600 km² in water depths ranging from 100 m to 3,000 m. Following a 3,500 km² 3D seismic survey in the initial exploration period, 25% of the surface area of the five blocks has been relinquished and the decision was made to drill two exploration wells in 2013 on Blocks L7 and L11b. In June 2012, the Group also acquired the L22 offshore license (100%, operator), located in the same basin and covering a surface area of more than 10,000 km² in water depths ranging from 2,000 m to 3,500 m.

In **Libya**, the Group's production was 62 kb/d in 2012, compared to 20 kb/d in 2011 and 55 kb/d in 2010. TOTAL is present in the following contract zones: 15, 16 & 32 (75%[1]), 70 & 87 (75%[1]), 129 & 130 (30%[1]), 130 & 131 (24%[1]), and Block NC 191 (100%[1], operator).

In 2012, production recovered the level preceding the events of 2011 in the country that had caused the interruption of production in late February 2011.

– In offshore zones 15, 16 and 32, production resumed in September 2011 and quickly reached its former level. The drilling of two wells is expected to start in the second quarter of 2013.

– In onshore zones 70 and 87, production resumed in January 2012. It gradually ramped back up to plateau level. In addition, the Group is continuing the development of the Dahra and Garian fields, where production is expected to start at the beginning of 2014.

– In onshore zones 129, 130 and 131, production resumed in October 2011. A return to plateau level production occurred in 2012. The seismic campaign started before the events and will be pursued in 2013.

– In the onshore Murzuk basin, following a successful appraisal well drilled on the discovery made on a portion of Block NC 191, a development plan was submitted to the authorities in 2009. After the interruption related to the events of 2011 in the country, discussions with the authorities have restarted.

In **Madagascar**, TOTAL acquired in 2008 a 60% stake in the Bemolanga 3102 license (operator) to appraise the license's oil sand accumulations. The exploitation of oil sand accumulations is no longer a consideration, TOTAL is focusing on exploration for conventional hydrocarbons. The conventional exploration of the block is expected to continue in 2013 with a 2D seismic survey following the approval of an additional two-year extension by the local authorities of the exploration phase.

(1) TOTAL's stake in the foreign consortium.

In **Mauritania**, TOTAL has exploration operations on the Ta7 and Ta8 licenses (60%, operator) located in the Taoudenni basin. In January 2012, TOTAL acquired interests in two exploration licenses (90%, operator): Block C9 in ultra-deep offshore, and Block Ta29 onshore in the Taoudenni basin.

– Following a 2D seismic survey shot in 2011 on license Ta7, a well has been prepared and drilling operations started in February 2013.

– On the Ta8 license, drilling of the exploration well ended in 2010. Results from the well were disappointing.

– A 900 km² 2D seismic shot was taken on Block Ta29 in 2012.

– On Block C9, a 3D seismic campaign started at the end of January 2013.

In **Morocco**, an authorization of recognition was allocated in December 2011 to TOTAL and the ONHYM (National Bureau of Petroleum and Mines) for an offshore zone of 100,000 km². In the 2012, the Group led geological studies and realized a seabed survey. In December 2012, the authorization of recognition was extended of one year and 3 D seismic survey shot of 5,000 km² started at the end of 2012.

In **Mozambique**, TOTAL acquired a 40% stake in the contract to share the production of the offshore Blocks 3 and 6 in September 2012. Located in the prolific Rovuma basin, these two blocks cover a total surface area of 15,250 km² in water depths ranging from 0 m to 2,500 m. An exploration well was drilled in 2012. The results are currently being analyzed.

In **Nigeria**, the Group's production was 279 kboe/d in 2012, compared to 287 kboe/d in 2011 and 301 kboe/d in 2010. This level of production makes of Nigeria the first contributing country for the productions of the Group in 2012. TOTAL has been present in Nigeria since 1962. It operates seven production licenses (OML) out of the thirty-eight in which it has a stake, and two exploration licenses (OPL) out of the five in which it has a stake. TOTAL is also the operator of the exploration Block 1 in the Joint Development Zone (JDZ administered jointly by Nigeria and São Tomé and Principe). The Group is also active in LNG through Nigeria LNG and the Brass LNG project. Regarding recent variations in the mining fields:

– In November 2012, TOTAL announced the signing of an agreement to sell its 20% stake in Block OML 138, which includes the Usan field. The agreement is subject to approval by the relevant authorities.

– In 2011, TOTAL (operator) increased its stake from 45.9% to 48.6% in Block 1 of the JDZ.

– The divestment of the 10% Group's stakes held through the joint venture operated by Shell Petroleum Development Company (SPDC) in Blocks OML 26 and 42 was finalized in 2011, and in Blocks OML 30, 34 and 40 in 2012. Blocks OML 4, 38 and 41 were sold in 2010.

– TOTAL owns 15% of the Nigeria LNG gas liquefaction plant, located on Bonny Island, with an overall LNG capacity of 22Mt/y.

With respect to the Brass LNG gas liquefaction plant project (17%), preliminary work continued in 2012 prior to launching the construction of two trains, each with a capacity of 5 Mt/y. Calls for tenders for the construction of the plant and loading facilities are underway.

TOTAL continues its efforts to strengthen its ability to supply gas to the LNG projects in which it owns a stake and to meet the growing domestic demand for gas:

- As part of its joint venture with the Nigerian National Petroleum Company (NNPC), TOTAL pursued the project to increase the gas production capacity of the OML 58 license (40%, operator) from 370 Mcf/d to 550 Mcf/d. The second phase of this project will be the development of additional reserves.

  A drilling incident on OML 58 in late March 2012 resulted in the facilities being stopped. The incident was resolved and production gradually ramped up as of June 2012. The facilities were stopped again and secured in October 2012 due to exceptionally high rainfall. Production resumed in November 2012.
- On the OML 112/117 licenses (40%), TOTAL continued development studies in 2012 for the Ima gas field.
- On the OML 99 license (40%, operator), engineering work is underway to develop the Ikike field, where production is expected to start in 2016 (estimated capacity: 55 kboe/d).
- On the OML 102 license (40%, operator), TOTAL continues to develop the Ofon phase 2 project, which was launched in 2011, with an expected capacity of 60 kboe/d and production start-up scheduled end of 2014. In 2011, the Group also discovered Etisong North, located 15 km of the currently-producing Ofon field. The exploration campaign continued in 2012 with the drilling of the Eben well, which is also south of Ofon. The positive results produced by this well further enhance the appeal of the future Etisong-Eben development hub as a satellite of the Ofon field.
- On the deep water acreage, TOTAL drilled three exploration wells in 2012: Obo and Enitimi on JDZ Block 1, and Owowo West on OPL 223. Results are under study.
- On the OML 130 license (24%, operator), the Akpo field reached plateau production of 225 kboe/d in 2010. The Group is actively working on the Egina field (capacity of 200 kboe/d), for which a development plan has been approved by the relevant authorities. Calls for tender are underway and the contracts should be signed in the second quarter of 2013.
- On the OML 138 license (20%, operator), TOTAL started production on the Usan offshore field in February 2012 (180 kb/d, capacity of the FPSO), which reached a level of 120 kboe/d at the end of 2012. As described above, on November 2012, TOTAL signed an agreement on the sale of its 20% stake in Block OML 138. This agreement is subject to approval by the relevant authorities, expected in 2013.
- The production that is not operated by the Group in Nigeria comes mainly from the SPDC association, in which TOTAL holds a 10% stake. Gas production by the SPDC association in 2011 remained strong due to the contribution made by the Gbaran-Ubie project, which started up in 2010. However, the sharp increase of oil bunkering in 2012 had an impact on onshore production, as well as on the integrity of the facilities and the environment. TOTAL also holds a 12.5% interests in Shell Nigeria Exploration and Production Company (SNEPCO) association, wich operates notably on the OML 118 license. On this license, the Bonga field contributed approximately 15 kboe/d to the Group's production in 2012.
- On the operated deep water acreage, the Bonga Northwest development project was progressed in 2012 on the OML licence (12.5%).

In **Uganda**, TOTAL finalized in February 2012 its farm-in for an interest of 33.33% covering the EA-1, EA-1A and EA-2 licenses as well as the new Kanywataba license and the Kingfisher production license. All of these licenses are located in the Lake Albert region, where oil resources have already been discovered.

TOTAL is the operator of EA-1 and EA-1A and a partner on the other licenses. TOTAL and its partners are embarking on an exploration and appraisal program from 2012 onwards.

- The Kanywataba exploration well was drilled in June 2012 and produced negative results. The license expired in August 2012 and was returned to the authorities.
- The EA-1A license expired in February 2013, following a campaign of several exploration drillings.
- On the appraisal license EA-1, a campaign of appraisal wells, production tests and a 3D seismic survey are planned for 2012-2014. Five development plans will be submitted to the authorities before the end of 2013 (Ngiri, Jobi-Rii, Mpyo, Gunya and Jobi East).
- On the appraisal license EA-2, the campaign of appraisal wells and production tests started in 2012 will continue in 2013. Several development plans will be submitted to the authorities before the end of 2013 (Waraga, Kasamene, Wahrindi, Kigogole, Ngege, Ngara and Nsoga).
- The development plan of the EA-3 production license of the Kingfisher field was finalized by the operator in November 2012 and submitted to the authorities for approval.

In the **Republic of Congo**, the Group's production was 113 kboe/d in 2012, compared to 123 kboe/d in 2011 and 120 kboe/d in 2010.

- The development of the Lianzi field (26.75%) was approved in 2012. Located in the offshore unitization zone between Angola and the Republic of Congo, this field will be developed by a tieback to the existing Benguela-Belize-Lobito-Tomboco platform (Block 14 in Angola). Production start-up is expected in 2015.
- The Moho Bilondo offshore field (53.5%, operator), reached plateau production of 90 kboe/d in mid-2010. The field has now started its decline.

  The existence of additional resources in the southern portion of the license was confirmed in 2010, creating the prospects for additional development of the existing facilities ("Phase 1b"). The basic engineering studies were finished in 2012.

  A series of agreements on the contractual and fiscal conditions applicable to the Moho Bilondo license were signed with the authorities in July 2012 and approved by a law passed in October 2012, triggering the development of the northern portion of the license, the potential of which was bolstered by appraisal and exploration wells drilled in 2008 and 2009 (Moho North project). The basic engineering studies were finished in 2012.

  The Phase 1b and Moho North projects have been launched in March 2013, with production start-up planned in 2015 and 2016 respectively. The estimated production capacities are about 140 kboe/d in 2017 ("Phase 1b" 40 kboe/d, "Moho Nord" 100 kboe/d).
- Production on Libondo (65%, operator), which is part of the Kombi-Likalala-Libondo operating license, started up in March 2011. Plateau production reached 12 kboe/d in 2011. A substantial portion of the equipment was sourced locally in Pointe-Noire through the redevelopment of a construction site that had been idle for several years.

In the **Democratic Republic of the Congo**, following the Presidential decree approving TOTAL's entry in 2011 as operator with a 60% interest in Block III of the Graben Albertine, the exploration permit was issued in January 2012 by the Minister of Hydrocarbons for a period of three years and subsequently extended by an additional year due to the postponement of the works resulting from the general

security situation in the eastern part of the country. This block is located in the Lake Albert region. TOTAL acquired an additional 6.66% of this block in March 2012. The prospecting program is limited to the northern portion of the license, which is outside the Virunga park. A helicopter acquisition of gravimetric and magnetic data was completed in August 2012.

In the **Republic of South Sudan,** TOTAL holds an interest in Block B and is working with state authorities to resume exploration activities on this zone. Since the independence of the Republic of South Sudan on July 9, 2011, TOTAL is no longer present in Sudan.

2.1.7.2. North America

In 2012, TOTAL's production in North America was 69 kboe/d, representing 3% of the Group's overall production, compared to 67 kboe/d in 2011 and 65 kboe/d in 2010.

In **Canada**, TOTAL signed in March 2011 a partnership with Suncor related to the Fort Hills and Joslyn mining projects and the Voyageur upgrader. This partnership allows TOTAL to reorganize around two major hubs the different oil sands assets that it has acquired over the last few years: on the one hand, a Steam Assisted Gravity Drainage (SAGD) hub focused on Surmont's (50%) ongoing development and, on the other hand, a mining and upgrading hub, which includes the TOTAL-operated Joslyn (38.25%) and Suncor-operated Fort Hills (39.2%) mining projects and the Suncor-operated Voyageur upgrader (49%) project. The Group also has a 50% stake in the Northern Lights mining project (operator) and 100% of a number of oil sands leases acquired through several auction sales. The Group's production was 12 kboe/d in 2012, compared to 11 kboe/d in 2011 and 10 kboe/d in 2010.

– On the Surmont lease, gross commercial production in SAGD mode of the first development phase in 2012 was around 25 kboe/d of bitumen from forty well pairs. The operator plans to drill additional wells in 2013 and to continue to convert the activation method on the existing wells from gas lift to electric submersible pump (ESP) in order to improve production. In addition, a project to debottleneck the steam has been initiated which will allow to increase the production of Phase 1.

  In early 2010, the partners of the project decided to launch the construction of the second development phase. The goal of production start-up from Surmont Phase 2 has been set for 2015 and overall production capacity from the field is expected to increase to 130 kboe/d. In April 2011, the authorities issued a license permitting production (phases 1 and 2) of up to 136 kboe/d.

– The Joslyn license is expected to be exploited using mining techniques. After the public hearings in 2010 and the 2011 provincial and federal Canadian authorities approval for a project of 100 kboe/d, the engineering studies including a review of the design to optimize the production of the Joslyn North Mine project are underway. On-site preliminary works were launched (surface waters drainage and civil engineering).

– TOTAL closed in September 2010 the acquisition of UTS and its main asset: a 20% stake in the Fort Hills lease. In 2011, as part of their partnership, TOTAL acquired from Suncor an additional 19.2% stake in the lease, thereby increasing its stake to 39.2%. The pre-project studies and site preparation work are underway. The Fort Hills mining project has already been approved by the authorities for a first development phase with a capacity of 180 kboe/d. After the completion of the pre-project studies in June 2012, the basic engineering studies are now in progress, with a final decision on investment expected for 2013. Some contracts for detailed engineering works have already been awarded.

– TOTAL also acquired in December 2010 a 49% interest in the Voyageur upgrader project, which is operated by Suncor, located in the Canadian province of Alberta and intended to upgrade bitumen from the Fort Hills and Joslyn mines. In 2012, the estimate of this project's cost and the evolution of North American oil markets modified its strategic and economic perspectives. As a consequence, the partners, TOTAL and Suncor, launched a joint strategic review of the development plan for the Voyageur upgrader. This detailed review included, notably, the optimization of the development plan, production evacuation logistics studies and implications of possible evolutions of the project. Pending the finalization of this review, development spending on the project was minimized during this period and until a joint decision on the future development of this project by both partners, TOTAL and Suncor.

  On March 27, 2013, TOTAL entered into an agreement for the sale to Suncor Energy Inc. of its 49% interest in the Voyageur upgrader project. The mining developments of Fort Hills and Joslyn are not affected by this transaction and continue according to the production evacuation logistics studies jointly conducted with Suncor (see Chapter 7, point 6.).

– The Group also holds a 50% stake in the Northern Lights project, which is expected to be developed through mining techniques.

In the **United States**, the Group's production was 57 kboe/d in 2012, compared to 56 kboe/d in 2011 and 55 kboe/d in 2010.

– In the Gulf of Mexico:
  - The deep-offshore Tahiti oil field (17%) reached peak production of 135 kboe/d in 2009. Phase 2, which was launched in September 2010, comprises drilling four injection wells and two producing wells. The injection of water, which attempts to limit the decline of the wells, started in February 2012. The second producing well is currently being drilled.
  - The Chinook 4 well in the deep offshore Chinook project (33.33%) started production in the third quarter of 2012. More drilling operations are planned, including one well underway (Chinook 5).
  - The TOTAL (40%) - Cobalt (60%, operator) alliance's exploratory drilling campaign was launched in 2009 and the drilling of the first three wells produced disappointing results. This campaign was interrupted due to the U.S. government's moratorium on deep offshore drilling operations in 2010 and resumed in 2012 with the drilling of the Ligurian 2 and North Platte wells. A significant discovery of oil was made in the latter in December 2012. Appraisal works are planned.
  - In 2010, the Group disposed of its equity stakes in the Matterhorn and Virgo operated fields.

– Following the signature of an agreement in late 2009, a joint venture was set up with Chesapeake to produce shale gas in the Barnett Shale Basin in Texas. Under this joint venture, TOTAL owns 25% of Chesapeake's portfolio in the area. In 2011, approximately 300 additional wells were drilled, enabling gas production to reach 1.4 Bcf/d at the end of 2011. Following the drop in gas prices in the United States, drilling activity was sharply reduced in 2012, with around 100 wells being drilled. The hook-up of certain wells drilled in 2011 helped to maintain production in 2012.

  At the end of 2011, TOTAL signed an agreement with Chesapeake and EnerVest to enter into a joint venture. Pursuant to the agreement, TOTAL acquired a 25% share in Chesapeake's and EnerVest's liquid-rich area of the Utica shale play in Ohio. More than 100 wells were drilled in 2012 and forty-seven were connected and started producing.

  Engineers from TOTAL are assigned to the teams led by Chesapeake.

- The Group holds a 50% stake in American Shale Oil LLC (AMSO) to develop in situ shale oil technology. The pilot to develop this technology is underway in Colorado.
- In March 2012, TOTAL entered a 50/50 joint venture with Red Leaf Resources for the ex-situ development of oil shale and agreed to fund a production pilot before any larger-scale development.
- In October 2012, TOTAL finalized an agreement to buy about 30,000 additional acres in Colorado and Utah, with a view to developing in situ shale oil techniques (AMSO technique) or ex-situ techniques (Red Leaf technique).

In **Mexico**, TOTAL is conducting various studies with state-owned PEMEX under a general technical cooperation agreement renewed in July 2011 for a period of five years.

2.1.7.3. South America

In 2012, TOTAL's production in South America was 182 kboe/d, representing 8% of the Group's overall production, compared to 188 kboe/d in 2011 and 179 kboe/d in 2010.

In **Argentina**, where TOTAL has been present since 1978, the Group operated 30%[1] of the country's gas production in 2012. The Group's production was 83 kboe/d in 2012, compared to 86 kboe/d in 2011 and 83 kboe/d in 2010.

- In Tierra del Fuego, the Group notably operates the Carina and Aries offshore fields (37.5%). Further to the re-appraisal of the reserves of the Carina field, two additional wells are expected to be drilled from the existing platform. These wells should allow production levels from the facilities operated by the Group in Tierra del Fuego to be maintained at about 615 Mcf/d until the Vega Pleyade field (37.5%, operator) starts up in 2015.
- In the Neuquén basin, TOTAL started a drilling campaign in 2011 on its mining licenses in order to assess their shale gas and oil potential. In 2012, this campaign, which started on the Aguada Pichana license (27.3%, operator), was extended to all the blocks operated by the Group: San Roque (24.7%, operator), Rincón la Ceniza and La Escalonada (85%, operator), Aguada de Castro (42.5%, operator), and Pampa de las Yeguas II (42.5%, operator), as well as to the blocks operated by third parties: Cerro Las Minas (40%), Cerro Partido (45%), Rincón de Aranda (45%) and Veta Escondida (45%). The first results of the production tests on the wells drilled during this campaign are positive and analyses are underway. The conventional production continues on the Group's assets in this basin.

In **Bolivia**, the Group's production, primarily gas, amounted to 27 kboe/d in 2012, compared to 25 kboe/d in 2011 and 20 kboe/d in 2010. TOTAL has stakes in six licenses: three producing licenses, San Alberto and San Antonio (15%) and Block XX Tarija Oeste (41%), and three licenses in the exploration or appraisal phase, Aquio and Ipati (80%, operator) and Rio Hondo (50%).

- Production started up in February 2011 on the gas and condensates Itaú field located on Block XX Tarija Oeste; it is routed to the existing facilities of the neighboring San Alberto field. In early 2011, TOTAL decreased its stake to 41% in Block XX Tarija Oeste after divesting 34% and is no longer the operator. The development of phase 2, which was approved by the local authorities in 2011, continued in 2012 and is expected to increase the field's production by 1.5 Mm^3/d to 4.5 Mm^3/d over the course of 2013.
- In 2004, TOTAL discovered the Incahuasi gas field on the Ipati Block. In 2011, an appraisal well confirmed the extension of the discovery northwards onto the adjacent Aquio Block. TOTAL consequently filed a declaration of commerciality for the Aquio and Ipati Blocks, which was approved by the local authorities in 2011. Additional appraisal work is underway, notably with the drilling of a second well on the Ipati Block, which started in January 2012 with encouraging results. In December 2012, TOTAL submitted to the Bolivian authorities a Phase 1 development plan, including two wells tied to a central processing plant of 6.5 Mm^3/d for which calls for tenders have been launched. A third appraisal well should be drilled in 2013 which will be tied back to the Phase 1 project in case of success.

In **Brazil**, TOTAL has equity stakes in three exploration blocks: Blocks BC-2 (41.2%) and BM-C-14 (50%) in the Campos basin, and Block BM-S-54 (20%) in the Santos basin.

- The Xerelete field is mainly located on Block BC-2, with an extension on Block BM-C-14. In 2012 TOTAL became the operator of the field. Following seismic reprocessing, a pre-salt prospect was found under the Xerelete discovery made in 2001 at a water depth of 2,400 m. Further to approval by the authorities, TOTAL expects to resume drilling activity on the block at the end of 2013.
- On Block BM-S-54, a first well was drilled in the pre-salt at the end of 2010 on the Gato do Mato structure, and a significant oil column was found. Between October 2011 and July 2012, an exploration/delineation campaign was conducted on the block, enabling a second structure (Epitonium) identified on Block BM-S-54 to be drilled, the productivity of the well drilled in 2010 to be tested and an appraisal well to be drilled in the northern part of the Gato do Mato structure. The encouraging results achieved on Gato do Mato are currently being analyzed in order to define the next steps in the appraisal of the field.

In **Colombia**, where TOTAL has had operations since 1973, the Group's production was 6 kboe/d in 2012, compared to 11 kboe/d in 2011 and 18 kboe/d in 2010. The drop in production in 2011 was due in particular to TOTAL's disposal of its interest in CEPSA, which was finalized in July 2011. The drop in production in 2012 was due to the sale in October 2012 of the Group's 100% owned subsidiary, TEPMA BV, which held an interest in the Cusiana field. This operation also involved the disposal of stakes in the OAM and ODC pipelines.

In 2011, TOTAL sold 10% of its stake in the Ocensa oil pipeline, thereby reducing its holding to 5.2%.

Following the discovery of Huron-1 in 2009 on the Niscota (50%) exploration license and a 3D seismic survey of this discovery in 2010, the first appraisal well, Huron-2, also found hydrocarbons and should be tested during the second quarter of 2013. The drilling of a second appraisal well, Huron-3, is in progress. The conceptual development studies have started for a declaration of commerciality in late 2013.

In **French Guiana**, TOTAL owns a 25% stake in the Guyane Maritime license. The license, located about 150 km off the coast, covers an area of approximately 24,100 km^2 in water depths ranging

(1) Source: Argentinean Ministry of Federal Planning, Public Investment and Services – Energy Secretary.

from 200 m to 3,000 m. At the end of 2011, the authorities extended the research permit until May 31, 2016.

After a 2,500 km² 3D seismic survey of the eastern portion of the block in 2009 and 2010, drilling started in 2011 of the GM-ES-1 well, about 170 km northeast of Cayenne on the Zaedyus prospect, at a water depth of more than 2,000 m. This well revealed two hydrocarbon columns in the gravelly reservoirs.

Two 3D seismic survey campaigns covering a total surface area of more than 5,000 km² were conducted in the center and extreme eastern portions of the block in 2012. The results of the GM-ES-2 appraisal well are disappointing, but they do not call the potential of the license into question. Drilling started on the GM-ES-3 exploration well at the end of 2012, and could be followed by two more exploration wells in 2013 and 2014.

In **Trinidad and Tobago**, where TOTAL has had operations since 1996, the Group's production was 16 kboe/d in 2012, compared to 12 kboe/d in 2011 and 3 kboe/d in 2010. TOTAL holds a 30% stake in the offshore Angostura field located on Block 2C and an 8.5% stake in the adjacent exploration Block 3A. Production started up in May 2011 on Phase 2, which corresponds to the gas development phase. The process to sell the companies owning these two assets was engaged in April 2012, with a sale anticipated in the first half of 2013.

In **Uruguay,** TOTAL acquired Block 14, located about 250 km offshore, in an auction sale in March 2012. The license covers an area of approximately 6,700 km² in water depths ranging from 2,000 m to 3,500 m. Under the terms of the contract to share production, signed in October 2012, TOTAL agreed to conduct a 3D seismic survey of the entire block, which started in November 2012, and to drill one well in the first three-year exploration phase.

In **Venezuela**, where TOTAL has had operations since 1980, the Group's production was 50 kboe/d in 2012, compared to 54 kboe/d in 2011 and 55 kboe/d in 2010. TOTAL has equity stakes in PetroCedeño (30.3%), which produces and upgrades extra heavy oil in the Orinoco Belt, in Yucal Placer (69.5%), which produces gas dedicated to the domestic market, and in the offshore exploration Block 4, located in Plataforma Deltana (49%). The development phase of the southern zone of the PetroCedeño field started in the second half of 2011. Pursuant to an amendment to the gas sale contract, a new development phase of the Yucal Placer field, which will boost the production capacity from 100 Mcf/d to 300 Mcf/d, started in June 2012.

2.1.7.4. Asia-Pacific

In 2012, TOTAL's production in Asia-Pacific was 221 kboe/d, representing 10% of the Group's overall production, compared to 231 kboe/d in 2011 and 248 kboe/d in 2010.

In **Australia**, where TOTAL has held leasehold rights since 2005, the Group owns 30% of the Ichthys project, 27.5% of the Gladstone LNG project and seven offshore exploration licenses, including three that it operates, off the northwest coast in the Browse and Bonaparte basins. The Group's production was 5 kboe/d in 2012, compared to 4 kboe/d in 2011 and 1 kboe/d in 2010.

- At the start of 2013, TOTAL acquired an additional 6% in the Ichthys project, increasing its stake to 30%. This project, launched in early 2012, is aimed at the development of the Ichthys gas and condensates field, located in the Browse basin. This development includes a floating platform designed for gas production, treatment and export, an FPSO (with a maximum capacity of 100 kb/d of condensates) to stabilize and export condensates, an 889 km gas pipeline and an onshore liquefaction plant (capacities of 8.4 Mt/y of LNG and 1.6 Mt/y of NGL) located in Darwin. The LNG has already been sold under long-term contracts mainly to Asian buyers. Production start-up is expected at year-end 2016.
- In late 2010, TOTAL acquired a 20% stake in the GLNG project, followed by an additional 7.5% stake in March 2011. This integrated gas production, transport and liquefaction project is based on the development of coal gas from the Fairview, Roma, Scotia and Arcadia fields. The final investment decision was made in early 2011 and start-up is expected in 2015. LNG production is expected to eventually reach 7.2 Mt/y. The upstream development of the project and the construction of the pipeline are underway.
- Two wells were drilled in 2011 on the WA-403 license (60%, operator). As one well demonstrated the presence of hydrocarbons, additional appraisal work will take place on this Block (3D seismic) in the coming years.
- At the end of 2012, TOTAL reduced its exposure on the WA-408 license (50%, operator) by disposing of 50% of its stake to partners. Three new exploration wells are planned, the first of which started in December 2012.

In 2012, TOTAL signed an agreement to enter four shale gas exploration licenses in the South Georgina basin in the center of the country. Under the terms of the agreement, TOTAL can increase its stake to 68% and become the operator in the event of development, which remains subject to approval by the authorities.

In **Brunei**, where TOTAL has been present since 1986, the Group operates the offshore Maharaja Lela Jamalulalam gas and condensates field located on Block B (37.5%). The Group's production was 12 kboe/d in 2012, compared to 13 kboe/d in 2011 and 14 kboe/d in 2010. The gas is delivered to the Brunei LNG liquefaction plant.

On Block B, the drilling campaign that started in 2009 continued until 2011. Two of the wells were connected to production facilities in 2010 and 2011. The other wells, which were exploratory, revealed new reserves in the southern portion of the field. A ten-year extension of the mining rights period was granted in December 2011 by the Brunei government, which has allowed a project to be launched to develop new reserves which will bring additional gas production, with deliveries to the Brunei LNG liquefaction plant starting in 2015.

On deep-offshore exploration Block CA1 (54%, operator), formerly Block J, exploration operations that were suspended in May 2003 due to a border dispute between Brunei and Malaysia resumed in September 2010. A new seismic survey started before the summer of 2011 and an initial campaign of three drilling operations started in October 2011. This campaign, which continued until October 2012, was disappointing, despite the identification of some layers containing hydrocarbons. Surveys to re-appraise the block's potential are underway and should result in a new exploration strategy.

In **China**, the Group has had operations since 2006 on the South Sulige Block, located in the Ordos basin in the Inner Mongolia province. Following appraisal work by TOTAL, China National Petroleum Corporation (CNPC) and TOTAL agreed to a development plan pursuant to which CNPC is the operator and TOTAL has a 49% stake.

The authorities gave the operator permission to undertake preliminary development work in the spring of 2011.

The first development wells have been drilled and the facilities are presently in the test phase.

TOTAL is discussing with Sinopec a joint study agreement on the potential of the shale gas in a zone of around 4,000 km^2 near Nanjing, on which Sinopec plans to conduct seismic and drilling operations. An agreement could be negotiated with the authorities to exploit these unconventional resources at a later stage.

In **Indonesia**, where TOTAL has had operations since 1968, the Group's production was 132 kboe/d in 2012, compared to 158 kboe/d in 2011 and 178 kboe/d in 2010.

TOTAL's operations in Indonesia are primarily concentrated on the Mahakam permit (50%, operator), which covers in particular the Peciko and Tunu gas fields. TOTAL also has a stake in the Sisi-Nubi gas 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 of the Bontang plant is 22 Mt/y.

In 2012, gas production operated by TOTAL decreased to 1,871 Mcf/d from 2,227 Mcf/d in 2011 due to the maturity of most of the fields on the Mahakam field, which is now in decline. The gas operated and delivered by TOTAL accounted for nearly 79% of Bontang LNG's supply. Operated condensates and oil production from the Handil and Bekapai fields are added to this gas production.

- On the Mahakam permit:
  - On the Tunu field in 2012, additional wells were drilled in the main reservoir and development wells targeted shallow gas reservoirs.
  - On the Peciko field, Phase 7 drilling, which started in 2009, is continuing.
  - On South Mahakam, which contains the Stupa, West Stupa and East Mandu condensate gas fields, production started at the end of October 2012. Other development wells are being drilled.
  - On the Sisi-Nubi field, which began production in 2007, drilling operations continue within the framework of a second phase of development. The gas from Sisi-Nubi is produced through Tunu's processing facilities.
- On the Sebuku license (15%), the development of the Ruby gas field started in February 2011. Production start-up is scheduled for the end of 2013, with an estimated capacity of 100 Mcf/d.
- On the Sageri exploration Block (50%), the first exploration well (Lempuk-1X), completed in early 2012, produced negative results.
- In October 2012, TOTAL acquired a 100% stake in the exploration Block Bengkulu I – Mentawai in the offshore Bengkulu basin, southwest of Sumatra.
- In October 2012, the Group also acquired a 100% stake in the exploration Block Telen, in the offshore Kutai basin in the East Kalimantan province.
- In May 2011, TOTAL acquired a 100% stake in the onshore and offshore exploration Block South West Bird's Head, located in the Salawati basin in the province of West Papua. The preparatory work on the Anggrek Hitam 1 exploration well started at the end of 2012 and drilling start up is planned for April 2013.
- In December 2011, the Group signed an agreement for a 18.4% stake in a coal bed methane (CBM) block on Kutai II in East Kalimantan province. This supplements the 50% stake acquired in March 2011 on the similar Kutai Timur Block. The first wells and core drilling operations are planned for 2013.
- Finally, TOTAL conducted surveys of several other exploration blocks in which it holds an interest: Amborip VI (24.5%), Arafura Sea (24.5%), Sadang (30%), South East Mahakam (50%, operator), South Mandar (33%) and South Sageri (45%).

In **Malaysia**, TOTAL signed a production sharing agreement in 2008 for the offshore exploration Blocks PM303 and PM324. TOTAL withdrew from the PM303 offshore exploration Block in early 2011 following seismic surveys. Exploration operations continued on Block PM 324 (50%, operator) and the first high-pressure/high-temperature drilling started in October 2011. The drilling continued under difficult technical conditions until September 2012. In geological terms, the results were disappointing. Surveys are underway to continue the appraisal of the block's potential.

TOTAL also signed in November 2010 a new production sharing agreement for the deep offshore exploration Block SK 317 B (85%, operator) located off the state of Sarawak. The interpretation of the 3D seismic data is underway and could result in the drilling of an exploration well in 2013.

In **Myanmar**, the Group's production was 16 kboe/d in 2012, compared to 15 kboe/d in 2011 and 14 kboe/d in 2010. TOTAL is the operator of the Yadana field (31.2%), which is located on offshore Blocks M5 and M6. This field produces gas that is delivered mainly to PTT (the Thai state-owned company) for use in Thai power plants as well as the domestic market via two pipelines that were built and are operated by MOGE, a state-owned company.

In September 2012, TOTAL entered into an agreement to take a 40% share of a production sharing agreement on the M-11 offshore Block in the Martaban basin. The acquisition was approved by the authorities at the start of 2013. The drilling of an exploration well is planned for 2013.

In **Papua New Guinea**, TOTAL acquired in October 2012, subject to the authorities' approval, a 40% stake, in the PPL234 and PPL244 offshore permits, 50% in the PRL10 offshore permit and an option for 35% of the PPL338 and PPL339 onshore permits. The program includes the drilling of two exploration wells in 2013.

In the **Philippines**, TOTAL has held a 75% stake in the SC56 license in the southern Sulu Sea since September 2012. The program of operations includes the refurbishment of the oldest seismic lines and a new seismic campaign wich was realized at the beginning of year 2013.

In **Thailand**, the Group's production, which was 55 kboe/d in 2012, compared to 41 kboe/d in 2011 and 2010, comes from the Bongkot (33.33%) offshore gas and condensates field. PTT purchases all of the natural gas and condensates production from this field.

- In the northern portion of the Bongkot field, new investments are in progress to allow gas demand to be met and plateau production to be maintained:
  - phase 3J (two well platforms) was launched in late 2010 and started up as scheduled in 2012;
  - phase 3K (two well platforms) was approved in September 2011 with start-up scheduled for 2013;
  - phase 3L (two well platforms) was approved in September 2012 with start-up scheduled for 2015; and
  - the second low-pressure compressor installation phase to increase gas production was completed in the first quarter of 2012.
- The southern portion of the field (Greater 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. Production of the first phase (phase 4A), with a capacity of 350 Mcf/d, started in June 2012.

In **Vietnam**, TOTAL holds a 35% stake in the production sharing contract for the offshore 15-1/05 exploration Block following an agreement signed in 2007 with PetroVietnam. TOTAL has put its share up for sale.

In 2009, TOTAL and PetroVietnam signed a production sharing agreement for the onshore Blocks DBSCL-02 and DBSCL-03 (75%, operator). Based on the seismic information obtained in 2009 and 2010, the partners have decided not to continue the exploration work and the license was returned to the authorities when it expired in April 2012.

2.1.7.5. Commonwealth of Independent States (CIS)

In 2012, TOTAL's production in the CIS was 195 kboe/d, representing 8% of the Group's overall production, compared to 119 kboe/d in 2011 and 23 kboe/d in 2010.

In **Azerbaijan**, where TOTAL has had operations since 1996, on the field of Shah Deniz (10%), production was 16 kboe/d in 2012 and continues to progress regularly from one year to the next since 2010. TOTAL also holds a 10% stake of the South Caucasus Pipeline (SCP) gas pipeline that transports the gas produced in Shah Deniz to the Turkish and Georgian markets. TOTAL also holds a 5% stake of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline, which connects Baku and the Mediterranean Sea and evacuates among others the condensates of Shah Deniz's gas.

Gas deliveries to Turkey and Georgia continued throughout 2012, at a lower pace for Turkey due to weaker demand than expected. Conversely, state-owned SOCAR continued to take greater quantities of gas than provided for by the agreement.

Development studies and business negotiations for the sale of additional gas needed to launch a second development phase in Shah Deniz field continued in 2012. In October 2011, SOCAR and Botas, a Turkish state-owned company, signed an agreement on the sale of additional gas volumes and the transfer conditions for volumes intended for the European market. The front end engineering and design (FEED) for the second phase were officially launched at the end of the first quarter of 2012. Negotiations and investigations into the means of transporting the gas from Shah Deniz to Europe are continuing at the same time. The goal is to reach a final decision on the investment in 2013 concerning the second development phase.

In 2009, TOTAL and SOCAR signed an exploration, development and production sharing agreement for a license located on the Absheron Block in the Caspian Sea. TOTAL (40%) is the operator during the exploration phase and a joint operating company will manage operations during the development and production phase. In September 2011, the first exploration well revealed a significant accumulation of gas that was tested in the first quarter of 2012. A discovery and commerciality declaration was filed in June 2012. Operations on the well continued with the drilling of a sidetrack to the north of the structure, which was completed in September 2012 with positive results. The field's development plan is under preparation and will be submitted to SOCAR for approval in the coming years, as required by the production sharing contract.

In **Kazakhstan**, TOTAL has owned since 1992 a 16.81% stake in the North Caspian license, which covers the Kashagan field in particular.

The Kashagan project is expected to develop the field in several phases. The development plan for the first phase (300 kb/d) was approved in February 2004 by the Kazakh authorities, permitting work to begin on the field. The consortium plans a start-up of production in 2013.

In May 2012, the members of the North Caspian Sea Production Sharing Agreement (NCSPSA) consortium and the Kazakh authorities signed agreements to settle a number of issues regarding the contractual conditions of the first phase.

In November 2012, TOTAL acquired a 75% share in the North and South Nurmunai onshore exploration blocks. These two blocks cover 14,500 km^2 and are located in the southwest of the country.

In **Russia**, where TOTAL has had operations through its subsidiary since 1991, the Group's production, which was 179 kboe/d in 2012 compared to 105 kboe/d in 2011 and 10 kboe/d in 2010, comes from the Kharyaga field (40%, operator) and TOTAL's stake in Novatek (15.34%).

- In March 2012, the partners in the first development phase of the Shtokman project through Shtokman Development AG (TOTAL, 25%) decided to assess the feasibility of a project focusing exclusively on the production of Liquefied Natural Gas (LNG). An analysis of the Shtokman project revealed that the technical solutions initially chosen to produce 23.7 Gm^3/y of gas, half of which to be exported to Europe by pipeline and the other half to be shipped as LNG, involved capital outlay and operational costs that were too high to achieve acceptable profitability. The 2007 agreement between TOTAL and Gazprom expired on July 1, 2012, but technical discussions are ongoing between the two companies in order to agree on an economically viable development.
- TOTAL and the Russian company Novatek, listed in Moscow and London, signed a strategic partnership agreement pursuant to which TOTAL acquired a 12.09% stake in Novatek in April 2011, with the intention of both parties for TOTAL to increase its participation to 19.40% within three years. In December 2011, TOTAL increased its stake in Novatek by 2% to 14.09%. Since April 2012, TOTAL has increased its stake in Novatek to reach 15.34% at year-end 2012.

  TOTAL and its partner Novatek made the final investment decision to develop the Termokarstovoye field (capacity 65 kboe/d) at the end of 2011. This onshore deposit of gas and condensates is located in the Yamalo-Nenets district. The development and production license for the Termokarstovoye field is owned by ZAO Terneftegas, a joint venture between Novatek (51%) and TOTAL (49%).
- In October 2011, TOTAL (20%) and Novatek signed the final agreements for the joint development of the Yamal LNG project. The Yamal LNG project covers the development of the South Tambey gas and condensates field, located on the Yamal Peninsula in the Arctic. The FEED studies were completed at the end of 2012, certain calls for tender have been issued and the final investment decision could be made in 2013.
- On the Kharyaga field, work related to the development plan of phase 3 is ongoing. This development plan is intended to maintain plateau production above the 30 kboe/d level reached in late 2009. TOTAL sold 10% of the field to state-owned Zarubezhneft in January 2010, thereby decreasing its interest to 40%.
- In 2009, TOTAL signed an agreement setting forth the principles of a partnership with KazMunaiGas (KMG) for the development of the Khvalynskoye gas and condensates field, located offshore in the Caspian Sea on the border between Kazakhstan and Russia, under Russian jurisdiction. Pursuant to this agreement,

TOTAL is planning to acquire a 17% share from KMG. This transaction will be subject to approval by the authorities.

In **Tajikistan**, TOTAL signed an agreement in December 2012 with a view to acquiring a 33.3% stake in the Bocktar PSC. This transaction is subject to approval by the authorities.

2.1.7.6. Europe

In 2012, TOTAL's production in Europe was 427 kboe/d, representing 19% of the Group's overall production, compared to 512 kboe/d in 2011 and 580 kboe/d in 2010.

In **Bulgaria**, the Khan Asparuh license (100%, operator), which covers 14,220 km² in the Black Sea, was awarded to TOTAL in July 2012 and a concession agreement was signed in August 2012. TOTAL has agreed to collect the seismic data and to drill two wells during the five-year term of the contract. An agreement to divest 30% stakes to OMV and Repsol was concluded in November 2012. Under the terms of this agreement, OMV will be the operator in the seismic phase and will then hand over the operatorship to TOTAL.

In **Cyprus**, TOTAL is present on two deep offshore exploration licenses for Blocks 10 and 11, which were obtained in the second offshore exploration round launched by the Cypriot government in 2012.

TOTAL signed two production-sharing contracts at the beginning of 2013 for these blocks which extend over 2,572 km² and 2,958 km², respectively, and are located in the southwest of Cyprus, in water depths ranging from 1,000 m to 2,500 m. The exploration of these blocks will begin with seismic surveys.

In **Denmark**, TOTAL has owned since 2010 an 80% stake in and the operatorship for licenses 1/10 (Nordjylland) and 2/10 (Nordsjaelland, formerly Frederoskilde). These onshore licenses, the shale gas potential of which has yet to be assessed, cover areas of 3,000 km² and 2,300 km², respectively. Following geoscience surveys on license 1/10 in 2011, the decision was made to drill a well. Initially planned for 2013, this well is expected to be delayed due to additional environmental studies requested by the local authorities. Geoscience surveys are ongoing on license 2/10.

In **France**, the Group's production was 13 kboe/d in 2012, compared to 18 kboe/d in 2011 and 21 kboe/d in 2010. TOTAL's major assets are the Lacq (100%) and Meillon (100%) gas fields, located in the southwest part 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. Most of the objectives of the experiment having been reached, the injection of carbon dioxide, came to an end in the first quarter 2013. For additional information, see Chapter 12.

Agreements were signed in December 2011 for the sale of the Itteville, Vert-le-Grand, Vert-le-Petit, La Croix Blanche, Dommartin Lettrée and Vic-Bilh assets. The operation of these concessions and the production rights were transferred in January 2012. Agreements for the sale of the Lacq, Lagrave and Pécorade assets were also signed in February 2012. These agreements remain subjet to approval by the authorities, expected in 2013.

The Montélimar exclusive exploration license, awarded to TOTAL in 2010 to assess, in particular, the shale gas potential of the area, was revoked by the government in October 2011. This revocation stemmed from the law of July 13, 2011, prohibiting the exploration and extraction of hydrocarbons by drilling followed by hydraulic fracturing. The Group had submitted the required report to the government, in which it undertook not to use hydraulic fracturing in light of the current prohibition. An appeal has therefore been filed in December 2011 with the administrative court requesting that the judge cancel the revocation of the license.

In **Italy,** the Tempa Rossa field (75%, operator), discovered in 1989 and located on the unitized Gorgoglione concession (Basilicate region), is one of the Group principal exploration and production assets in the country. In March 2013, TOTAL has finalized an agreement to sell a 25% interest in the Tempa Rossa fields. The transfer of interests will take effect after the Italian authorities have approved the transactions.

In 2011, Total Italia acquired an additional 25% stake in the Tempa Rossa field, thereby increasing its share to 75%, as well as an interest in two exploration licenses. Although preparation work started in early August 2008, the proceedings initiated by the Prosecutor of the Potenza Court against Total Italia led to a freeze in the preparation work (for additional information, see paragraph 5., Chapter 7, Legal and arbitration proceedings). New calls for tenders were launched related to certain contracts that had been cancelled.

Drilling of the Gorgoglione 2 appraisal well that started in June 2010 reached its final depth and was tested in 2012, confirming the results of the previous wells. The final investment decision was made in July 2012, following the approval of the state and regional authorities. The extension plan for the Tarente refinery export system, needed for the development of the Tempa Rossa field, was approved at the end of 2011. Start-up of production is expected in 2016 with a capacity of 55 kboe/d.

In **Norway**, where the Group has had operations since the mid-1960s, TOTAL has equity stakes in ninety-one production licenses on the Norwegian continental shelf, twenty-three of which it operates. In 2012, the Group's production was 275 kboe/d, compared to 287 kboe/d in 2011 and 310 kboe/d in 2010. 90 kboe/d is from the Greater Ekofisk Area located in the southern sector of the North Sea, 106 kboe/d comes from the central and northern portions of the North Sea and 79 kboe/d comes from the Haltenbanken region and the Barents Sea.

– In the Norwegian North Sea, where a numerous of development projects have just been launched, the most substantial contribution to the Group's production, for the most part non-operated, comes from the Greater Ekofisk Area (*e.g.*, Ekofisk, Eldfisk, Embla).
  - Several projects are underway on the Greater Ekofisk Area, located in the south. The Group owns a 39.9% stake in the Ekofisk and Eldfisk fields. The Ekofisk South and Eldfisk 2 projects, each with a capacity of 70 kboe/d, were launched in June 2011 following approval of the development and operation plans by the authorities. The production is scheduled to start in 2014 for Ekofisk South and in 2015 for Eldfisk 2. The project relating to the construction and installation of the new Ekofisk accommodation and field services center platform is now in its third year.
  - On the Greater Hild Area, located in the north and in which the Group has a 51% stake (operator), the Martin Linge development scheme (capacity of 80 kboe/d, formerly known as Hild) was selected at the end of 2010 and approved by the authorities in 2012, with production start-up scheduled for 2016.

- The Islay field, operated by the Group and fully owned by TOTAL, was put into production in April 2012. The Islay field extends on each side of the Norwegian/Great Britain border and the Group's interest in the Norwegian part is 5.51%.
- A number of successful exploration and appraisal activities were carried out in the North Sea in the 2010-2012 period. These activities have led to the launch of several development projects, some of them are already finalized, others are underway or are expected to be approved soon by the authorities:
  . In the central section of the North Sea, on license PL102C (40%, operator), a fast-track development project had been launched for the Atla field (formerly known as David), which was discovered in 2010. Gas production started in October 2012, less than two years after the discovery of the field.
  . Gas production on the Beta West field (10%), a satellite of Sleipner, located in the central section of the North Sea, started in April 2011.
  . In the Visund area of the Nordic North Sea on license PL120 (7.7%), the Visund South fast-track development project for the Pan/Pandora discoveries was completed in the fourth quarter of 2012. Production started up in November 2012. Visund North, a second fast-track development project, was launched at the end of 2011 to redevelop the northern portion of the Visund field and provide development infrastructure for the nearby exploration prospects and discoveries (Titan) inside the license. Production is scheduled to start at the end of 2013. The authorities approved the extension of the PL20 license (Visund) until the end of 2034.
  . The Stjerne project was launched in 2011 to develop the Katla structure discovered in 2009, located on license PL104 (14.7%) south of Oseberg in the Nordic North Sea. Start-up of production is expected in 2013.
  . The fast-track development project of the Vigdis North East structure (PL089, sold as part of the 2012 transaction with ExxonMobil described below), which was discovered in 2009 and is located south of Snorre, was launched in 2011.
  . A positive appraisal well was drilled in 2010 on the southern slope of the Dagny structure (38%) north of Sleipner. The development project was sanctioned at the end of 2012 and the plan of development and operation (PDO) submitted to the authorities, with an approval expected for mid-2013. Production is scheduled to start in 2017.

– In the Norwegian Sea, the Haltenbanken area includes the Tyrihans (23.2%), Linnorm (20%), Mikkel (7.7%) and Kristin (6%) fields as well as the Åsgard (7.7%) field and its satellites Yttergryta (24.5%) and Morvin (6%). Morvin started up in August 2010 as planned, with two producing wells.

  The Åsgard sub-sea compression project, which will increase hydrocarbon recovery on the Åsgard and Mikkel fields, was approved by the Norwegian authorities in 2012. All the main contracts have been awarded.

  On the Linnorm gas field, the Onyx South exploration well is expected to be drilled in 2013. Gas from Linnorm will be exported from the Nyhamna onshore terminal through a new pipeline (Polarled project).

  The Polarled project (5.11%) was sanctioned in December 2012 and the development plan was submitted to the Norwegian authorities in January 2013. The project consists in the installation of a 481 km long pipeline from the Aasta Hansen field to the Nyhamna terminal and in the expansion of the terminal.

– In the Barents Sea, LNG production on Snøhvit (18.4%) started in 2007. This project included the development of the Snøhvit, Albatross and Askeladd natural gas fields, and the construction of the associated liquefaction facilities (capacity of 4.2 Mt/y). A project has been launched in 2012 with the objective of improving the performances of the plant.

– Several exploration wells were successfully drilled over the 2011-2012 period:

  - In October 2012, TOTAL drilled a positive exploration well on the Garantiana structure (40%, operator) on license PL554 in the Nordic North Sea. The drilling of additional exploration and appraisal wells in the license is currently under study.
  - In July 2012, TOTAL announced a major gas and condensate discovery on the King Lear prospect in licenses 146 and 333 in the southern Norwegian North Sea (22.2%). An appraisal well is planned to be drilled in 2014.
  - In 2011, TOTAL successfully drilled an exploration well on the Alve North structure on license PL127 (50%, operator) near the Norne field. Preliminary studies have been performed. The data from a new seismic campaign is being interpreted.
  - In 2011, TOTAL drilled a positive exploration well on the Norvarg structure in the Barents Sea on license PL535 (40%, operator), which was awarded during the twentieth licensing round. The preliminary development studies have been completed and an appraisal well should be drilled in 2013.

The Group improved its asset portfolio in Norway by obtaining new licenses and divesting a number of non-strategic assets:

– In the beginning of 2013, TOTAL obtained eight new licences of which four as operator at the occasion of licensing round APA 2012 (Awards in Predefined Areas). All these licenses are localized in the Nowergian North sea: PL661 (60%, operator), PL662 (60%, operator) and PL667 (50%, operator) in the Ekofisk area, PL675 (40%) and PL676S (20%) in the central part, and PL190B (10%), PL684 (5%) and PL685 (40%, operator) in the north.

– In October 2012, TOTAL and ExxonMobil exchanged interests in a range of producing and undeveloped assets already in production or on the verge of being developed. In exchange for its interests in the PL089 license (5.6%) and in the Sygna (2.52%), Statfjord Øst (2.8%) and Snorre (6.18%) fields, TOTAL received the interest held by ExxonMobil in the Oseberg field (4.7%), the Oseberg gas transportation system (4.33%) and the PL029c (100%) and PL029b (30%) licenses, which contain part of the Dagny field. The agreement was finalized and approved by the Norwegian authorities in the fourth quarter of 2012. TOTAL's share of the PL104 license is 14.7% and it holds a 38% stake in the Dagny structure. TOTAL no longer holds a stake in license PL089.

– At the beginning of 2012, during licensing round APA 2011, TOTAL obtained eight new licenses including five as operator.

  In 2011, TOTAL obtained four new exploration licenses during licensing round APA 2010, including one as operator. The Group also acquired in 2011 a 40% stake and the role of operator of license PL554, north of Visund. The exploration well drilled on this license in 2012 resulted in the discovery of Garantiana.

– In June 2011, TOTAL announced that it had signed an agreement for the planned sale of its entire stake in Gassled (6.4%) and the associated entities. The sale became effective at the end of 2011.

– In 2010, the Group divested its stake in the Valhall and Hod fields.

In the **Netherlands**, TOTAL has had natural gas exploration and production operations since 1964 and currently owns twenty-four offshore production licenses, including twenty that it operates, and two offshore exploration licenses, E17c (16.92%) and K1c (30%). The Group's production was 33 kboe/d in 2012, compared to 38 kboe/d in 2011 and 42 kboe/d in 2010.

– The L4-D field (55.66%, operator) started production in November 2012.

– A 3D seismic survey of several offshore permits covering an area of 3,500 km[2] was conducted between May and September 2012. The interpretation of the results of this campaign is expected at the end of 2013.

– The K4-Z development project (50%, operator) began in 2011. This development is comprised of two sub-sea wells connected to the existing production and transport facilities. Start-up of production is expected in 2013.

– The K5-CU development project (49%, operator) was launched in 2009 and production started up in early 2011. This development includes four wells supported by a platform that was installed in 2010 and connected to the K5-A platform by a 15 km gas pipeline.

In late 2010, TOTAL disposed of 18.19% of its equity stake in the NOGAT gas pipeline and decreased its stake to 5%.

In **Poland**, at the beginning of 2012, TOTAL signed an agreement to acquire a 49% stake in the Chelm and Werbkowice exploration concessions in order to assess their shale gas potential. A well was drilled and tested on the Chelm permit. The results from the well are being analyzed. TOTAL asked the authorities to relinquish the Werbkowice permit in September 2012 since it did not meet expectations.

In the **United Kingdom**, where TOTAL has had operations since 1962, the Group's production was 106 kboe/d in 2012, compared to 169 kboe/d in 2011 and 207 kboe/d in 2010. About 90% of 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. In 2012, the shutdown of the Elgin, Franklin and West Franklin fields due to a gas leak from well G4 in Elgin severely impacted production.

– On the Alwyn zone (100%), start-up of satellite fields or new reservoir compartments allowed production to be maintained. Wells N54, N53 and N52 started production in May 2012, September 2011 and February 2010, respectively.

  On the Dunbar field (100%), a new drilling survey (Dunbar phase IV) should begin in the middle of 2013 including three work overs and six new wells.

  The production on the Islay field (94.49%, gas and condensates) started in April 2012.

  In February 2012, TOTAL finalized the divestment of its stake in the Otter field.

  In October 2011, the decision was made to redevelop the Brent South West formation in Alwyn by drilling two wells: one production well, which was started in August 2012, and one water injection well, which is expected to be drilled during the second semester 2013.

– In Central Graben, at the end of 2011, TOTAL increased its stake in Elgin Franklin Oil & Gas (EFOG), a company through which it holds a stake in the Elgin and Franklin fields (46.2%, operator), from 77.5% to 100%. Following a gas leak on the Elgin field on March 25, 2012, the production on the Elgin, Franklin and West Franklin fields was stopped and the personnel of the site were evacuated.

  In May 2012, TOTAL confirmed that the leak from well G4 had been successfully stopped and at the end of October 2012, well G4 was definitively secured by installing five cement plugs.

  The enquiry led by TOTAL permitted the clear identification of the causes of the accident and the definition of new criteria for well integrity to allow the restart of the production of Elgin/Franklin in total security.

  The production on the Elgin/Franklin area restarted on March 9, 2013, following the approval of the safety case by the UK Health and Safety Executive (HSE). Production is resuming gradually, and is expected to soon reach close to 70 kboe/d (approximately 30 kboe/d in TOTAL's share), corresponding to approximately 50% of the production potential from the fields.

  In order to recover by 2015 the production level that existed before the Elgin incident, a redevelopment project envisaging drilling of new infill wells on Elgin and Franklin is currently under study.

  In addition, the West Franklin Phase II development project remains ongoing with production start-up scheduled for 2014.

– In addition to Alwyn and the Central Graben, a third area, West of Shetland, is undergoing development. This area covers the Laggan and Tormore fields, in which TOTAL acquired an 80% stake in early 2010.

  The decision to develop these two fields was made in March 2010 and production is scheduled to start in 2014 with an expected capacity of 90 kboe/d. The joint development scheme includes:
  - sub-sea production facilities,
  - off-gas treatment (gas and condensates) at a plant located near the Sullom Voe terminal in the Shetland Islands, 150 km away, and
  - a new pipeline connected to the Frigg gas pipeline (FUKA) for the export of gas to the Saint Fergus terminal.

  In early 2011, a gas and condensate discovery was made on the Edradour license (75%, operator), near Laggan and Tormore. The development of Edradour East by using the infrastructures in place was decided in the end of December 2012.

  In 2010, the Group's stake in the P967 license (operator), which includes the Tobermory gas discovery, increased to 50% from 43.75%. This license is located north of Laggan/Tormore.

  TOTAL also holds a stake in three assets operated by other parties: the Bruce (43.25%), Keith (25%), and Markham (7.35%) fields. The Group's stakes in other fields operated by third parties (Seymour, Alba, Armada, Maria, Moira, Mungo/Monan and Everest) were sold off in 2012.

Nine new licenses (three in the Northern North Sea, three in Central Graben and three in West Shetland) were awarded to TOTAL in the twenty-seventh exploration round, the results of which were announced on October 25, 2012.

2.1.7.7. Middle-East

TOTAL's production in the Middle East in 2012 was 493 kboe/d, representing 21% of the Group's overall production, compared to 570 kboe/d in 2011 and 527 kboe/d in 2010.

In the **United Arab Emirates**, where TOTAL has had operations since 1939, the Group's production was 246 kboe/d in 2012, compared to 240 kboe/d in 2011 and 222 kboe/d in 2010. In 2012,

the country maintained a steady rhythm of production, which led to a slight increase of TOTAL's share of production. The increase in production in 2011 was mainly due to higher production by Abu Dhabi Company for Onshore Oil Operations (ADCO) and Abu Dhabi Marine (ADMA).

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

The ADCO license expires in January 2014. In 2012, the Abu Dhabi authorities started the discussions to define the future of ADCO beyond that date.

In early 2011, TOTAL and IPIC, a government-owned entity in Abu Dhabi, signed a memorandum of understanding (MOU) with a view to developing projects of common interest in the Upstream oil and gas sectors. The analyses continue.

The Group has a 24.5% stake in Dolphin Energy Ltd. alongside Mubadala, a company owned by the government of Abu Dhabi, to market gas produced primarily in Qatar to the United Arab Emirates.

The Group also owns 33.33% of Ruwais Fertilizer Industries (FERTIL), which produces urea. 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 is currently being started and is expected to permit FERTIL to double its production to reach 2 Mt/y by mid-2013.

In **Iraq**, TOTAL holds an 18.75% stake in the development and production contract of the Halfaya field in the Missan province. Production of phase 1 of the project (capacity of 100 kb/d) started in June 2012 and was 12 kboe/d over the last six months of 2012 (6 kboe/d on overage over the year). The definitive development plan (estimated capacity of 535 kb/d) was submitted to the authorities in the beginning of 2013.

In mid-2012, TOTAL finalized the acquisition of a 35% stake in the Safen (TOTAL will become the operator when a discovery is declared) and Harir exploration Blocks (respectively covering 424 km^2 and 705 km^2, northeast of Erbil), and a 20% stake in the Taza Block (505 km^2, southwest of Souleimaniye). The drilling of the Harir 1 well was completed in the beginning of 2013 and the drilling of the Taza 1 well is in progress. Two new wells are scheduled in 2013.

In **Iran**, the Group has had no production since 2010. The 2010 production of 2 kb/d came from remaining payments under buyback contracts. For additional information, see Chapter 4 (Risk Factors).

In **Oman**, the Group's production in 2012 was 37 kboe/d, stable compared to 2011 and 2010. The Group produces oil primarily on Block 6 (4%)[(1)] as well as on Block 53 (2%)[(2)], and it produces Liquefied Natural Gas through its stake in the Oman LNG (5.54%)/Qalhat LNG (2.04%) liquefaction plant[(3)],which has a capacity of 10.5 Mt/y.

In **Qatar**, where TOTAL has had operations since 1936, the Group's production in 2012 was 139 kboe/d, compared to 155 kboe/d in 2011 and 164 kboe/d in 2010. The Group has equity stakes in the Al Khalij field (100%), the NFB Block (20%) in the North field and the Qatargas 1 liquefaction plant (10%). The Group also holds a 16.7% in Qatargas 2 train 5.

- In November 2012, TOTAL and Qatar Petroleum signed a new agreement to continue their partnership on the Al Khalij field for an additional 25-year period. Under the terms of this protocol, as from 2014, TOTAL will remain the operator with a 40% stake and Qatar Petroleum will hold a 60% stake.
- The production contract for the Dolphin gas project, signed in 2001 with state-owned Qatar Petroleum, provides for the sale of 2 Bcf/d of gas from the North Field for a 25-year period. The gas is processed in the Dolphin plant in Ras Laffan and exported to the United Arab Emirates through a 360 km gas pipeline.
- Production of Qatargas 2 train 5, which started in 2009, is 8 Mt/year. TOTAL has been a shareholder in this train since 2006. An agreement to share the two liquefaction trains of the Qatargas project (trains 4 and 5) was signed in 2011. The agreement provides for a 50/50 split of the physical production of the two trains as well as the associated operating costs and capital outlay. In addition, TOTAL began to off-take part of the LNG produced in compliance with the contracts signed in 2006, which provide for the purchase of 5.2 Mt/y of LNG from Qatargas 2 by the Group.

The Group became a partner in the offshore BC exploration permit (25%) in May 2011.

In **Syria**, TOTAL has interests in the Deir Ez Zor permit through its 50% stake in DEZPC (100%, operator) and through the Tabiyeh contract, which came into effect in October 2009. The Group had no production in 2012 compared to 53 kboe/d in 2011 and 39 kboe/d in 2010. TOTAL suspended its activities contributing to the production of hydrocarbons in Syria in December 2011, in compliance with the European Union's regulations regarding this country. For additional information, see Chapter 4 (Risk Factors).

In **Yemen**, where TOTAL has had operations since 1987, production was 65 kboe/d in 2012, compared to 86 kboe/d in 2011 and 66 kboe/d in 2010.

TOTAL has an equity stake in the Yemen LNG project (39.62%). As part of this project, the Balhaf liquefaction plant on the southern coast of Yemen is supplied with the gas produced on Block 18, located near Marib in the center of the country, through a 320 km gas pipeline. The first LNG train was commissioned in October 2009 and the second came online in April 2010. The plant's nominal capacity is 6.7 Mt of LNG per year. 2012 witnessed eight sabotage attacks on the pipeline, which resulted in production losses of nearly 24%.

TOTAL also has stakes in two oil basins, as the operator of Block 10 (Masila Basin, East Shabwa license, 28.57%) and as a partner on Block 5 (Marib basin, Jannah license, 15%).

TOTAL owns stakes in five onshore exploration licenses: Blocks 69 and 71 (40%), Block 70 (50.1%, operated by TOTAL since July 2010), and Block 72 (36%, operated by TOTAL since October 2011).

In December 2012, TOTAL's acquisition of a 40% interest in the Block 3 exploration license, which it will operate, became effective.

(1) TOTAL has a direct interest of 4.00% in Petroleum Development Oman LLC, operator of Block 6, in wich TOTAL has an indirect interest of 4.00% via Pohol (equity affiliate).
(2) TOTAL has indirect interest of 2.00% in Block 53.
(3) TOTAL's indirect stake in Qalhat LNG through its stake in Oman LNG.

2.1.8. Oil and gas acreage

As of December 31, (in thousands of acres)		2012		2011		2010	
		Undeveloped acreage[(a)]	Developed acreage	Undeveloped acreage[(a)]	Developed acreage	Undeveloped acreage[(a)]	Developed acreage
Europe	Gross	10,015	724	6,478	781	6,802	776
	Net	6,882	176	3,497	185	3,934	184
Africa	Gross	135,610	1,256	110,346	1,229	72,639	1,229
	Net	88,457	337	65,391	333	33,434	349
Americas	Gross	16,604	1,705	15,454	1,028	16,816	1,022
	Net	6,800	330	5,349	329	5,755	319
Middle East	Gross	32,369	1,896	31,671	1,461	29,911	1,396
	Net	3,082	256	2,707	217	2,324	209
Asia	Gross	37,208	955	40,552	930	36,519	539
	Net	18,184	270	19,591	255	17,743	184
Total	**Gross**	**231,806**	**6,536**	**204,501**	**5,429**	**162,687**	**4,962**
	Net[(b)]	**123,405**	**1,369**	**96,535**	**1,319**	**63,190**	**1,245**

(a) Undeveloped acreage includes leases and concessions.
(b) Net acreage equals the sum of the Group's equity stakes in gross acreage.

2.1.9. Number of productive wells

As of December 31, (number of wells)		2012		2011		2010	
		Gross productive wells	Net productive wells[(a)]	Gross productive wells	Net productive wells[(a)]	Gross productive wells	Net productive wells[(a)]
Europe	Oil	410	111	576	151	569	151
	Gas	330	117	358	125	368	132
Africa	Oil	2,216	593	2,275	576	2,250	628
	Gas	156	48	157	44	182	50
Americas	Oil	898	258	877	247	884	261
	Gas	2,892	546	2,707	526	2,532	515
Middle East	Oil	6,488	462	7,829	721	7,519	701
	Gas	371	49	372	49	360	49
Asia	Oil	206	75	209	75	196	75
	Gas	1,912	578	1,589	498	1,258	411
Total	**Oil**	**10,218**	**1,499**	**11,766**	**1,770**	**11,418**	**1,816**
	Gas	**5,661**	**1,338**	**5,183**	**1,242**	**4,700**	**1,157**

(a) Net wells equal the sum of the Group's equity stakes in gross wells.

2.1.10. Number of net oil and gas wells drilled annually

As of December 31,	2012			2011			2010		
	Net productive wells drilled(a)	Net dry wells drilled(a)	Total net wells drilled(a)	Net productive wells drilled(a)	Net dry wells drilled(a)	Total net wells drilled(a)	Net productive wells drilled(a)	Net dry wells drilled(a)	Total net wells drilled(a)
Exploratory									
Europe	0.9	3.3	4.2	1.5	1.7	3.2	1.7	0.2	1.9
Africa	4.9	2.8	7.7	2.9	1.5	4.4	1.6	4.3	5.9
Americas	3.9	0.6	4.5	1.2	1.3	2.5	1.0	1.6	2.6
Middle East	-	-	-	1.2	0.8	2.0	0.9	0.3	1.2
Asia	2.4	1.4	3.8	2.1	3.7	5.8	3.2	1.2	4.4
Subtotal	**12.1**	**8.1**	**20.2**	**8.9**	**9.0**	**17.9**	**8.4**	**7.6**	**16.0**
Development									
Europe	6.0	0.7	6.7	7.5	-	7.5	5.0	-	5.0
Africa	22.7	-	22.7	24.7	-	24.7	18.1	-	18.1
Americas	70.6	131.7	202.3	113.1	82.2	195.3	135.3	112.5	247.8
Middle East	43.3	-	43.3	32.6	2.6	35.2	29.5	1.4	31.0
Asia	127.8	-	127.8	118.4	-	118.4	59.3	-	59.3
Subtotal	**270.4**	**132.4**	**402.8**	**296.3**	**84.8**	**381.1**	**247.3**	**113.9**	**361.2**
Total	**282.5**	**140.5**	**423.0**	**305.2**	**93.8**	**399.0**	**255.7**	**121.5**	**377.2**

(a) Net wells equal the sum of the Group's equity stakes in gross wells.

2.1.11. Drilling and production activities in progress

As of December 31, (number of wells)	2012		2011		2010	
	Gross	Net(a)	Gross	Net(a)	Gross	Net(a)
Exploratory						
Europe	1	1.0	2	2.0	3	2.1
Africa	4	1.3	2	0.8	4	1.4
Americas	7	3.4	3	1.0	2	0.9
Middle East	2	1.1	-	-	2	1.2
Asia	2	1.3	1	0.6	2	1.1
Subtotal	**16**	**8.1**	**8**	**4.4**	**13**	**6.7**
Development						
Europe	23	6.2	21	4.5	21	3.8
Africa	25	6.4	31	11.3	29	6.4
Americas	29	8.2	22	5.7	99	29.2
Middle East	93	6.1	26	3.5	20	5.1
Asia	171	49.2	11	5.1	23	9.8
Subtotal	**341**	**76.1**	**111**	**30.1**	**192**	**54.3**
Total	**357**	**84.2**	**119**	**34.5**	**205**	**61.0**

(a) Net wells equal the sum of the Group's equity stakes in gross wells.

2.1.12. Interests in pipelines

The table below sets forth TOTAL's interests in oil and gas pipelines as of December 31, 2012.

Pipeline(s)	Origin	Destination	% interest	Operator	Liquids	Gas
Europe						
France						
TIGF	Network South West	-	100.00	x	-	x
Norway						
Frostpipe (inhibited)	Lille-Frigg, Froy	Oseberg	36.25	-	x	-
Heimdal to Brae Condensate Line	Heimdal	Brae	16.76	-	x	-
Kvitebjorn pipeline	Kvitebjorn	Mongstad	5.00	-	x	-
Norpipe Oil	Ekofisk Treatment center	Teeside (UK)	34.93	-	x	-
Oseberg Transport System	Oseberg, Brage and Veslefrikk	Sture	12,98	-	x	-
Sleipner East Condensate Pipe	Sleipner East	Karsto	10.00	-	x	-
Troll Oil Pipeline I and II	Troll B and C	Vestprosess (Mongstad refinery)	3.71	-	x	-
Vestprosess	Kollsnes (Area E)	Vestprosess (Mongstad refinery)	5.00	-	x	-
The Netherlands						
Nogat pipeline	F3-FB	Den Helder	5.00	-	-	x
WGT K13-Den Helder	K13A	Den Helder	4.66	-	-	x
WGT K13-Extension	Markham	K13 (via K4/K5)	23.00	-	-	x
United Kingdom						
Alwyn Liquid Export Line	Alwyn North	Cormorant	100.00	x	x	-
Bruce Liquid Export Line	Bruce	Forties (Unity)	43.25	-	x	-
Central Graben Liquid Export Line (LEP)	Elgin-Franklin	ETAP	15.89	-	x	-
Frigg System: UK line	Alwyn North, Bruce and others	St.Fergus (Scotland)	100.00	x	-	x
Ninian Pipeline System	Ninian	Sullom Voe	16.00	-	x	-
Shearwater Elgin Area Line (SEAL)	Elgin-Franklin, Shearwater	Bacton	25.73	-	-	x
SEAL to Interconnector Link (SILK)	Bacton	Interconnector	54.66	x	-	x
Africa						
Gabon						
Mandji Pipes	Mandji fields	Cap Lopez Terminal	100.00[a]	x	x	-
Rabi Pipes	Rabi fields	Cap Lopez Terminal	100.00[a]	x	x	-
Americas						
Argentina						
Gas Andes	Neuquen Basin (Argentina)	Santiago (Chile)	56.50	x	-	x
TGN	Network (Northern Argentina)		15.40	-	-	x
TGM	TGN	Uruguyana (Brazil)	32.68	-	-	x
Bolivia						
Transierra	Yacuiba (Bolivia)	Rio Grande (Bolivia)	11.00	-	-	x
Brazil						
TBG	Bolivia-Brazil border	Porto Alegre via São Paulo	9.67	-	-	x
Colombia						
Ocensa	Cusiana	Covenas Terminal	5.20	-	x	-
Asia						
Yadana	Yadana (Myanmar)	Ban-I Tong (Thai border)	31.24	x	-	x
Rest of world						
BTC	Baku (Azerbaijan)	Ceyhan (Turkey, Mediterranean)	5.00	-	x	-
SCP	Baku (Azerbaijan)	Georgia/Turkey Border	10.00	-	-	x
Dolphin (International transport and network)	Ras Laffan (Qatar)	U.A.E.	24.50	-	-	x

(a) Interest of Total Gabon. The Group has a financial interest of 58.28% in Total Gabon.

2.2. Gas & Power

Gas & Power's primary objective is to contribute to the growth of the Group by ensuring sales outlets for its current and future natural gas reserves and production.

In order to optimize these gas resources, particularly liquefied natural gas (LNG), Gas & Power's activities include trading and marketing of natural gas, liquefied natural gas, liquefied petroleum gas (LPG) and electricity, as well as shipping. Gas & Power also has stakes in infrastructure companies (re-gasification terminals, natural gas transport and storage, power plants) necessary to implement its strategy.

Gas & Power also manages a coal business line, handling everything from production to marketing.

2.2.1. Liquefied Natural Gas

A pioneer in the LNG industry, TOTAL today is one of the world's leading players[(1)] in the sector and has sound and diversified positions both in the upstream and downstream portions of the LNG chain. LNG development is key to the Group's strategy, with TOTAL strengthening its positions in most major production zones and markets.

Through its stakes in liquefaction plants[(2)] located in Qatar, the United Arab Emirates, Oman, Nigeria, Norway and Yemen, and its gas supply agreement with the Bontang LNG plant in Indonesia, TOTAL markets LNG in all worldwide markets. In 2012, TOTAL sold 11.4 Mt of LNG, a decrease of 13% compared to 2011 LNG sales (13.2 Mt) and 7% compared to 2010 sales (12.3 Mt). This decrease is due in particular to the decline of the Bontang LNG plant production and to the force majeure events reported by the Yemen LNG project in 2012. The planned start-up of the Angola LNG plant in 2013, together with the Group's liquefaction projects in Australia, Russia and Nigeria are expected to allow for growth in the coming years.

Gas & Power is responsible for LNG operations downstream from liquefaction plants. It is in charge of LNG marketing to third parties on behalf of Exploration & Production, developing the Group's LNG portfolio for its trading, marketing and transport operations as well as re-gasification terminals.

In **Nigeria**, TOTAL holds a 15% interest in the Nigeria LNG plant. The Group signed an LNG purchase agreement, initially intended for deliveries to the United States and Europe, for an initial 0.23 Mt/y over a 23-year period starting in 2006, to which an additional 0.94 Mt/y was added when the sixth train came on stream in 2007.

TOTAL also holds a 17% stake in the Brass LNG project, which 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 LNG purchase agreement for approximately one-sixth of the plant's capacity over a 20-year period. This contract is subject to the final investment decision for the project.

In **Norway**, as part of the Snøhvit project, in which the Group holds an 18.4% stake, TOTAL signed in 2004 a purchase agreement for 0.78 Mt/y of LNG over a 15-year period primarily intended for North America and Europe. LNG deliveries started in 2007.

In **Qatar**, TOTAL signed purchase agreements in 2006 for 5.2 Mt/y of LNG from train 5 (16.7%) of Qatargas 2 over a 25-year period. This LNG is marketed mainly in France, the United Kingdom and North America. LNG deliveries started in 2009.

In **Yemen**, TOTAL signed an agreement with Yemen LNG Ltd (39.62%) in 2005 to purchase 2 Mt/y of LNG over a 20-year period, starting in 2009, which is initially intended for delivery in the United States and Europe. LNG deliveries started in 2009.

Since 2009, part of the volume purchased by the Group pursuant to its long-term contracts related to the LNG projects mentioned above has been diverted to markets in Asia.

In **Australia**, TOTAL increased its stake in the Ichthys LNG project from 24% to 30% in early 2013. This project was launched at the beginning of 2012 and calls for the construction of two LNG trains, each with a capacity of 4.2 Mt/y. In conjunction with this acquisition, TOTAL signed an LNG purchase agreement for 0.9 Mt/y over a 15-year period. Deliveries are expected to start in 2017.

In **Angola**, TOTAL is involved in the Angola LNG liquefaction project (13.6%), which includes a 5.2 Mt/y train. The start-up of the project is planned for mid-2013. A subsidiary of Angola LNG Ltd, Angola LNG Marketing, in which TOTAL holds an 8.6% stake, was created in London in July 2012. This subsidiary acts as an intermediary in charge of marketing LNG volumes from the project.

In the **United States**, TOTAL entered into an agreement with Kogas in 2012 for the purchase of 0.7 Mt/y of LNG, over a 20-year period, from train 3 of the Sabine Pass gas terminal (Louisiana). LNG deliveries are expected to start in 2017. This contract is conditional to the final investment decision for the project.

In parallel to this, TOTAL also entered into an agreement with Sabine Pass Liquefaction LLC for the purchase over a 20-year period of 2 Mt/y of LNG from train 5 of the Sabine Pass terminal. LNG deliveries will begin on the date on which train 5 is commissioned, which is scheduled for 2018. This agreement is conditional on, among other things, export and construction permits being obtained by Cheniere for the construction of train five and the final investment decision for the project.

In addition, TOTAL has signed certain sale agreements for LNG from the Group's global LNG portfolio:

In **China**, TOTAL signed an LNG sale agreement with China National Offshore Oil Company (CNOOC). Under this agreement, which became effective in 2010, TOTAL supplies up to 1 Mt/y of LNG to CNOOC over a 15-year period.

In **South Korea**, TOTAL signed an LNG sale agreement in 2011 with Kogas. Under this agreement, TOTAL will deliver up to 2 Mt/y of LNG to Kogas between 2014 and 2031.

With regard to LNG transport operations, TOTAL has been the direct long-term charterer since 2004 of the Arctic Lady, a 145,000 m^3 LNG tanker that ships TOTAL's share of production from the Snøhvit liquefaction plant in Norway. In November 2011, TOTAL signed a second long-term contract for the chartering of a 165,000 m^3 LNG tanker, the Meridian Spirit (former Maersk Meridian), in order to strengthen its transport capacities with regard to its lifting commitments in Norway.

(1) Company data, based on upstream and downstream LNG portfolios.
(2) Exploration & Production is in charge of the Group's natural gas liquefaction and production operations.

The Group also holds a 30% stake in Gaztransport & Technigaz (GTT), which focuses mainly on the design and engineering of membrane cryogenic tanks for LNG tankers. At year-end 2012, out of a worldwide tonnage estimated at 388 LNG tankers[1], 260 active LNG tankers were equipped with membrane tanks built under GTT licenses.

2.2.2. Trading

In 2012, TOTAL continued to pursue its strategy of developing its operations downstream from natural gas and LNG production. The aim of this strategy is to optimize access for the Group's current and future production to traditional markets (with long-term contracts) and to markets open to international competition (with short-term contracts and spot sales). In the context of deregulated markets, which allow customers to more freely access suppliers, in turn leading to marketing arrangements that are more flexible than traditional long-term contracts, TOTAL is developing trading, marketing and logistics businesses to offer its natural gas and LNG production directly to customers.

In parallel, the Group has operations in electricity trading and LPG as well as coal marketing. Furthermore, TOTAL began to market in 2011 the petcoke production of the Port Arthur refinery (United States) on the international market.

Gas & Power's trading teams are located in London, Houston, Geneva and Singapore and conduct most of their business through the Group's wholly-owned subsidiaries Total Gas & Power and Total Gas & Power North America.

2.2.2.1. Gas and electricity

TOTAL has gas and electricity trading operations in Europe and North America with a view to selling the Group's production and supplying its marketing subsidiaries.

In **Europe**, TOTAL marketed 1,488 Bcf (42.1 Bm^3) of natural gas in 2012, including approximately 11% coming from the Group's production, compared to 1,500 Bcf (42.5 Bm^3) in 2011 and 1,278 Bcf (36.2 Bm^3) in 2010. In addition, TOTAL marketed mainly from external resources 53.3 TWh of electricity in 2012 compared to 24.2 TWh in 2011 and 27.1 TWh in 2010.

In **North America**, TOTAL marketed from its own production or external resources 1,256 Bcf (36 Bm^3) of natural gas in 2012, compared to 1,694 Bcf (48 Bm^3) in 2011 and 1,798 Bcf (51 Bm^3) in 2010.

2.2.2.2. LNG

TOTAL has LNG trading operations through spot sales and fixed-term contracts as described in section 2.2.1. Since 2009, new purchase agreements from the Qatargas 2 and Yemen LNG projects and new sale agreements in China, India, Japan, South Korea and Thailand have substantially developed the Group's LNG marketing operations, particularly in Asia's most buoyant markets. This spot and fixed-term LNG portfolio allows TOTAL to supply gas to its main customers worldwide, while retaining a sufficient degree of flexibility to react to market opportunities.

In 2012, TOTAL purchased eighty-seven contractual cargoes and eight spot cargos from Qatar, Yemen, Nigeria, Norway, Russia and Egypt, compared to ninety-nine and ten, respectively, in 2011 and ninety-four and twelve, respectively, in 2010. This decrease is due in particular to the force majeure events reported by the Yemen LNG project and the Snøhvit project in 2012.

2.2.2.3. LPG

In 2012, TOTAL traded and sold approximately 6.0 Mt of LPG (butane and propane) worldwide, compared to 5.7 Mt in 2011 and 4.5 Mt in 2010. Approximately 20% of these quantities came from fields or refineries operated by the Group. LPG trading involved the use of eleven time-charters, representing 220 voyages in 2012, and approximately seventy-three spot charters.

2.2.2.4. Coal

In 2012, TOTAL marketed 8.5 Mt of coal in the international market, compared to 7.5 Mt in 2011 and 7.3 Mt in 2010. More than 80% of this coal comes from South Africa. Approximately 70% of the volume was sold in Asia, where coal is used primarily to generate electricity. The remaining volume was marketed in Europe.

2.2.2.5. Petcoke

In 2011, TOTAL began to market the petcoke produced by the coker at the Port Arthur refinery. Approximately 1.1 Mt of petcoke was sold on the international market in 2012, compared to 0.6 Mt in 2011, to cement plants and electricity producers mainly in Mexico, Brazil, Turkey, China, Dominican Republic and other Latin Americas.

2.2.3. Marketing

To unlock value from the Group's production, TOTAL is developing gas, electricity and coal marketing operations with end users in the United Kingdom, France, Spain and Germany. At the end of 2012, the Group enlarged its European marketing coverage by creating two marketing affiliates: Total Gas & Power North Europe in Belgium, and Total Gas & Power Nederland B.V. in the Netherlands.

In the **United Kingdom**, TOTAL markets gas and electricity to the industrial and commercial segments through its subsidiary Total Gas & Power Ltd. In 2012, volumes of gas sold amounted to 146 Bcf (4.2 Bm^3), compared to 162 Bcf (4.6 Bm^3) in 2011 and 173 Bcf (4.9 Bm^3) in 2010. Sales of electricity totaled approximately 3.9 TWh in 2012, compared to 4.1 Twh in 2011 and in 2010.

In **France**, TOTAL markets natural gas through its subsidiary Total Energie Gaz (TEGAZ), the overall sales of which were 176 Bcf (5.0 Bm^3) in 2012, compared to 208 Bcf (5.9 Bm^3) in 2011 and 226 Bcf (6.4 Bm^3) in 2010. The Group also markets coal to its French customers through its subsidiary CDF Energie, with sales of approximately 0.975 Mt in 2012, compared to 1.2 Mt in 2011 and 1.3 Mt in 2010.

In **Spain**, TOTAL markets natural gas to the industrial and commercial segments through Cepsa Gas Comercializadora, in which it holds a 35% stake. In 2012, volumes of gas sold amounted to 101 Bcf (2.9 Bm^3), compared to 2.4 Bm^3 in both 2011 and 2010.

In **Germany**, Total Energie created a marketing subsidiary in 2010, Total Energy Gas GmbH, which began commercial operations in 2011. In 2012, this subsidiary marketed 0.15 Bm^3 of gas to industrial and commercial customers.

The Group also holds stakes in the marketing companies that are associated with the Altamira and Hazira LNG re-gasification terminals located in Mexico and India, respectively.

(1) Gaztransport & Technigaz data.

2.2.4. Gas facilities

TOTAL develops natural gas transport networks, gas storage facilities (both liquid and gaseous) and LNG re-gasification terminals downstream from its natural gas and LNG production.

2.2.4.1. Transport of natural gas

In **France**, TIGF (Transport Infrastructures Gaz France) comprises the Group's transport operations located in the southwest. This wholly-owned subsidiary operates
a regulated transport network of 5,000 km of gas pipelines. As part of the development of Franco-Spanish interconnections, TOTAL decided in 2011 to complete the Euskadour (France-Spain link) project with commissioning scheduled in 2015. This decision followed the decisions made in 2010 to invest in the Artère du Béarn and Girland gas pipeline projects (reinforcement of Artère de Guyenne), with commissioning scheduled in 2013.

In addition, in 2012 TIGF continued to implement the Third Energy Package adopted by the European Union in July 2009, which entails splitting network operations from production and supply operations.

New conditions in the European gas market and, in particular, the plan for reorganization of gas transmissions launched by Europe in 2012, have caused TOTAL to seek buyers capable of ensuring TIGF's long-term development. On February 5, 2013, TOTAL has entered into exclusive negotiations with a consortium comprising Snam, EDF and GIC that has submitted a firm offer to acquire all outstanding shares of TIGF.

In **South America**, TOTAL owns interests in several natural gas transport companies in Argentina, Chile and Brazil. These assets represent a total integrated network of approximately 9,500 km of pipelines serving the Argentinean, Chilean and Brazilian markets from gas-producing basins in Bolivia and Argentina, where the Group has natural gas reserves. These natural gas transport companies face a difficult operational and financial environment in Argentina stemming from the absence of an increase in transport tariffs and restrictions imposed on gas exports. However, GasAndes, a company in which TOTAL holds a 56.5% stake, successfully negotiated positive financial arrangements with all its customers.

2.2.4.2. Storage of natural gas and LPG

In **France**, the Group's storage operations located in the southwest are grouped under TIGF. This subsidiary operates two storage units under a negotiated legal regime with a usable capacity of 95 Bcf (2.7 Bm^3).

Through its 29.5% stake in Géométhane, TOTAL owns natural gas storage in a salt cavern in Manosque with a capacity of 10.5 Bcf (0.3 Bm^3). A 7 Bcf (0.2 Bm^3) increase in storage capacity is scheduled to be commissioned in 2017-2018.

In **India**, TOTAL holds a 50% stake in South Asian LPG Limited (SALPG), a company that operates an underground import and storage LPG terminal located on the east coast of the country. This cavern, the first of its kind in India, has a storage capacity of 60 kt. In 2012, inbound vessels transported 950 kt of LPG, compared to 850 kt in 2011 and 779 kt in 2010.

2.2.4.3. LNG re-gasification

TOTAL has entered into agreements to obtain long-term access to 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 presence allows the Group to access new liquefaction projects by becoming a long-term buyer of a portion of the LNG produced at these plants, thereby strengthening its LNG supply portfolio.

In **France**, TOTAL holds a 27.54% stake in the Company Fosmax, formerly called Société du Terminal Méthanier de Fos Cavaou, and has, through its subsidiary Total Gas & Power Ltd., a re-gasification capacity of 2.25 Bm^3/y. The terminal received fifty-six vessels in 2012, compared to fifty-nine in 2011.

In 2011, TOTAL acquired a 9.99% stake in Dunkerque LNG in order to develop a methane terminal project with a capacity of 13 Bm^3/y. Trade agreements have also been signed which allow TOTAL to reserve up to 2 Bm^3/y of re-gasification capacity over a 20-year period. The project is underway and commissioning of the terminal is scheduled for the end of 2015.

In the **United Kingdom**, through its equity interest in the Qatargas 2 project, TOTAL holds an 8.35% stake in the South Hook LNG re-gasification terminal and an equivalent right of use to the terminal. Phase 2 of the terminal was commissioned in 2010, which increased the terminal's total capacity to 742 Bcf/y (21 Bm^3/y). In 2012, the terminal re-gasified sixty-eight cargoes from Qatar, compared to nearly one hundred in 2011.

In **Mexico**, TOTAL sold in 2011 its entire stake in the Altamira re-gasification terminal, but it retained a 25% reservation of the terminal's capacity (*i.e.*, 59 Bcf/y, or 1.7 Bm^3/y) through its 25% stake in Gas del Litoral.

In the **United States**, TOTAL has reserved a re-gasification capacity of approximately 353 Bcf/y (10 Bm^3/y) at the Sabine Pass terminal (Louisiana) for a 20-year period ending in 2029. In April 2012, the Sabine Pass terminal received the authorization to export LNG from four trains of liquefaction, which would involve converting the re-gasification plants into liquefaction plants. As a result, TOTAL negotiated financial compensation with Cheniere, the terminal's operator, in the event that the capacity reserved by TOTAL for re-gasification is restricted before 2029 as a result of the conversion of the terminal.

In **India**, TOTAL holds a 26% stake in the Hazira terminal, which in 2013 is expected to have a natural gas re-gasification capacity of 244 Bcf/y (6.9 Bm^3/y). The terminal, located on the west coast of India in the Gujarat state, is a merchant terminal with operations that cover both LNG re-gasification and gas marketing. After a year of sluggish activity in 2010, the terminal's full capacities are under contract for 2011 and 2012 as well as 2013. The Indian market's strong growth prospects have led to plans for an investment decision in 2013 aimed at increasing the terminal's capacity to at least 343 Bcf/y (9.7 Bm^3/y) by 2017.

2.2.5. Electricity generation

In a context of increasing global demand for electricity, TOTAL has developed expertise in the power generation sector, especially through cogeneration and combined-cycle power plant projects.

In **Abu Dhabi**, the Taweelah A1 plant combines electricity generation and water desalination. It is owned by Gulf Total Tractebel Power Cy, in which TOTAL holds a 20% stake. The Taweelah A1 power plant, in operation since 2003, currently has net power generation capacity of 1,600 MW and water desalination capacity of 385,000 m^3 per day. The plant's production is sold to Abu Dhabi Water and Electricity Company (ADWEC) as part of a long-term agreement.

In **Nigeria**, TOTAL and its partner, the state-owned Nigerian National Petroleum Corporation (NNPC), own interests in two gas-fired power plant projects 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 Shell Petroleum Development Company (SPDC) joint venture in which TOTAL holds a 10% stake, concerns the development of a 630 MW combined-cycle power plant in production since the end of 2010;
- The development of a new 417 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). A final investment decision is expected in 2014 and commissioning is scheduled in 2015 in open-cycle and 2016 in closed-cycle. The power plant will be connected to the existing power grid through a new 108 km high-voltage transmission line.

In **Thailand**, TOTAL owns 28% of Eastern Power and Electric Company Ltd, which operates the combined-cycle gas power plant in Bang Bo, with a capacity of 350 MW, in operation since 2003. The plant's production is sold to the Electricity Generating Authority of Thailand under a long-term agreement.

2.2.6. Coal production

For nearly thirty years, TOTAL has produced and exported coal from South Africa primarily to Europe and Asia. In 2012, TOTAL produced 4.4 Mt of coal.

The subsidiary Total Coal South Africa (TCSA) owns and operates five mines in South Africa. The Group continues to study other projects aimed at developing its mining resources.

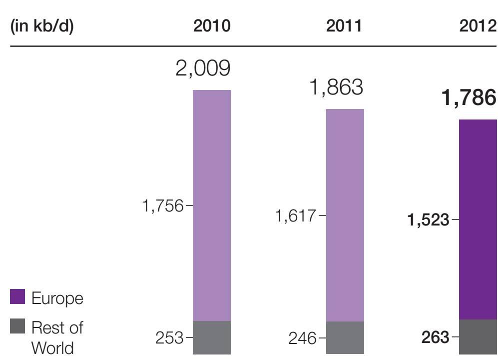
The South African coal produced by TCSA or bought from third-parties' mines is either marketed locally or exported through the port of Richard's Bay, in which TOTAL holds a 5.7% interest.

3. Refining & Chemicals segment

In October 2011, the Group announced a proposed reorganization of its Downstream and Chemicals segments. The reorganization became effective on January 1, 2012, with the creation of a Refining & Chemicals segment, a large industrial group that encompasses refining, petrochemicals, fertilizers and specialty chemicals operations. This segment also includes oil trading and shipping activities. As a result, certain information has been restated according to the new organization.

- Among the world's ten largest integrated producers[(1)]
- Refining capacity of approximately **2 Mb/d** at year-end 2012
- One of the leading traders of oil and refined products worldwide
- **€1,9** billion invested in 2012
- **51,545** employees

Refinery throughput[(a)]



(a) Including TOTAL's share in CEPSA, through July 31, 2011, and in TotalErg.

In 2012, refinery throughput decreased by 4% compared to 2011, reflecting essentially the portfolio effect relating to the sale of the Group's interest in CEPSA at the end of July 2011 and the closure of the Rome refinery at the end of the third quarter 2012. Excluding these portfolio effects, throughput increased by 4% due to increased availability of the Group's refineries. As in 2011, 2012 was marked by higher levels of planned maintenance at European refineries, in particular the temporary shut-down of the Normandy refinery during the upgrading project at the end of 2012, as well as scheduled maintenance at the Provence and Feyzin refineries.

Refining & Chemicals segment financial data

(M€)	2012	2011	2010
Non-Group sales	91,117	77,146	65,156
Adjusted operating income	1,513	613	793
Adjusted net operating income	1,414	848	1,012
Contribution of Specialty Chemicals	384	423	475

For 2012, the ERMI was 36.0 $/t, more than double the average during 2011.

Adjusted net operating income from the Refining & Chemicals segment in 2012 was €1,414 million, an increase of 67% compared to €848 million in 2011. Expressed in dollars, adjusted net operating income was $1.8 billion, an increase of 54% compared to 2011. This increase is mainly due to the positive effect of improved refining margins in Europe, noting that throughput at the Group's refineries decreased on a global basis by 4% between the two periods, and the petrochemical environment weakened, particularly in Europe and in polymers. The decrease in adjusted net operating income for the Specialty Chemicals is attributable entirely to the sale of the resins business in mid-2011.

The ROACE[(2)] for the Refining & Chemicals segment was 9% for 2012, compared to 5% for 2011.

3.1. Refining & Chemicals

Refining & Chemicals includes the Group's refining, petrochemicals, fertilizers and specialty chemicals businesses. The petrochemicals business includes base petrochemicals (olefins and aromatics) and polymer derivatives (polyolefins and polystyrene). The specialty chemicals business includes elastomer processing, adhesives and electroplating chemistry. TOTAL is one of the world's ten largest integrated producers[(1)].

In a context of growing worldwide demand for oil and petrochemicals driven by non-OECD countries, the strategy of Refining & Chemicals, in addition to the priority placed on safety and environmental protection, involves adapting production capacities to changes in demand in Europe and the United States by focusing on integrated platforms, and expanding in Asia and the Middle East in order to access, in particular, dedicated oil and gas resources and to benefit from market growth. This strategy is underpinned by an effort to differentiate through the technology used and innovation found in its products and processes, and involves pursuing asset portfolio management to focus on core businesses.

3.1.1. Refining & Petrochemicals

TOTAL's worldwide refining capacity was 2,048 kb/d at year-end 2012, compared to 2,096 kb/d in 2011 and 2,459 kb/d in 2010[(3)]. The Group's worldwide refined products sales (including trading operations) in 2012 were 3,403 kb/d, compared to 3,639 kb/d in 2011 and 3,776 kb/d in 2010.

TOTAL has equity stakes in twenty refineries (including nine that it operates) located in Europe, the United States, the French West Indies, Africa, the Middle East and China.

(1) Based on publicly available information, 2011 consolidated sales.
(2) Calculated based on adjusted net operating income and average capital employed, using replacement cost.
(3) The 2010 and 2011 data was restated to take into account notably the Ras Laffan refinery in Qatar, which was formerly part of Exploration & Production prior to the 2012 reorganization.

Refining & Chemicals manages the refining operations located in Europe (excluding the joint ventureTotalErg in Italy), the United States, the Middle East and Asia, for a capacity of 1,953 kb/d at year-end 2012 (*i.e.*, 95% of the Group's total capacity[(1)]).

The petrochemicals businesses (production and marketing of base petrochemicals and polymer derivatives) are located mainly in Europe, the United States, Qatar and in South Korea. Most of these sites are either adjacent or connected by pipelines to Group refineries. As a result, TOTAL's petrochemical operations are integrated within its refining operations.

The goal of the Refining & Petrochemicals business is to improve the profitability of its operations, including in particular by implementing synergies related to refining-petrochemicals integration, and to improve operational efficiency (plant availability, cost control, energy efficiency) in order to take full advantage of its assets.

In March 2012, TOTAL finalized the acquisition of 35% of Fina Antwerp Olefins, Europe's second largest base petrochemicals (monomers) production plant[(2)]. The acquisition will open new opportunities to strengthen the competitiveness of the platform in Antwerp and to pursue its integration, which is one of the foundations of TOTAL's strategy.

In July 2011, TOTAL closed the sale to IPIC of its 48.83% stake in CEPSA as part of a public takeover bid on the entire share capital of CEPSA. With respect to refining operations, this sale concerned mainly four Spanish refineries (Huelva, Algeciras, Tenerife, Tarragona) and, with respect to petrochemicals operations, aromatics and their derivatives.

3.1.1.1. Europe

TOTAL is the largest refiner in Western Europe[(3)].

In **Western Europe**, TOTAL's refining capacity was 1,742 kb/d in 2012, compared to 1,787 kb/d in 2011 and 2,135 kb/d in 2010, accounting for 85% of the Group's overall refining capacity. The decrease in 2012 was due primarily to the shutdown of the Rome refinery, while the decrease in 2011 stemmed mainly from the sale of the Group's stake in CEPSA. The Group operates eight refineries in Western Europe (one in Antwerp, Belgium, five in France in Donges, Feyzin, Gonfreville, Grandpuits and La Mède, one in Immingham in the United Kingdom and one in Leuna, Germany) and owns stakes in the Schwedt refinery in Germany, the Zeeland refinery in the Netherlands and the Trecate refinery in Italy through its interest in TotalErg.

The main petrochemical sites are located in Belgium, in Antwerp (steam crackers, polyethylene, aromatics) and Feluy (polyolefins, polystyrene), and in France, in Carling (steam cracker, polyethylene, polystyrene, aromatics), Feyzin (steam cracker, aromatics), Gonfreville (steam crackers, styrene, polyolefins, polystyrene, aromatics) and Lavéra (steam cracker, polypropylene, aromatics). Europe accounts for 56% of the Group's petrochemicals capacity, *i.e.* 11,803 kt in 2012, compared to 11,013 kt in 2011 and 12,721 kt in 2010. The increase in 2012 was due mainly to the acquisition of 35% of Fina Antwerp Olefins (discussed above), while the decrease in 2011 was due mainly to the sale of the Group's stake in CEPSA.

- **In France**, the Group owns five refineries and continues to adapt its refining capacities and shift the production emphasis to diesel due to the structural decline in the demand for petroleum products in Europe and an increase in gasoline surpluses.

  Since 2010, TOTAL has been implementing its project to repurpose the Flanders site. The shutdown of the refining business results in the gradual dismantling of the units. The Group has commenced repurposing the site through the creation of four areas: a technical support center, a refining jobs training school, an oil depot, and a department whose role is to support the general revitalization of the site.

  In 2010, the Group divested its minority interest (40%) in the Société de la Raffinerie de Dunkerque (SRD), a company that specializes in bitumen and base oil production.

  In addition, the industrial plan intended to reconfigure the Normandy refinery is ongoing. The project is intended to upgrade the refinery and shift the production emphasis to diesel. For this purpose, the investments resulted in the eventual reduction of the annual distillation capacity to 12 Mt from 16 Mt, upsizing the hydrocracker unit for heavy diesel cuts and improving energy efficiency by lowering carbon dioxide emissions. The new design should be operational early 2014.

  In parallel, the project to modernize the Normandy platform's petrochemical operations was completed in early 2012. This project did notably improve the energy efficiency of the steam cracker and the high-density polyethylene unit.

- In **Belgium** and **the Netherlands**, the Group is studying a project intended to increase the conversion capacities of the Antwerp and Zeeland refineries. This project would make the refineries more complementary and allow the residual gases produced by the Antwerp refinery to be used as feedstock for the petrochemical steam crackers. In addition, in Feluy, TOTAL is building a new-generation expandable polystyrene manufacturing plant targeted for the fast-growing insulation market, with start-up scheduled for first half 2013.

- In the **United Kingdom**, the commissioning in 2011 of the hydrodesulphurization (HDS) unit at the Lindsey refinery allowed the refinery to increase its crude processing flexibility (up to 70% of high-sulphur crudes, compared to 10% previously) and its low-sulphur diesel production. After announcing in 2010 that it would put the Lindsey refinery up for sale as part of the sale of downstream activities in the United Kingdom, the Group, after receiving no offer meeting its requirements, decided in early 2012 to keep it in its portfolio.

- In **Italy**, TotalErg (49%) holds a 25.9% stake in the Trecate refinery. The Rome refinery, which was wholly-owned by TotalErg, was turned into a depot in October 2012.

(1) Earnings related to the refining assets in Africa, the French West Indies and of the joint venture TotalErg are reported in the results of the Marketing & Services segment.
(2) Company data, 2011 production capacity.
(3) Based on publicly available information, 2011 refining capacities and quantities sold.

3.1.1.2. North America

The main sites are located in Texas, in Port Arthur (refinery, steam cracker), Bayport (polyethylene) and La Porte (polypropylene), and in Carville, Louisiana (styrene, polystyrene).

In 2008, TOTAL launched a program to upgrade the Port Arthur refinery that included the construction of a desulphurization unit commissioned in 2010, a vacuum distillation unit, a deep-conversion unit (coker) and other associated units, which were successfully commissioned in 2011. This upgrade enables the refinery to process more heavy and high-sulphur crudes and to increase production of lighter products, in particular low-sulphur distillates.

In 2011, TOTAL and BASF purchased Shell's stakes in Sabina, a butane processing plant, which they transferred to BTP (40%), their joint subsidiary that owns the Port Arthur steam cracker. This new structure increases synergies between the refinery and the steam cracker, which are located on the same site in Port Arthur. Furthermore, from April 2013, the BTP cracker will be able to produce up to 35% of its ethylene from ethane and 35% from butane, which will allow it to benefit from favorable market conditions in the United States.

3.1.1.3. Asia and the Middle East

TOTAL is continuing to expand in growth areas and is developing sites in countries with favorable access to raw materials.

In **Saudi Arabia**, TOTAL and Saudi Arabian Oil Company (Saudi Aramco) created a joint venture in 2008, Saudi Aramco Total Refining and Petrochemical Company (SATORP) held by Saudi Aramco (62.5%) and TOTAL (37.5%), to build a 400 kb/d refinery in Jubail. TOTAL and Saudi Aramco each plan to retain a 37.5% interest, with the remaining 25% expected to be listed on the Saudi stock exchange. The main contracts for the construction of the refinery were signed in mid-2009, concurrent with the start-up of work. Gradual commissioning of the different units is expected in 2013.

The configuration of this refinery is designed for processing heavy crudes produced in Arabia and selling fuels and other light products that meet strict specifications and that are mainly intended for export. The refinery is also integrated with the petrochemical units: a 700 kt/y paraxylene unit, a 200 kt/y propylene unit, and a 140 kt/y benzene unit.

In **China**, TOTAL holds a 22.4% stake in WEPEC, a company that operates a refinery located in Dalian and produces also polypropylene.

The Group is also active through its polystyrene plant in Foshan (Guangzhou region), the capacity of which doubled to 200 kt/y at the beginning of 2011. TOTAL decided to build a new 200 kt/y polystyrene plant in Ningbo in the Shanghai region that is scheduled to start up in 2014.

In **South Korea**, TOTAL holds a 50% stake in Samsung Total Petrochemicals Co., Ltd., which operates the petrochemical site located in Daesan (condensate splitter, steam cracker, styrene, paraxylene, polyolefins). The joint venture completed in mid-2011 the first debottlenecking phase of the units at the Daesan site, with the aim of bringing them to full capacity. This first phase included increasing the capacity of the steam cracker to 1,000 kt/y and the polyolefin units to 1,150 kt/y. A second phase took place in September 2012 and involved increasing the capacity of the paraxylene unit to 700 kt/y.

In addition, to keep up with growth in the Asian markets, two major investments have been approved for planned start-up in 2014: a new 240 kt/y EVA[1] unit and a new aromatic unit with a capacity of 1.5 Mt/y of paraxylene and benzene, the raw material of which will be supplied by a new condensate splitter that will also produce kerosene (1.5 Mt/y) and diesel (1.0 Mt/y). As a result, the site's paraxylene production capacity will be increased to 1.8 Mt/y. Overall, these projects should result in the plant doubling its production capacity between 2011 and 2015.

In **Qatar**, the Group holds interests[2] in two steam crackers (Qapco, Ras Laffan) and four polyethylene lines (Qapco, Qatofin). A linear low-density polyethylene plant with a capacity of 450 kt/y, which is operated by Qatofin in Messaied, started up in 2009. An ethane-based steam cracker in Ras Laffan, designed to produce 1.3 Mt/y of ethylene, started up in 2010. The new 300 kt/y low-density polyethylene line operated by Qapco was commissioned in the third quarter 2012.

TOTAL holds a 10% stake in the Ras Laffan condensate refinery, which has a capacity of 146 kb/d. Plans to double the refinery's capacity are being studied.

(1) Ethylene and vinyl acetate copolymers.
(2) TOTAL interests: Qapco 20%; Qatofin 49%; Ras Laffan Olefin Cracker 22.5% along with Qatar Petroleum.

3.1.1.4. Crude oil refining capacity

The table below sets forth TOTAL's daily crude oil refining capacity:

As of December 31, (kb/d)	2012	2011	2010
Nine refineries operated by Group companies			
Normandy (100%)[a]	247	247	338
Provence (100%)	153	153	153
Donges (100%)	219	219	219
Feyzin (100%)	109	109	109
Grandpuits (100%)	101	101	101
Antwerp (100%)	338	338	338
Leuna (100%)	227	227	227
Lindsey-Immingham (100%)	207	207	207
Port-Arthur (100%)	169	169	169
Subtotal	**1,770**	**1,770**	**1,861**
Other refineries in which the Group has equity stakes[b]	278	326	598
Total	**2,048**	**2,096**	**2,459**

(a) 2010 capacity restated in accordance with the effective date of the final closure of a unit in 2011. End-2011 and end-2012 capacities take into account a distillation unit debottlenecking.
(b) TOTAL share in the eleven refineries in which TOTAL has equity stakes ranging from 10% to 55% (one in the Netherlands, in Germany, in China, in Qatar, in Italy, in Martinique and five in Africa). TOTAL divested its stake in CEPSA (four refineries) in 2011 and shut down the Rome refinery in 2012.

3.1.1.5. Refined products

The table below sets forth by product category TOTAL's net share of refined quantities produced at the Group's refineries[a]:

(kb/d)	2012	2011	2010
Gasoline	351	350	345
Aviation fuel[b]	153	158	168
Diesel and heating oils	734	804	775
Heavy fuels	160	179	233
Other products	338	335	359
Total	**1,736**	**1,826**	**1,880**

(a) For refineries not 100% owned by TOTAL, the production shown is TOTAL's equity share of the site's overall production.
(b) Avgas, jet fuel and kerosene.

3.1.1.6. Utilization rate

The tables below set forth the utilization rate of the Group's refineries:

On crude and other feedstock[a][b]	2012	2011	2010
France	82%	91%	64%
Europe (excluding CEPSA and TotalErg)	90%	77%	85%
Americas	99%	81%	83%
Asia	67%	67%	81%
Africa	75%	80%	76%
CEPSA and TotalErg[c]	58%	83%	94%
Average	**86%**	**83%**	**77%**

(a) Including equity share of refineries in which the Group has a stake.
(b) Crude + crackers' feedstock/distillation capacity at the beginning of the year.
(c) For CEPSA in 2011: calculation of the utilization rate based on production and capacity prorated on the first seven months of the year.

On crude[a][b]	2012	2011	2010
Average	82%	78%	73%

(a) Including equity share of refineries in which the Group has a stake.
(b) Crude/distillation capacity at the beginning of the year.

NB: utilization rates do not include Ras Laffan refinery contribution.

3.1.1.7. Petrochemicals: breakdown of TOTAL's main production capacities

As of December 31,

(in thousands of tons)				2012	2011	2010
	Europe	North America	Asia and Middle East[a]	Worldwide	Worldwide	Worldwide
Olefins[b]	5,318	1,264	1,457	8,039	7,097	7,060
Aromatics[c]	3,098	1,512	1,185	5,795	5,730	6,910
Polyethylene	1,180	445	614	2,239	2,094	1,948
Polypropylene	1,325	1,200	350	2,875	2,835	2,810
Polystyrene	587	700	308	1,595	1,555	1,350
Other[d]	295	-	63	358	358	858
Total	**11,803**	**5,121**	**3,976**	**20,900**	**19,668**	**20,935**

(a) Including interests in Qatar and 50% of Samsung Total Petrochemicals capacities.
(b) Ethylene + Propylene + Butadiene.
(c) Including Monomer Styrene.
(d) Mainly Monoethylene Glycol (MEG) and Cyclohexane.

End-2010 and end-2011 capacities were restated to take into account TOTAL's share in CEPSA as of end-2010 and other petrochemicals products.

3.1.1.8. Development of fuel and polymer production technologies not based on hydrocarbons

In addition to optimizing existing processes, TOTAL is exploring new ways for valorizing carbon resources, conventional or otherwise. A number of innovative projects are being examined, and entail defining access to the resource (nature, location, supply method, transport), the nature of the molecules and targeted markets (fuels, lubricants, petrochemicals, specialty chemicals), and the most appropriate, efficient and environmentally-friendly conversion processes.

3.1.1.8.1. Coal to polymers

TOTAL has developed know-how in the various processes used to convert coal into higher value products by gasification. These efforts allow a better understanding of the technological issues specific to each process, such as Fischer-Tropsch, methanol, di-methyl ether (DME) and methane, particularly in terms of energy optimization, water consumption and carbon capture.

TOTAL has been involved in the feasibility of a coal to olefin (CTO) conversion project, in partnership with the China Power Investment utility company. This project includes the innovative methanol-to-olefins (MTO/OCP) process tested on a demonstration unit basis in Feluy (Belgium), and would be located in Inner Mongolia (China).

In parallel, TOTAL pursues a program to develop new carbon capture and storage technologies to reduce the environmental footprint of the Group's industrial projects based on fossil energy.

In partnership with the French IFP Énergies Nouvelles (French Institute for Oil and Alternative Energies), TOTAL is involved in an R&D program related to chemical looping combustion, an innovative process to burn solid and gas feedstock that includes carbon capture at a very low energy cost. In 2010, this partnership resulted in the construction of a pilot at the Solaize site in France.

3.1.1.8.2. Biomass to polymers

TOTAL is involved in the development of processes dedicated or related to the conversion of biomass to polymers. The main area of focus is the development of a poly (lactic acid) (PLA) production technology through Futerro, a joint venture with Galactic, a lactic acid producer as well as developing a technology for dehydration of bio-alcohols into olefins (monomers for the manufacture of large conventional polymers), in collaboration with IFPen/Axens.

3.1.1.8.3. Biomass to fuels

TOTAL is a member of the BioTFuel consortium, the objective of which is to develop a chain for converting lignocellulose into fungible, sulphur-free liquid products through gasification and Fischer-Tropsch synthesis. To benefit from economies of scale, it will be possible to convert lignocellulosic feedstock into a blend with fossil resources. This development involves an initial pilot demonstration phase.

TOTAL has also been involved in the Swedish BioDME project, which aims to demonstrate the feasibility of the entire chain, from DME production through gasification of biomass (black liquor, residue from the paper industry) to logistics and tests on a fleet of fourteen dedicated trucks. Although the European program ended in late 2012, the tests on the fleet of trucks are continuing in 2013.

More generally, TOTAL is paying close attention to the emergence of the first second-generation biofuel production plants.

In 2012, the Group incorporated:

- in gasoline, 531 kt of ethanol[1] at its European refineries and several oil depots[2], compared to 494 kt in 2011 and 464 kt in 2010[3], and
- in diesel, 1,927 kt of VOME[4] at its European refineries and several oil depots[5], compared to 1,859 kt in 2011 and 1,737 kt in 2010[3].

(1) Including ethanol from ETBE (Ethyl-tertio-butyl-ether) and biomethanol from bio-MTBE (Methyl-tertio-butyl-ether), expressed in ethanol equivalent. Reference for bio content of ETBE and bio-MTBE is the RED directive.
(2) PCK and Zeeland Refinery included (TOTAL share).
(3) PCK and Zeeland Refinery included (TOTAL share).TotalErg (100% JV) included.
(4) VOME: Vegetable-oil- Methyl-ester. Including HVO (Hydrotreated vegetable oil).
(5) Including TotalErg's Rome and Trecate refinery/depots and TotalErg depots in Italy (100% TotalErg). PCK and Zeeland Refinery included (TOTAL share).

3.1.2. Fertilizers

Through its French subsidiary GPN, TOTAL manufactures and markets mostly nitrogen fertilizers made from natural gas.

In 2012, GPN's production was limited by the unavailability of the Rouen ammonia plant during primarily the first half of the year. This lack of availability had a negative impact on GPN's results.

In recent years, GPN's manufacturing system was updated through two investments: the construction of a nitric acid plant in Rouen, which started up in the second half of 2009, and a urea plant in Grandpuits, where production is stabilizing. This additional urea production will enable GPN to position itself in the growing markets of products that contribute to reducing nitrogen oxide emissions, including Adblue® for transportation applications.

In January 2012, the Group finalized the divestment of its stake in Pec-Rhin. GPN's mines and quarries business at the Mazingarbe site was divested in January 2011.

These actions are intended to improve the competitiveness of GPN by concentrating its operations on two sites with updated facilities and a production capacity above the European average.

TOTAL announced in February 2013 that it had received a firm offer from the Borealis Group for its fertilizing businesses in Europe. This offer will now be presented to the employees representatives concerned, as part of the information and consultation procedures.

3.1.3. Specialty chemicals

The specialty chemicals businesses include elastomer processing (Hutchinson), adhesives (Bostik) and electroplating chemistry (Atotech). They serve the automotive, construction, electronics, aerospace and convenience goods markets, for which marketing, innovation and customer service are key drivers. TOTAL markets specialty products in more than sixty countries and intends to develop by combining organic growth and targeted acquisitions. This development is focused on high-growth markets and the marketing of innovative products with high added value that meet the Group's Sustainable Development approach.

In 2012, the specialty chemicals businesses enjoyed a favorable business environment due to the resilience of the North American market and continued growth in emerging countries, despite such growth slowing down during the year. Although the situation deteriorated in Europe, it had no notable impact on earnings. In this context and on a like-for-like basis (excluding Resins), 2012 sales were €5.7 billion, a 7% increase compared to 2011.

The Hutchinson consumer goods business (Mapa® and Spontex®) was divested in spring 2010.

The Cray Valley coating resins and Sartomer photocure resins businesses were divested in July 2011. Sales for the divested lines of business were €860 million in 2010. The hydrocarbon and structural resins business lines were kept and have been incorporated into the Petrochemicals division.

3.1.3.1. Elastomer processing

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

Among the industry's leaders worldwide[1], Hutchinson provides its customers with innovative solutions in the areas of fluid transfer, air and fluid seals, anti-vibration, sound and thermal insulation, and transmission and mobility.

Hutchinson has eighty production sites worldwide, including fifty-one in Europe, sixteen in North America, seven in South America, five in Asia and one in Africa.

In 2012, Hutchinson's sales were €3.17 billion, up 6% compared to 2011. Sales for the automotive business increased 5% due to significantly increased sales on the North American market and increased sales on the Latin American and Chinese markets. Sales in Europe fell slightly (-3%) compared to 2011. On the industrial markets, turnover increased 7% as a result of increased sales in the civil aviation, railway and offshore oil markets.

To strengthen its position in the aerospace industry, in early 2011 Hutchinson acquired Kaefer, a German company specializing in aircraft interior equipment (*e.g.*, insulation, ventilation ducts) and, at the end of 2012, the Canadian company Marquez specializing in air-conditioning circuits. In the automotive sector, in 2011, Hutchinson acquired Keum-Ah, a South Korean company specializing in fluid transfer systems. In 2012, Hutchinson announced the divestment of 30% of its automobile brake hose business in Palamos (Spain) through the creation of a joint venture with Japanese company Nichirin, one of the world leaders in this segment. Additionally, Hutchinson closed the Oyartzun production plant in Spain at the end of 2012.

Hutchinson continues to develop in strong growth potential markets and among the most dynamic strongest customers. Hutchinson continuously strives to innovate, offering its customers high-performance materials and high-value added solutions capable of performing the most demanding functions.

3.1.3.2. Adhesives

Bostik is one of the world leaders in the adhesive sector[1] and has significant positions in the industrial, hygiene and construction markets, complemented by both consumer and professional distribution channels.

Bostik has fourty-nine production sites worldwide, including twenty in Europe, nine in North America, eight in Asia, six in Australia-New Zealand, four in South America and two in Africa.

In 2012, sales were €1.55 billion, up 8% compared to 2011.

Bostik continues to strengthen its technological position in the construction and industrial sectors, accelerate its program for innovation focused on Sustainable Development, pursue its expansion in high-growth countries and improve its operational performance.

After the start-up of a new production unit in Vietnam in 2011, in 2012 Bostik commissioned a new production unit in Egypt and a third production unit in China, located at Changshu, which is expected to be Bostik's largest plant worldwide, and opened a new regional technology center for Asia in Shanghai.

(1) Based on publicly available information, 2012 consolidated sales.

In the United States, Bostik acquired StarQuartz in 2011, increasing its range of construction adhesives. Bostik is strengthening its position in growth areas with the acquisition in 2012 of Usina Fortaleza, a Brazilian company specializing in construction adhesives.

In France, Bostik announced in late 2011 an investment in a new specialty polyester adhesive production workshop in Ribécourt and, in October 2012, an investment in a new worldwide and regional R&D center near Compiègne. In addition, Bostik continued to rationalize its industrial base with the closure of the Ibos site in France at year-end 2011 and the announcement in the fourth quarter of 2012 of the shutdown of production, in mid-2013, at the sites in Dublin, Ireland, and Barcelona, Spain.

3.1.3.3. Electroplating

Atotech is the second largest company in the electroplating sector based on worldwide sales[1]. It is active in the markets for electronics (printed circuits boards, semiconductors) and general surface treatment applications (automotive, construction, furnishing).

Atotech has seventeen production sites worldwide, including seven in Asia, six in Europe, three in North America and one in South America.

In 2012, Atotech's sales were €0.97 billion, up 8% compared to 2011.

Atotech successfully pursued its strategy designed to differentiate its products through a comprehensive service provided to its customers in terms of equipment, processes, design and 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.

In order to strengthen its position in the electronics market, Atotech started up in 2011 a new production unit aimed at the semiconductors market in Neuruppin (Germany) and acquired adhesive technologies (molecular interfaces) in the nanotechnology domain in the United States.

Atotech intends to continue to develop in Asia, which represents already close to 65% of its global sales.

3.2. Trading & Shipping

Trading & Shipping's main focus is serving the Group, and its activities primarily involve:

- selling and marketing the Group's crude oil production;
- providing a supply of crude oil for the Group's refineries;
- importing and exporting the appropriate petroleum products for the Group's refineries to be able to adjust their production to the needs of local markets;
- chartering appropriate ships for these activities; and
- undertaking trading on various derivatives markets.

Trading & Shipping conducts its activities worldwide through various wholly-owned subsidiaries, including TOTSA Total Oil Trading S.A., Atlantic Trading & Marketing Inc., Total Trading Asia Pte, Total Trading and Marketing Canada L.P., Total Trading Atlantique S.A. and Chartering & Shipping Services S.A.

3.2.1. 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 Trading's worldwide crude oil sales and supply sources and refined products sales for each of the past three years.

Trading of physical volumes of crude oil and refined products amounted to 4.5 Mb/d in 2012.

Trading's crude oil sales and supply and refined products sales[a]

(kb/d)	2012	2011	2010
Group's worldwide liquids production	**1,220**	**1,226**	**1,340**
Purchased by Trading from Exploration & Production	976	960	1,044
Purchased by Trading from external suppliers	1,904	1,833	2,084
Total of Trading's supply	**2,880**	**2,793**	**3,128**
Sales by Trading to Refining & Chemicals and Marketing & Services segments	1,569	1,524	1,575
Sales by Trading to external customers	1,311	1,269	1,553
Total of Trading's sales	**2,880**	**2,793**	**3,128**
Total of Trading's refined products sales	**1,608**	**1,632**	**1,641**

(a) Including condensates.

(1) Based on publicly available information, 2012 consolidated sales.

Trading operates extensively on physical and derivatives markets, both organized and over the counter. In connection with its trading activities, TOTAL, like most other oil companies, uses derivative energy instruments (futures, forwards, swaps and 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 activities are subject to strict internal controls and trading limits.

In 2012, the oil market remained tight, with a slight increase in oil prices during the year and crude oil prices firmly in backwardation[1]. Freight rates improved slightly in 2012, despite the ever growing availability in charter capacities.

		2012	2011	2010	2012/11	min 2012		max 2012	
Brent ICE - 1st Line[a]	($/b)	111.68	110.91	80.34	0.7%	89.23	(Jun. 21)	126.22	(Mar. 13)
Brent ICE - 12th Line[b]	($/b)	106.66	108.12	84.61	-1.3%	91.40	(Jun. 21)	119.39	(Mar. 13)
Contango time structure (12th - 1st)[c]	($/b)	-5.01	-2.79	4.27	79.6%	-9.37	(Mar. 1)	2.17	(Jun. 21)
WTI NYMEX - 1st Line[a]	($/b)	94.15	95.11	79.61	-1.0%	77.69	(Mar. 13)	109.77	(Jul. 9)
WTI vs. Brent 1st Line	($/b)	-17.53	-15.80	-0.73	11.0%	-25.53	(Nov. 15)	-8.55	(Jan. 1)
Gasoil ICE - 1st Line[a]	($/t)	953.42	933.30	673.88	2.2%	808.00	(Jun. 25)	1 043.50	(Mar. 19)
ICE Gasoil vs ICE Brent	($/b)	16.30	14.36	10.11	13.5%	9.30	(Mar. 1)	23.62	(Oct. 19)
VLCC Ras Tanura Chiba - BITR[d]	($/t)	12.82	11.99	13.41	6.9%	9.05	(Jul. 19)	19.13	(Apr. 4)

(a) 1st Line: quotation on ICE or NYMEX Futures for first nearby month delivery.
(b) 12th Line: quotation on ICE Futures for twelfth nearby month delivery.
(c) Contango +/Backwardation -.
(d) VLCC: Very Large Crude Carrier. BITR: Baltic International Tanker Routes.

An overview of global oil markets in 2012 is set forth below.

Despite the challenging economic environment, oil demand underwent sound growth in 2012 (+1.0 Mb/d according to estimations), especially gasoil (+0.3 Mb/d) and gasoline (+0.5 Mb/d). Growth was concentrated in Asia (+0.9 Mbd), while demand shrank in the Atlantic Basin.

The new economic sanctions imposed against Iran in 2012 deprived the market of 0.7 Mb/d of crude supply on average. In spite of an otherwise abundant crude supply, the loss of Iranian crude oil sparked tensions during the first half of 2012 with certain countries restructuring their supplies and stockpiling (especially in China). The loss of Iran's crude supply was exacerbated by production losses in other OPEC and non-OPEC countries. Despite such production losses, OPEC crude oil production was estimated to have risen in 2012 by approximately +1.8 Mb/d, fuelled by the resumption of Libyan production and the production efforts of Saudi Arabia, Iraq, Kuwait and the United Arab Emirates. Non-OPEC production only rose by +0.6 Mb/d in 2012, driven upward by North America (+1.0 Mb/d), while production was down in most other regions. In particular, various problems affected supplies from Yemen (attacks on oil infrastructures), Syria (embargo), Sudan (disputes on transport tariffs), United Kingdom (accidents) and Brazil (accidents). NGL production (natural gas liquids) has increased according to estimations (+0.3 Mb/d), but biofuel production stagnated due to problems in Brazil.

After a relatively stable January 2012, the dated Brent price followed the trend spawned in Q4 2011 by quickly climbing from $110/b on January 31 to culminate in the year's highest price of $128/b on March 8. The price then fell steadily to $89/b around June 25, due to abundant supply in the market and a rapid increase in inventories. Prices took off again during Q3 2012 following a major fall in stock levels, reaching $118/b on August 23 (the year's second highest price). Prices subsequently eased off before stabilizing around $110/b at the end of the year.

Global refining capacity rose overall by approximately +1.1 Mb/d, boosting refinery throughput by +1.0 Mb/d. Refiners faced an especially high level of unscheduled shutdowns, but that did not prevent them from increasing their utilization rates, particularly in Europe and the United States. Product supply remained tight, and OECD oil industry inventories fell to their lowest level in seven years by the end of June. Such tensions increased the price differential between diesel fuel and crude oil.

2012 was once again marked by a widening of the price differential between WTI crude (West Texas Intermediate, confined to the central United States) and Brent crude (delivered in the North Sea and accessible internationally). Brent crude especially came under tension due to extended maintenance at the Buzzard field in the North Sea and regular cargo exports to South Korea. In 2012, WTI continued to experience downward pressure from a rise in local production and exports from Canada, the combination of which exceeded local refining capacity requirements and pipeline capacities to American refineries in the Gulf of Mexico. WTI prices fell during 2012, while Brent prices continued to rise, thereby widening their price differential.

3.2.2. Shipping

The transportation of crude oil and refined products necessary to develop the Group's activities is arranged by Shipping. These needs are met through transactions on the spot market and the development of a balanced time charter policy. Shipping's rigorous safety policy is due mainly to the strict selection of the vessels that it charters. Like a certain number of other oil companies and shipowners, the Group uses freight rate derivative contracts to adjust its exposure to freight rate fluctuations.

(1) "Backwardation" is a term used to describe an energy market in which the anticipated value of the spot price in the future is lower than the current spot price. The reverse situation is described as "contango".

In 2012, Shipping chartered more than 3,000 voyages to transport approximately 115 Mt of crude oil and refined products. As of December 31, 2012, it employed a fleet of fifty-one vessels, none of which were single-hulled, that were chartered under long-term or medium-term agreements (including ten LPG carriers). The fleet has an average age of approximately five years.

Freight rate averages of three representative routes for crude transportation

		2012	2011	2010	min 2012		max 2012	
VLCC Ras Tanura Chiba-BITR[a]	($/t)	12.82	11.99	13.41	9.05	(Jul. 19)	19.13	(Apr. 4)
Suezmax Bonny Philadelphia-BITR	($/t)	14.44	13.86	14 .50	11.52	(Dec. 7)	21.99	(Mar. 15)
Aframax Sullom Voe Wilhemshaven-BITR	($/t)	6.48	6.51	6.39	5.98	(Aug. 20)	8.65	(Jan. 19)

(a) VLCC: Very Large Crude Carrier. BITR: Baltic International Tanker Routes.

The year 2012 was difficult for the oil shipping business with heightened activity levels during the first half of the year in strong contrast to those of the second half of the year. At the same time, marine fuel attained record-breaking levels with a strong knock-on effect on transport costs.

In the first half of 2012, VLCC crude transportation increased by nearly 10% compared to the first half of 2011 due to high exports from the Persian Gulf to the United States and stockpiling in China. At the same time, growth of the fleet was offset by the large number of delayed deliveries and the high demolition rate. The balance between supply and demand improved, allowing rates to rise substantially.

The situation worsened considerably during the second half of the year, mirroring the same situation witnessed in 2011. Following the loss of the economic effects felt during the first half of the year, charter rates plummeted at the beginning of the summer, leaving the crude transportation market at a historic low.

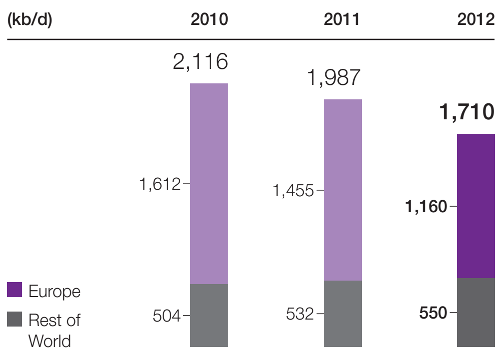
With regard to the product tanker market, the situation has generally improved compared to 2011. Arbitrage in favor of longer routes, especially to Asia, has been beneficial for larger-sized vessels.

4. Marketing & Services segment

In October 2011, the Group announced a proposed reorganization of its Downstream and Chemicals segments. The reorganization became effective on January 1, 2012, with the creation of a Marketing & Services segment which is dedicated to worldwide supply and marketing activities in the oil products field. Since July 1, 2012, it includes the activities of New Energies. As a result, certain information has been restated according to the new organization.

- Among the **largest** marketers in Western Europe[(1)]
- **No.1** marketer in Africa and the Middle East[(1)]
- **14,725** service stations at year-end 2012 (excluding AS24 service stations)
- **€1.3** billion invested in 2012
- **26,071** employees

2012 refined products sales[(a)]



(a) Excludes trading and refining bulk sales, includes share of CEPSA through July 31, 2011, and of TotalErg.

For 2012, the decrease in sales of 14% compared to 2011 was almost entirely attributable to the sale of the Group's interest in CEPSA and the sale of marketing activities in the United Kingdom. Excluding these portfolio effects, sales would have decreased by 1% on an annual basis with a notable decrease in Europe (3%) partially offset by increased sales in Asia and the Middle East.

Marketing & Services segment financial data

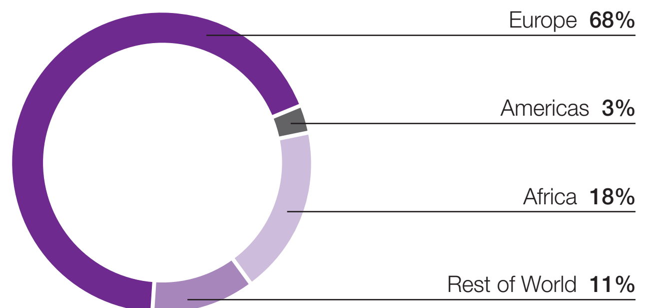
(M€)	2012	2011	2010
Non-Group sales	86,614	85,325	75,580
Adjusted operating income	1,365	1,187	1,310
Adjusted net operating income	837	813	981
Contribution of New Energies	(169)	(197)	n/a

For 2012, Marketing & Services segment sales were €86.6 billion, an increase of 2% compared 2011.

Adjusted net operating income from the Marketing & Services segment was €837 million in 2012, an increase of 3% compared to €813 million in 2011. This increase is explained principally by the improved performance of New Energies. Marketing activities continued to provide stable results despite sales volumes generally decreasing, due in particular to improved results from activities in the Asia-Pacific and Eastern European regions.

The ROACE[(2)] for the Marketing & Services segment was 12% for 2012, compared to 13% for 2011.

2012 refined products sales by geographical area: 1,710 kb/d[(a)]



(a) Excludes trading and refining bulk sales, includes share of TotalErg.

(1) Based on publicly available information based on quantities sold.
(2) Calculated based on adjusted net operating income and average capital employed, using replacement cost.

4.1. Marketing & Services

TOTAL is one of the leading marketers in Western Europe[1]. It is also the leader[2] on the African continent and in the Middle East.

TOTAL sells a wide range of products produced from its refineries and other facilities. TOTAL is among the leading companies in the specialty products market, in particular for lubricants, LPG, jet fuel, special fluids, bitumen, heavy fuels and marine fuels, with products marketed in approximately 150 countries[3].

TOTAL also sells numerous services for consumers and professionals in the mobility, residential and industrial sectors.

As part of its activities, Marketing & Services holds stakes in five refineries in Africa, one in Europe, through its share in TotalErg (49%), and one in the Caribbean.

Marketing & Services restructured its organization in 2012 in order to achieve its ambitions for growth. Marketing & Services now comprises four geographical divisions: Europe, Africa-Middle East, Asia-Pacific and the Americas. An operational division was set up to manage activities that are worldwide by nature due to their markets, customers and offers. The functional divisions were adapted in order to support the attainment of growth targets.

4.1.1. Europe

In Europe, TOTAL has a network of more than 9,100 service stations in France, Belgium, the Netherlands, Luxembourg and Germany, as well as in Italy through its share in TotalErg (49%).

TOTAL also operates a network of 700 AS24-branded service stations dedicated to commercial transporters in twenty-seven European countries. In 2012, the Group continued to develop its network of service stations by entering the market in Georgia. The AS24 network is expected to continue to grow, mainly through expansion in the Mediterranean Basin and Russia and through its toll payment card service, which covers more than sixteen countries.

TOTAL is among the leaders in Europe for fuel-payment cards, with approximately 3.5 million cards issued in twenty-seven European countries.

In specialty products, the Group benefits from its extensive presence in continental Europe and relies on numerous industrial facilities to produce lubricants (mainly Rouen in France and Ertvelde in Belgium), special fluids (Le Havre in France), bitumen (Brunsbüttel in Germany) and grease (Lille in France).

In **Western Europe**, TOTAL continued to optimize its Marketing business in 2012.

– In **France**, the dense network includes almost 1,850 TOTAL-branded service stations and 1,650 Elan service stations which are located mainly in rural areas. In October 2011, TOTAL launched "Total access", a new service station concept combining low prices with TOTAL brand fuel and service quality. By the end of 2012, 316 Total access stations had been opened out of the 600 planned for the end of 2013. The 121 Elf stations remaining at the end of 2012 will be converted into Total access service stations in 2013.

TOTAL leads the heating oil market in France[4], with eight local subsidiaries covering the entire country. TOTAL continued its diversification strategy in 2012, with the commercial launch of wood pellets and services with fioulmarket.fr, France's first website for online heating oil sales to consumers.

TOTAL completed the adaptation of its logistics assets in 2012 with the closure of the Brive, Chambéry and BTT Honfleur depots and the transfer of the operations of the Lorient and Lyon depots to third parties, and strengthened its position in eastern France by acquiring an 18% interest in the Strasbourg depot owned by Société Européenne de Stockage. As a result of this adaptation, TOTAL now holds stakes in twenty-three depots, of which it operates eight.

– In **Italy**, as part of the optimization of the Group's downstream portfolio in Europe, TotalErg (49%) was created in autumn 2010 through the merger of Total Italia and ERG Petroli. TotalErg has become the third largest operator in the Italian market with a network market share of nearly 12%[5] and more than 3,150 service stations. Production at the Rome refinery, owned by TotalErg, was stopped in October 2012 and the site will be converted into a logistics hub for petroleum products storage.

– In October 2011, TOTAL sold its network of service stations and its fuel and heating oil marketing business in the **United Kingdom**, the Channel Islands and the Isle of Man. TOTAL retains a market presence in the United Kingdom through its specialty products activities, particularly lubricants and aviation fuel.

In **northern, central and eastern Europe**, TOTAL continued in 2012 to expand its direct presence in these growing markets, in particular for lubricants and bitumen. The Group is seeking to speed up the growth of its specialty products business, mainly in Russia, and to consolidate its production units in the region.

4.1.2. Africa & the Middle East

TOTAL is the leading marketer of petroleum products on the African continent and in the Middle East, with a market share of 12%[6] in 2012. The Group operates almost 4,500 service stations in more than forty countries in these high-growth markets, as well as major networks in South Africa, Turkey, Nigeria, Kenya and Morocco.

In November 2012, TOTAL was granted a distribution license in Jordan that paves the way for a rapid development of a network of service stations and a wholesale business. As part of the optimization of its portfolio, the Group divested its subsidiary in Benin in late 2010.

Moreover, TOTAL has become a leading partner for mining customers by delivering supply chain and management solutions for fuels and lubricants.

In 2012, TOTAL strengthened its logistics in western Africa. The Group increased its stake in the Senstock storage company in Senegal from 25% to 35% and is developing an import terminal project in Ghana.

(1) Publicly available information, based on quantities sold (2011).
(2) PFC Energy and Company data.
(3) Including via national distributors.
(4) CPDP 2012 and Company data.
(5) PFC Energy: Italy report 2012.
(6) Market share in the countries where the Group operates, based on 2012 publicly available information, quantities sold.

TOTAL is pursuing its strategy for growth on the specialty products markets. The Group, which relies in particular on the lubricants blending plant in Dubai, started up a new plant in Egypt in November 2012.

4.1.3. Asia-Pacific

At year-end 2012, TOTAL was present in nearly twenty countries in the Asia-Pacific region, primarily in the specialty products market. The Group is developing its position as a fuel marketer in the region, in particular in China. TOTAL operates service stations in Pakistan, the Philippines, Cambodia and Indonesia, and is a significant player in the Pacific Islands.

In China, the Group operated nearly 175 service stations at year-end 2012 through two TOTAL/Sinochem joint ventures.

In India, TOTAL inaugurated its first lubricants, bitumen, special fluids and additives technical center outside Europe in September 2012.

In Vietnam, TOTAL continues to strengthen its position in the specialty products market. The Group became one of the leaders in the Vietnamese LPG market with the acquisition of Vinagas in June 2012.

In the lubricants sector, TOTAL continues to grow in the region, with a 6.4% increase in lubricant sales in 2012 compared with 2011. The Group is building in Tianjin its third lubricants blending unit in China. Commissioning is expected in the first half of 2013.

Finally, the Group also extended its commercial footprint with the creation of a branch in Papua New Guinea in December 2012.

4.1.4. Americas

In Latin America and the Caribbean, TOTAL is active in about twenty countries in the specialty products markets (lubricants and special fluids) and in the major products sector (retail, wholesale, aviation). The Group holds a significant position[1] in the fuel distribution business in the Caribbean.

In the United States and Canada, TOTAL mainly markets specialty products, in particular lubricants, and is continuing to grow since the acquisition at year-end 2009 of lubricant assets in the province of Quebec in Canada. The Group is also looking into the construction of a special fluids production plant in Texas.

TOTAL operates a significant number of industrial units throughout the Americas and the Caribbean (production of lubricants, storage and conditioning of LPG).

(1) Fuel distribution in three of the four main opened markets in the region.

4.1.5. Sales of refined products

The table below sets forth TOTAL's sales of refined products by region:

(kb/d)	2012	2011	2010
France	566	574	606
Europe, excluding France[a]	594	881	1,006
Americas	53	56	53
Africa	307	304	292
Rest of the World	190	172	159
Total excluding Trading and refinery bulk sales	**1,710**	**1,987**	**2,116**
Trading	1,161	1,215	1,281
Refinery bulk sales	532	437	379
Total including Trading and refinery bulk sales	**3,403**	**3,639**	**3,776**

(a) Including TOTAL's share in CEPSA (up to end of July 2011) and, as from October 1, 2010, in TotalErg.

For data on biofuels, refer to Chapter 2, paragraph 3.1.1.8.

4.1.6. Service stations

The table below sets forth the number of service stations of the Group (excluding AS24):

As of December 31,	2012	2011	2010
France[a]	3,911	4,046	4,272
Europe, excluding France	5,200	5,375	7,790
of which TotalErg	3,161	3,355	3,221
of which CEPSA	-	-	1,737
Africa	3,601	3,464	3,570
Rest of the World	2,013	1,934	1,858
Total	**14,725**	**14,819**	**17,490**

(a) TOTAL, Total access, Elf and Elan-branded service stations.

4.1.7. Product and services developments

In 2012, TOTAL continued its technical and R&D partnerships in Formula 1 with Renault Sport F1 and in the WRC with Citroën Sport, and it entered into a partnership with Toyota in endurance racing. The purpose of these partnerships is to demonstrate TOTAL's technical excellence in the formulation of fuels and lubricants under extreme conditions and restrictions on fuel consumption. The TOTAL brand was associated with four world titles in 2012.

TOTAL continued its Clean Energy Partnership in Germany, centered on hydrogen distribution. An experimental service station, located near TOTAL Deutschland's new head office in Berlin, was completed in 2012. A new hydrogen station should be opened in 2013 near Berlin's new airport. The "H2 Mobility" study, looking into the potential deployment of a hydrogen fuel distribution network in Germany by 2015-2020, was completed. TOTAL has now entered negotiations between industrial partners with a view to implementing the business plan based on the study.

The number of prototype electric vehicle fueling stations (fast charge) is also increasing. Today, TOTAL has around twenty charging stations in the Netherlands, Belgium, Germany and France.

In 2012, TOTAL launched a program of six experimental pilot schemes of multi-energy and energy services offers designed to encourage reductions in consumption, to develop hybrid fuel/photovoltaic technical solutions and to facilitate access to energy in rural Africa.

4.2. New Energies

New Energies is developing renewables that will complement hydrocarbons so as to meet the increasing global demand for energy. In meeting this objective, the Group has two main focuses: solar energy, which benefits from unlimited energetic resources and is expected to play a key role by 2030, in particular in certain geographical zones where the Group has a significant presence, and the transformation of biomass, which aims to develop new bio-sourced product solutions for the Group's downstream markets, Marketing & Services and Refining & Chemicals. An active watch is kept on other technologies, such as marine energy.

4.2.1. Solar energy

TOTAL is developing upstream operations through industrial production and downstream marketing activities in the photovoltaic sector based on crystalline silicon technology. The Group is also pursuing R&D in this field through several partnerships, as well as in the concentrated solar power field.

4.2.1.1. Solar photovoltaic

The photovoltaic industry has undergone significant changes since 2011, with the disappearance of numerous players and cuts in subsidy programs prompted by the collapse of prices and excess production capacity. The competitiveness of photovoltaic solar energy has been strengthened by the significant drop in the cost of modules over the past eighteen months, which should cause its share of the energy mix rise while helping to cut greenhouse gas emissions at the same time.

4.2.1.1.1. SunPower

TOTAL now holds 66% of SunPower, a U.S. company based in San Jose, California, and listed on NASDAQ (NASDAQ: SPWR), following a friendly takeover bid in June 2011 and a capital increase in January 2012 in conjunction with SunPower's integration of Tenesol, TOTAL's long-established solar subsidiary present mainly in Europe and Africa.

SunPower is an integrated player that designs, manufactures and supplies the highest-efficiency solar panels in the market. It is active throughout the solar chain, from cell production based on crystalline silicon to the design and construction of turnkey large power plants, passing by the commercialization of solar solutions for residential and commercial markets.

Upstream, SunPower manufactures all of its cells in Asia (Philippines, Malaysia) and has a total production capacity of 1,200 MW/y. The company is continuing to adjust its production capacity while maintaining its technological leadership. The cells are assembled into modules, or solar panels, in plants located in Asia, North America, Europe and South Africa.

Downstream, SunPower is present in most major geographic markets (United States, Europe, Australia, Asia and Africa), with operations ranging from residential roof tiles to large solar power plants.

4.2.1.1.2. Photovoltech

TOTAL holds a 50% interest in Photovoltech, a Belgian company specialized in manufacturing multicrystalline photovoltaic cells. Against the crisis context, the company, which suffered structural losses, is in the process of closing down.

4.2.1.1.3. Other assets

The overseas activities previously operated by Tenesol are now managed by Sunzil, in which TOTAL holds a 50% stake.

Elsewhere, the Group is continuing its projects to display solar application solutions as part of decentralized rural electrification projects in a number of countries, including in South Africa via Kwazulu Energy Services Company (KES), in which TOTAL holds a 35% stake.

4.2.1.2. Concentrated solar power

TOTAL won in 2010 the call for tenders for the construction and 25-year operation of a 109 MW concentrated solar power plant in Abu Dhabi. The Shams project (20%) is being carried out in partnership with Masdar through the Abu Dhabi Future Energy Company (ADFEC). Construction work started in July 2010 and the plant started up in early 2013. The production will be sold to Abu Dhabi Water and Electricity Company (ADWEC).

4.2.1.3. New solar technologies

In order to strengthen its technological leadership in the crystalline silicon field, TOTAL invests considerable efforts in R&D programs through a partnership network with major laboratories and international research institutes in France and abroad operated by mixed research teams.

They are tasked with optimizing the photovoltaic solar chain (silicon, wafers, cells, modules and systems) by cutting production costs and multiplying its applications, while increasing the efficiency of the components in terms of electric conversion.

The IMEC (Interuniversity MicroElectronics Center – Belgium) research center hosts an R&D team from TOTAL and is involved in research programs looking into the reduction of quantities of silicon required by cells and the improvement of their efficiency.

TOTAL is also conducting researches into next-generation photovoltaic cells and modules through a partnership with the *École Polytechnique*'s Laboratory of physics of interfaces and thin layers which is specialized in plasma-deposition processes at low temperatures. Following on from this partnership, in March 2012, TOTAL and EDF, the CNRS and the *École Polytechnique* announced the creation of the IPVF (Institut photovoltaïque d'Île-de-France), created to become one of the top five worldwide centers conducting research into latest-generation photovoltaic devices.

Another team from TOTAL is collaborating with scientists from the LAAS-CNRS (*Laboratoire d'Analyse et d'Architecture des Systèmes*) in Toulouse, France, on improving module energy performance through a system-based approach.

With respect to electricity storage, TOTAL continues its research program started in 2009 with a laboratory from the Massachusetts Institute of Technology (MIT) in the United States to develop a new battery technology. TOTAL also invested in 2011 in the Ambri start-up which comes from the same laboratory.

The difficulties experienced in improving the technology developed by AEP Polysilicon Corporation (AEP) (30%) to produce solar-quality silicon resulted in the project being abandoned and the industrial pilot being shut down. The Konarka Technologies Inc. start-up (25%) did not succeed in raising the capital needed to the continuation of its activities is being wound up.

4.2.2. Biotechnologies and the conversion of biomass

TOTAL is exploring a number of avenues for developing biomass transformation, which vary depending on the resource used, markets targeted (fuels, lubricants, petrochemicals, specialty chemicals, etc.) and the nature of the conversion processes. New Energies has chosen to target one out of the two primary conversion processes: biochemicals.

Since 2010, TOTAL has been pursuing its strategic biotechnologies partnership with Amyris Inc., an American company (NASDAQ: AMRS) specializing in this domain. The Group holds an 18.5% stake in the company as of December 31, 2012, and entered into a collaboration agreement regarding research, development, production and commercialization of new bio-based molecules that will be used in the upstream markets of oil and green chemicals. A common R&D team will be implemented. Amyris owns a cutting-edge industrial synthetic biological platform designed to create and optimize micro-organisms that can convert sugars into molecules of interest through fermentation. Amyris also owns a research laboratory and pilot units in California as well as in Brazil. Amyris started its industrial production facility in Paraiso, Brazil, at the beginning of 2013.

In addition, the Group continues to develop a network of R&D partnerships in technology segments that are complementary with Amyris' platform (deconstruction of lignocelluloses, new biosynthesis processes, tools for metabolism engineering and processes linked to biochemicals routes), including with the Joint BioEnergy Institute (JBEI) (United States), Novogy (United States), the University of Wageningen (Holland) and the Toulouse White Biotechnology consortium (TWB) (France).

The Group is also assessing the potential of phototrophic processes and bio-engineering of microalgae. It entered into a partnership with Cellectis S.A. to conduct exploratory research on this field. The Group also takes part in the AlgaePark consortium (Netherland).

4.2.3. Other renewable energies

In wind power, TOTAL owns a 12 MW wind farm in Mardyck (near Dunkirk, France), which was commissioned in 2003.

In marine energy, TOTAL holds a 26.6% share in Scotrenewables Tidal Power, located in the Orkney Islands in Scotland. Tests are being conducted on a 250 kW prototype. A 2 MW commercial model is being developed.

5. Investments

5.1. Major investments over the 2010-2012 period[1]

(M€)	2012	2011	2010
Upstream	19,618	20,662	13,049
Refining & Chemicals	1,944	1,910	2,124
Marketing & Services	1,301	1,834	1,019
Corporate	80	135	81
Total	**22,943**	**24,541**	**16,273**

Organic capital expenditure, including net investment in equity affiliates and non-consolidated subsidiaries, amounted to $23.8 billion in 2012 (€18.5 billion[2]), compared with $20.6 billion in 2011 (€14.8 billion). In addition to this, $4 billion (€3.1 billion) was invested in acquisitions.

TOTAL investment (including acquisitions) therefore decreased from $34.2 billion (€24.5 billion) in 2011 to $29.5 billion (€22.9 billion) in 2012. The decrease in capital expenditure comes mainly from the Upstream and Marketing & Services segments. While continuing to develop its major Exploration & Production projects in 2012, the Group significantly reduced the amount spent on acquisitions, which came to $4 billion in 2012 compared with more than $12 billion in 2011. These acquisitions were primarily in the Upstream Segment, and included in particular the acquisition of interests in exploration and production licenses in Uganda, an additional 1.3% stake in Novatek, various exploration licenses and the carry agreement in the Utica shale gas and condensates field in the United States. In the Refining & Chemicals segment, the Group also acquired a minority interest in Fina Antwerp Olefins.

In addition to these acquisitions, capital expenditure in the Upstream segment was mainly intended to develop new hydrocarbon production facilities, exploration operations and acquisition of new licenses. In 2012, development expenditure was devoted primarily to the following projects: GLNG and Ichthys in Australia, Surmont in Canada, the Ekofisk and Eldfisk areas in Norway and the Mahakam area in Indonesia, Kashagan in Kazakhstan; the Laggan Tormore projects in the United Kingdom, CLOV in Angola; Anguille and Mandji in Gabon and Ofon II in Nigeria.

In the Refining & Chemicals segment, capital expenditure was devoted to the maintenance of facilities and safety and to projects to increase the production of lighter products, add desulphurization capacities, adapt the refining base to new specifications and improve energy efficiency. 2012 was marked by the upgrading project at the Normandy refinery in France and ongoing construction of the Jubail refinery in Saudi Arabia.

In the Marketing & Services segment, capital expenditure in 2012 was mainly dedicated to the network, logistics and specialty production and storage facilities.

In 2012, asset sales totaled $5.9 billion compared with nearly $11 billion in 2011, comprised essentially of sales of the remainder of the Group's shares of Sanofi, a stake in the Gassled pipeline in Norway, Upstream assets in Nigeria, the United Kingdom, Colombia and France, as well as interests in Pec-Rhin and Geostock in France and in Composites One in the US.

5.2. Major investments anticipated

For the year 2013, TOTAL announced an organic capital expenditure budget[3] of $28 billion, over 80% of which is dedicated to the Upstream segment. A $23 billion capital expenditure in the Upstream segment is expected to be mainly dedicated to major development projects, including GLNG in Australia, Surmont in Canada, the Ekofisk and Eldkisk areas in Norway, Kashagan in Kazakhstan, the Laggan Tormore projects in the United Kingdom, CLOV in Angola, Ofon II in Nigeria and Moho North in Congo. Approximately 30% of the Upstream segment's overall capital expenditure budget is expected to be dedicated to maintenance and integrity work on assets already in production and 70% is intended for future projects and exploration.

In the Refining & Chemicals segment, the nearly $3 billion capital expenditure budget is expected to be dedicated to the refining, petrochemicals and specialty chemicals businesses. In particular, 2013 is expected to be marked by the ongoing construction and start-up of the Jubail refinery in Saudi Arabia. A significant portion of the segment's budget will also be allocated to maintenance and safety, which are vital to this type of industrial activity.

The Marketing & Services segment has a nearly $2 billion capital expenditure budget for 2013 to finance, in particular, the service station network, logistics, specialty production and storage facilities (lubricants, LPG, etc.) and the development of its activities in New Energies. Most of the Marketing & Services budget will be allocated to growth areas (Africa, Middle East, Asia and Latin America).

Beyond 2013, TOTAL plans to make sustained investments to support the growth of its activities, prioritizing the Upstream segment.

TOTAL self-finances most of its capital expenditure from cash flow from operations (see the consolidated statement of cash flow, Chapter 9, point 5.), which is essentially increased by accessing the bond market on a regular basis, when conditions on the financial markets are favorable (see Note 20 to the Consolidated Financial Statements, Chapter 9, point 7.). However, capital expenditure for joint ventures between TOTAL and external partners are generally funded through project financing.

For 2013, the Group has also announced that it wishes to divest certain assets from its portfolio, and its budget provides for asset disposals worth over $6 billion more than planned acquisitions.

(1) Major acquisitions and disposals for fiscal years 2010-2012 are detailed in Note 3 to the Consolidated Financial Statements of this Registration Document.
(2) Based on average exchange rates for 2012 of $1.2848/€.
(3) Including net investments in equity affiliates and non-consolidated companies, excluding acquisitions and divestments, based on €1 = $1.30 for 2013.

In November 2012, TOTAL announced the sale of the Group's interest in the offshore OML 138 Block in Nigeria, which includes the Usan field, and in February 2013 receipt of a firm offer and the start of exclusive negotiations with a consortium of buyers for the sale of TIGF, a natural gas transport and storage affiliate in France.

As part of certain project financing arrangements, TOTAL S.A. has provided guarantees. These guarantees ("Guarantees given on borrowings") as well as other information on off-balance sheet commitments and contractual obligations for the Group appear in Note 23 to the Consolidated Financial Statements (Chapter 9, point 7.). 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 to have in the future a material effect on the Group's financial situation, revenues or expenses, liquidity, capital expenditure or capital resources.

6. Organizational structure

6.1. Position of the Company within the Group

TOTAL S.A. is the Group's parent company. As of December 31, 2012, there were 883 consolidated subsidiaries, of which 803 were fully consolidated and 80 were accounted for under the equity method.

The decision of TOTAL S.A.'s major subsidiaries to declare dividends is made by their relevant Shareholders' Meetings and is subject to the provisions of applicable local laws and regulations. As of December 31, 2012, there is no restriction under such provisions that would materially restrict the distribution to TOTAL S.A. of the dividends declared by those subsidiaries.

As of December 31, 2012, the Group's businesses are organized as indicated on the chart in paragraph 8. of this Chapter. The Group's businesses receive assistance from Corporate divisions (Finance, Legal, Ethics, Insurance, Strategy & Business Intelligence, Human Resources and Communications) that are grouped within the parent company, TOTAL S.A.

6.2. Company subsidiaries

A list of the major subsidiaries directly or indirectly held by the Company is given in Note 35 to the Consolidated Financial Statements (Scope of Consolidation) in Chapter 9, point 7. of this Registration Document.

7. Property, plant and equipment

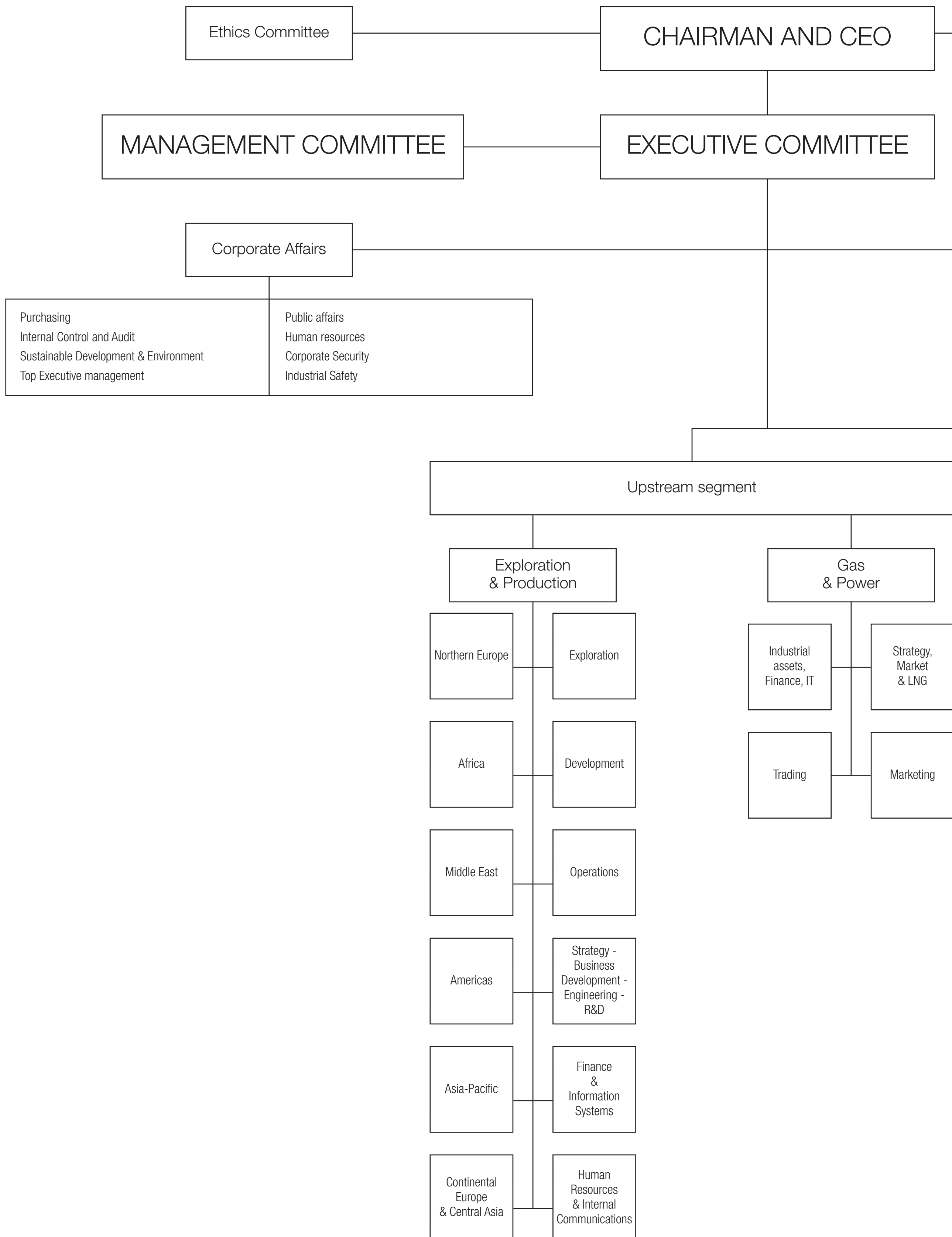
TOTAL has freehold and leasehold interests in over 130 countries throughout the world. Operations in properties, oil and gas fields or any other industrial, commercial or administrative facility, as well as the production capacities and utilization rates of these facilities, are described in this Chapter for each business segment (Upstream, Refining & Chemicals, Marketing & Services).

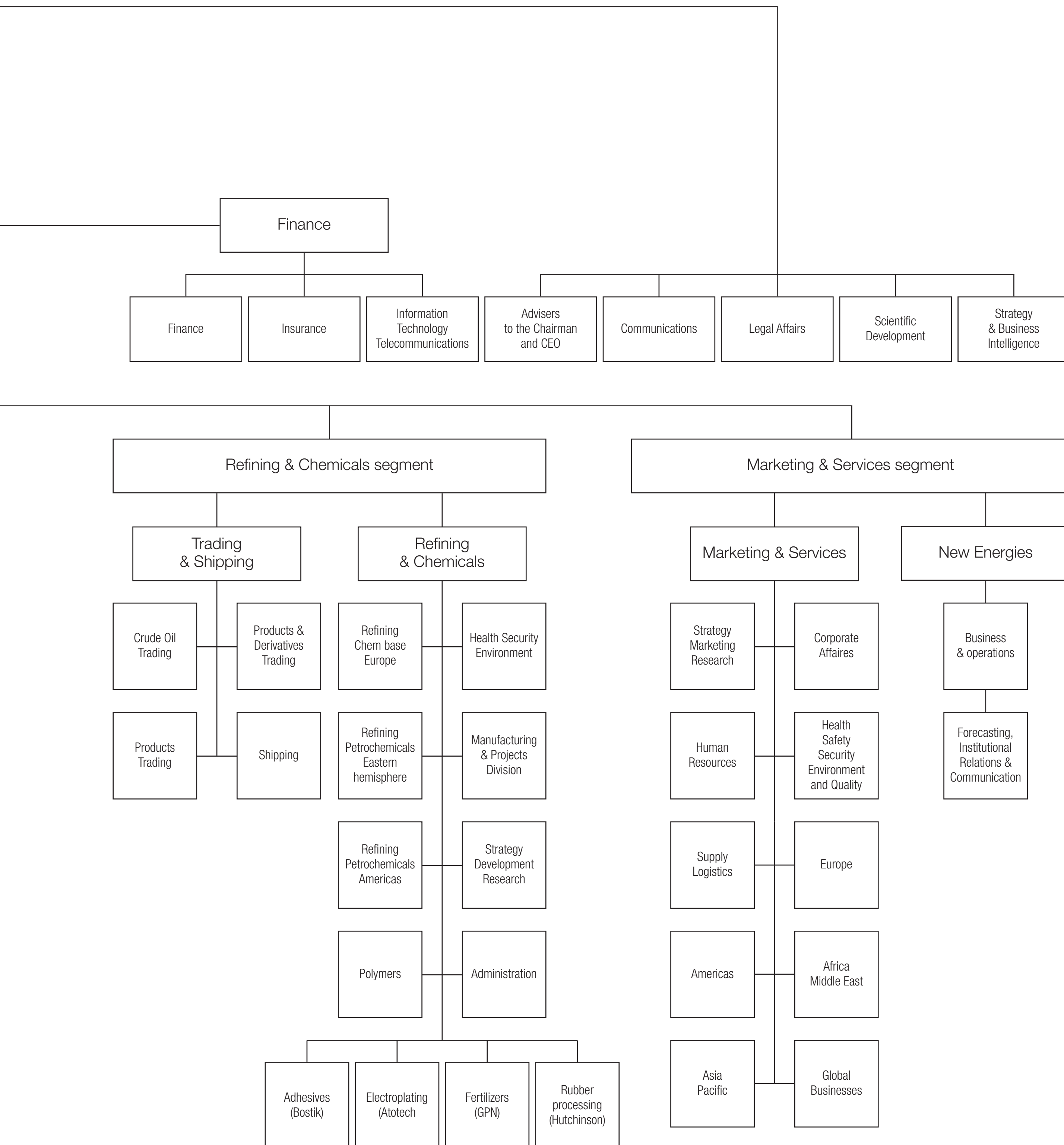
A summary of the Group's property, plant and equipment and their main related expenses (depreciation and impairment) is included in Note 11 to the Consolidated Financial Statements (Chapter 9, point 7.).

Minimum royalties from finance lease agreements regarding properties, service stations, vessels and other equipment are given in Note 22 to the Consolidated Financial Statements (Chapter 9, point 7.).

Information about the Company's environmental policy, in particular that related to the Group's industrial sites or facilities, is presented in Chapter 12 - Social and environmental information of this Registration Document.

8. Organization chart as of December 31, 2012




Finance
Finance
Insurance
Information Technology Telecommunications
Advisers to the Chairman and CEO
Communications
Legal Affairs
Scientific Development
Strategy & Business Intelligence
Refining & Chemicals segment
Marketing & Services segment
Trading & Shipping
Refining & Chemicals
Marketing & Services
New Energies
Crude Oil Trading
Products & Derivatives Trading
Products Trading
Shipping
Refining Chem base Europe
Health Security Environment
Refining Petrochemicals Eastern hemisphere
Manufacturing & Projects Division
Refining Petrochemicals Americas
Strategy Development Research
Polymers
Administration
Adhesives (Bostik)
Electroplating (Atotech
Fertilizers (GPN)
Rubber processing (Hutchinson)
Strategy Marketing Research
Corporate Affaires
Human Resources
Health Safety Security Environment and Quality
Supply Logistics
Europe
Americas
Africa Middle East
Asia Pacific
Global Businesses
Business & operations
Forecasting, Institutional Relations & Communication

Management Report

The Management report was approved by the Board of Directors on February 12, 2013 and has not been updated with subsequent events.

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1. Summary of results and financial position

1.1. Overview of the 2012 fiscal year for TOTAL

The year 2012 was marked by an economic slowdown that damped the oil demand from OECD countries. The dynamism of emerging countries and the needs brought about by the Fukushima accident in Japan however sustained the overall growth of the demand for oil products, particularly in Asia at the year end. Market supplies remained adequate mainly due to the increase in non-conventional oil production in North America, whereas the persistence of geopolitical factors put a strain on the supply. The average price of Brent therefore remained stable, standing at $111.7/b in 2012 against $111.3/b in 2011.

Gas spot prices remained stable in Europe and Asia in 2012, sustained by the demand on Asian markets. However, spot prices for gas in the United States dropped to very low levels due to the abundant supply of natural gas following the development of shale gas, further strengthened by associated gas production from the production of unconventional liquids.

The further progressive decline in European refining capacity combined with very high level of maintenance downtime in the global refining industry limited the overcapacity observed since 2009, thereby causing refining margins to rebound from $17/t in 2011 to $36/t in 2012[1]. Margins in petrochemicals in Europe declined on average over the year due to the drop in demand caused by the economic slowdown. On the other hand, in the United States, the petrochemicals segment benefited from the decrease in the prices of ethane and liquefied petroleum gases, driving a rebound in margins.

In this environment, TOTAL's adjusted net income amounted to €12.4 billion, up from the year 2011. This result essentially reflects the good performance of the segments, in an environment conducive to the Upstream segment and marked by a temporary but significant rebound in refining margins in the downstream segment. The Upstream segment's adjusted net operating income reached €11.2 billion in 2012, a 6% increase from the previous year, supported mainly by the change in the €-$ exchange rate. The Refining & Chemicals segment reported a 67% increase in its adjusted net operating income. This increase is primarily due to the increase in refining margins. Lastly, the Marketing & Services segment recorded a 3% increase in income compared with 2011.

The year 2012 was marked by a significant decline in acquisitions compared with 2011, and asset sales of $6 billion reflecting the Group's intention to optimize and simplify its portfolio, by developing its Upstream assets with high growth potential.

TOTAL benefited from the rise in its operating cash flow and the drop in acquisitions to fund its investments while increasing its dividend by nearly 3% to €2.34 per share, which will be submitted for approval to the Shareholders' Meeting on May 17, 2013. The balance sheet was further strengthened with a ratio of net debt to equity of 21% at the end of 2012 compared with 23% at the end of 2011.

In terms of operations, the Group had to deal with accidents in the North Sea and Nigeria in 2012, as well as safety issues in its facilities in Yemen which affected its productions. With responsibility and transparency, TOTAL reasserted the utmost priority it gives to the safety of operations and its commitment to environmental protection. It improved its safety performance further, with an 18% drop in the Group-wide TRIR[2] compared with 2011.

In the Upstream segment, four major discoveries in Argentina, the United States in the Gulf of Mexico, Nigeria and Norway were made as a result of the Group's bolder exploration strategy. The year 2012 also witnessed successful production start-ups especially in the fields of Usan, Islay, Bongkot South, Halfaya and South Mahakam. New major projects, such as Ofon II, Hild and Tempa Rossa, were launched in order to secure growth in the years to come. In 2012, the Group also extended its oil and gas acreage by obtaining licenses in promising exploration areas, particularly in Iraq, Bulgaria, Uruguay, Kenya and Kazakhstan.

At the same time, TOTAL disposed of certain mature or non-strategic Upstream assets, such as stakes in pipelines in Norway, its production subsidiary in Columbia or minority stakes in assets in Nigeria and the North Sea. It also announced the sale of its stakes in the OML 138 offshore Block in Nigeria including the Usan field.

In the Refining & Chemicals segment, TOTAL set out its strategy of increasing the competitive performance of its activities to boost the segment's profitability from 6% in 2010 to 13% in 2015 in the market environment of 2010, scaling down its exposure to mature zones, mainly Europe, and bolstering its presence in high-growth areas. Thus, the year 2012 witnessed advances in the modernization of the refinery in Normandy, France, and the construction of the Jubail refinery in Saudi Arabia slated to start production in 2013.

In the Marketing & Services segment, the Group restructured its organization in 2012 in order to achieve its ambitions for growth. It consolidated its leading position in the African continent and in the Middle-East notably with the development of its activities in Jordan and its sale of specialty products. In Europe, it continued to optimize its activities by deploying its new concept of Total Access in 300 service stations by the end of 2012. In the New Energies segment, TOTAL stepped up its efforts to enhance its competitiveness in the field of photovoltaic solar energy against a backdrop of profound changes in the industry, and at the end of 2012, it announced the commercial success of its subsidiary SunPower with the sale of the Antelope Valley project in the United States.

The process initiated in 2004 to increase R&D budgets continued with expenditures of €805 million in 2012, up 4% compared with 2011, with the aim, in particular, of the continued improvement of the Group's technological expertise in the development of oil and gas resources and the development of solar, biomass, carbon capture and storage technologies in order to contribute to changes in the global energy mix.

Finally, in 2012, TOTAL reasserted the priority on safety and the environment as part of its operations throughout its business. For all of its projects conducted in a large number of countries, the Group puts an emphasis on Corporate Social Responsibility (CSR) challenges and the development of the local economies.

(1) Based on TOTAL's "European Refining Margin Indicator".
(2) Total Recordable Injury Rate.

As of December 31, 2012, the Group's activities were conducted through three business segments as defined below:

- an Upstream segment including the activities of Exploration & Production and Gas & Power;
- a Refining & Chemicals segment that is a major production hub combining TOTAL's refining, petrochemicals, fertilizers and specialty chemicals operations. This segment also includes oil Trading & Shipping activities;
- a Marketing & Services segment including the global supply and marketing of oil products as well as New Energies activities.

Moreover, the Corporate segment includes the operating and financial activities of the holding companies. As a result of the reorganizations carried out in 2012, information by business segment for comparative periods has been adjusted according to the new organization in force as from December 31, 2012.

1.2. 2012 Group results

(M€)	2012	2011	2010
Sales	200,061	184,693	159,269
Adjusted operating income from business segments[a]	24,986	24,409	19,797
Adjusted net operating income from business segments[a]	13,437	12,263	10,622
Net income (Group share)	10,694	12,276	10,571
Adjusted net income (Group share)[a]	12,361	11,424	10,288
Fully-diluted weighted-average shares (millions)	2,267	2,257	2,244.5
Adjusted fully-diluted earnings per share (euros)[a][b]	5.45	5.06	4.58
Dividend per share (euros)[c]	2.34	2.28	2.28
Net-debt-to-equity ratio (as of December 31)	21%	23%	22%
Return on Average Capital Employed (ROACE)[d]	16%	16%	16%
Return on Equity (ROE)	18%	18%	19%
Cash flow from operations	22,462	19,536	18,493
Investments	22,943	24,541	16,273
Divestments	5,871	8,578	4,316

(a) Adjusted results are defined as income using replacement cost, adjusted for special items, excluding the impact of changes for fair value from January 1, 2011, and, through June 30, 2010 excluding TOTAL's equity share of adjustments related to Sanofi.
(b) Based on fully-diluted weighted-average number of common shares outstanding during the period.
(c) Dividend 2012 is subject to the approval by the Shareholder's Meeting on May 17, 2013.
(d) Based on adjusted net operating income and average capital employed at replacement cost (excluding after-tax inventory effect).

Market environment	2012	2011	2010
Exchange rate €-$	1.28	1.39	1.33
Brent ($/b)	111.7	111.3	79.5
European Refinery Margin Indicator (ERMI) [a] ($/t)	36.0	17.4	27.4

(a) ERMI is an indicator intended to represent the margin after variable costs for a hypothetical complex refinery located around Rotterdam in Northern Europe. 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 specific operating conditions.

Adjustments to operating income from business segments

(M€)	2012	2011	2010
Special items affecting operating income from the business segments	(2,342)	(873)	(1,394)
Restructuring charges	(2)	-	-
Impairments	(1,474)	(781)	(1,416)
Other	(866)	(92)	22
Effect of change in fair value	(9)	45	-
Pre-tax inventory effect (FIFO vs, replacement cost) [a]	(234)	1,215	993
Total adjustments affecting operating income from the business segments	**(2,585)**	**387**	**(401)**

(a) See Note 1N to the Consolidated Financial Statements.

Adjustments to net income (Group share)

(M€)	2012	2011	2010
Special items affecting net income (Group share)	(1,503)	(14)	(384)
Gain on asset sales	581	1,538	1,046
Restructuring charges	(77)	(122)	(53)
Impairments	(1,112)	(1,014)	(1,224)
Other	(895)	(416)	(153)
Equity share of adjustment items related to Sanofi[(a)]	-	-	(81)
Effect of changes in fair value	(7)	32	-
After-tax inventory effect (FIFO vs, replacement cost[(b)])	(157)	834	748
Total adjustments to net income (Group share)	**(1,667)**	**852**	**283**

(a) Effective July 1, 2010, Sanofi is no longer treated as an equity affiliate. TOTAL's share in Sanofi. TOTAL's share in Sanofi was 5.5% on December 31, 2010, and 0% on December 31, 2012.
(b) See Note 1N to the Consolidated Financial Statements.

1.2.1. Sales

Consolidated sales increased by 8% to € 200,061 million in 2012 from €184,693 million in 2011.

1.2.2. Operating income

On average, the oil market environment was stable compared to the previous year. For 2012, the average Brent price remained around 111.7 $/b and the average realized price of gas for the Group increased by 3% to 6.74 $/Mbtu, compared to 6.53 $/Mbtu in 2011. In the downstream, the ERMI increased to 36.0 $/t on average for 2012, compared to 17.4 $/t in 2011.

The euro-dollar exchange rate averaged 1.28 $/€ in 2012 compared to 1.39 $/€ in 2011.

In this environment, the adjusted operating income from the business segments was €24,986 million, an increase of 2% compared to 2011[(1)]. Expressed in dollars[(2)], the adjusted operating income for the business segments was $32.1 billion, a decrease of 6% compared to 2011, essentially due to lower Upstream results which were partially offset by improved results from Refining & Chemicals and Marketing & Services.

The effective tax rate[(3)], for the business segments was 55.2% in 2012 compared to 57.9% in 2011, essentially due to a decrease in the effective tax rate for Upstream and the increased contribution of downstream activities to the Group results.

Adjusted net operating income from the business segments was €13,437 million compared to €12,263 million in 2011, an increase of 10%.

Expressed in dollars, adjusted net operating income from the business segments increased by 1%. The fact that adjusted net operating income from the business segments increased in 2012 while the adjusted operating income from the business segments decreased compared to 2011 is explained mainly by the decrease in the effective tax rates in the two periods and an increase in the contribution of equity affiliates to adjusted results.

1.2.3. Net income (Group share)

Adjusted net income was €12,361 million in 2012, an increase of 8% compared to €11,424 million in 2011. Expressed in dollars, adjusted net income of $15.9 billion was stable compared to 2011.

Adjusted net income excludes the after-tax inventory effect, special items and the effect of changes in fair value:

- The after-tax inventory effect had a negative impact on net income of €157 million in 2012 and a positive impact of €834 million in 2011.
- Changes in fair value had a negative impact on net income of €7 million in 2012 and a positive impact of €32 million in 2011.
- Special items had a negative impact on net income of €1,503 million in 2012, comprised essentially of an impairment of assets in the Barnett in the US, provisions for abandonment costs relating to Elgin in the UK, a one-off tax of 4% on petroleum stocks in France, an impairment of chemicals assets in Europe, and a provision relating to a settlement agreement in progress with the SEC and DoJ in the US. These special items were partially offset by gains on asset sales. In 2011, special items had a negative impact of €14 million.

Net income (Group share) was €10,694 million compared to €12,276 million. The effective tax rate for the Group was 56.2% in 2012 compared to 58.4% in 2011. On December 31, 2012, there were 2,270.4 million fully-diluted shares compared to 2,263.8 million on December 31, 2011.

In 2012, adjusted fully-diluted earnings per share, based on 2,266.6 million fully-diluted weighted-average shares, was €5.45, an increase of 8% compared to €5.06 in 2011.

Expressed in dollars, adjusted fully-diluted earnings per share was $7.01 compared to $7.05 in 2011, a decrease of 1%.

1.2.4. Investments - divestments

Investments, excluding acquisitions and including changes in non-current loans, were €18.5 billion ($23.8 billion) in 2012 compared to €14.8 billion ($20.6 billion) in 2011, due to an increase in investments relating to new Upstream projects under development.

Acquisitions were €3.1 billion ($4.0 billion) in 2012, comprised essentially of the acquisition of interests in exploration and production licenses in Uganda, an additional 1.3% stake in Novatek[(4)], various

(1) Special items affecting operating income from the business segments had a negative impact of €2,342 million in 2012 and a negative impact of €873 million in 2011.
(2) Dollar amounts represent euro amounts converted at the average €-$ exchange rate for the period: 1.2848 $/€ for the full year 2012; 1.3920 $/€ for the full year 2011; 1.3257 $/€ for the full year 2010.
(3) Defined as: (tax on adjusted net operating income) / (adjusted net operating income – income from equity affiliates – dividends received from investments + tax on adjusted net operating income).
(4) The Group's interest in Novatek was 15.3% at December 31, 2012.

exploration licenses, the minority interest in Fina Antwerp Olefins and the carry agreement in the Utica shale gas and condensates field in the US.

For 2012, asset sales were €4.6 billion ($5.9 billion), comprised essentially of sales of the remainder of the Group's shares of Sanofi, a stake in the Gassled pipeline in Norway, Upstream assets in Nigeria, the UK, Colombia and France, as well as interests in Pec-Rhin and Geostock in France and in Composites One in the US.

Net investments were €17.1 billion ($21.9 billion) in 2012, compared to €16.0 billion ($22.2 billion) in 2011, an increase of 7%.

Expressed in dollars, net investments in 2012 decreased 1%, mainly due to a significant decrease in acquisitions compared to 2011.

1.2.5. Profitability

The ROACE for the Group for 2012 was 16%, stable compared to 2011. Return on Equity for 2012 was 18%, also stable compared to 2011, and 19% in 2010.

1.3. Upstream results

Environment - liquids and gas price realizations[a]	2012	2011	2010
Brent ($/b)	111.7	111.3	79.5
Average liquids price ($/b)	107.7	105.0	76.3
Average gas price ($/Mbtu)	6.74	6.53	5.15
Average hydrocarbons price ($/boed)	77.3	74.9	56.7

(a) Consolidated subsidiaries, excluding fixed margin. Effective first quarter 2012, over/under-lifting valued at market prices.

TOTAL benefited from favorable market conditions for Upstream in 2012. The Group's average realizations for liquids and gas rose by 3% during 2012 compared to 2011.

Hydrocarbons production	2012	2011	2010
Liquids (kb/d)	1,220	1,226	1,340
Gas (Mcf/d)	5,880	6,098	5,648
Combined productions (kboe/d)	2,300	2,346	2,378

In 2012, hydrocarbon production was 2,300 kboe/d, a decrease of 2% compared to 2011, essentially as a result of:

- +4.5% for start-ups and ramp-ups from new projects,
- -4% for normal decline,
- +1.5% for changes in the portfolio, comprised essentially of an increased share of Novatek production and the impact of the sale of CEPSA and assets in the UK, France, Nigeria, and Cameroon,
- -2% for incidents at Elgin in the UK North Sea and Ibewa in Nigeria,
- -1.5% for disruptions related to security conditions in Yemen and the production shut-down in Syria, net of the positive effect of the return of production in Libya, and
- -0.5% for price effect[1].

Year-end reserves	2012	2011	2010
Liquids (Mb)	5,686	5,784	5,987
Gas (Bcf)	30,877	30,717	25,788
Hydrocarbon reserves (Mboe)	11,368	11,423	10,695

Proved reserves based on SEC rules (based on Brent at 111.13 $/b) were 11,368 Mboe at December 31, 2012. Based on the 2012 average rate of production, the reserve life is more than 13 years.

The 2012 proved reserve replacement rate[2], based on SEC rules, was 93%.

The 2012 organic proved reserve replacement rate[3] was 100% in a constant price environment.

At year-end 2012, TOTAL had a solid and diversified portfolio of proved and probable reserves[4] representing more than 20 years of reserve life based on the 2012 average production rate, and resources[5] representing more than 45 years of production.

Effective July 1, 2012, the Upstream segment no longer includes the activities of New Energies, which are now reported with Marketing & Services. As a result, certain information has been restated according to the new organization.

Results (M€)	2012	2011	2010
Adjusted operating income	22,108	22,609	17,694
Adjusted net operating income	11,186	10,602	8,629
Cash flow from operating activities	18,950	17,044	15,617
Adjusted cash flow	18,306	17,661	14,176
Investments	19,618	20,662	13,049
Divestments	2,798	2,591	2,067
Return on Average Capital Employed[a]	18%	21%	-

(a) 2009 capital employed was not recalculated according the new organization.

Adjusted net operating income from the Upstream segment in 2012 was €11,186 million compared to €10,602 million in 2011, an increase of 6%. Expressed in dollars, adjusted net operating income from the Upstream segment was $14.4 billion, a decrease of 3% compared to 2011 explained mainly by the decrease in hydrocarbon production, since the increase technical costs (as discussed below) was largely offset by the decrease in the effective tax rate for the Upstream.

Technical costs for consolidated subsidiaries, in accordance with ASC 932[6], were 22.8 $/boe in 2012, compared to 18.9 $/boe in 2011, mainly due to increased depreciation of tangible assets relating to start-ups such as Pazflor, Halfaya, and Usan, as well as increased exploration expenses.

The Return on Average Capital Employed (ROACE) for the Upstream segment was 18% in 2012 compared to 21% in 2011.

(1) Impact of changing hydrocarbon prices on entitlement volumes.
(2) Change in reserves excluding production *i.e.* (revisions + discoveries, extensions + acquisitions – divestments) / production for the period.
(3) The reserve replacement rate in an environment with a constant 110.96 $/b oil price, excluding acquisitions and divestments.
(4) Limited to proved and probable reserves covered by E&P contracts on fields that have been drilled and for which technical studies have demonstrated economic development in a 100 $/b Brent environment, including projects developed by mining.
(5) Proved and probable reserves plus contingent resources (potential average recoverable reserves from known accumulations - Society of Petroleum Engineers - 03/07).
(6) FASB Accounting Standards Codification Topic 932, Extractive industries – Oil and Gas.

1.4. Refining & Chemicals results

Operational data[(a)]	2012	2011	2010
Total refinery throughput (kb/d)	1,786	1,863	2,009

(a) Includes share of CEPSA, through July 31, 2011, and of TotalErg. Results for refineries in South Africa, French Antilles and Italy are reported in the Marketing & Services segment.

In 2012, refinery throughput decreased by 4% compared to 2011, reflecting essentially the portfolio effect relating to the sale of the Group's interest in CEPSA at the end of July 2011 and the closure of the Rome refinery at the end of the third quarter 2012. Excluding these portfolio effects, throughput increased by 4% due to increased availability of the Group's refineries. As in 2011, 2012 was marked by higher levels of planned maintenance at European refineries, in particular the temporary shut-down of the Normandy refinery during the upgrading project at the end of 2012, as well as scheduled maintenance at the Provence and Feyzin refineries.

Results

(M€)	2012	2011	2010
Adjusted operating income	1,513	613	793
Adjusted net operating income	1,414	848	1,012
Including Specialty Chemicals	*384*	*423*	*475*
Cash flow from operating activities	2,127	2,146	1,226
Adjusted net operating income	2,170	1,318	2,115
Investments	1,944	1,910	2,124
Divestments	304	2,509	763
Return on Average Capital Employed[(a)]	9%	5%	-

(a) 2009 capital employed was not recalculated according the new organization.

For 2012, the ERMI was 36.0 $/t, more than double the average during 2011.

Adjusted net operating income from the Refining & Chemicals segment in 2012 was €1,414 million, an increase of 67% compared to €848 million in 2011.

Expressed in dollars, adjusted net operating income was $1.8 billion, an increase of 54% compared to 2011. This increase is mainly due to the positive effect of improved refining margins in Europe, noting that throughput at the Group's refineries decreased on a global basis by 4% between the two periods, and the petrochemical environment weakened, particularly in Europe and in polymers. The decrease in adjusted net operating income for the Specialty Chemicals is attributable entirely to the sale of the resins business in mid-2011. Excluding this portfolio effect, the adjusted net operating income for the Specialty Chemicals would have increased slightly.

The ROACE for the Refining & Chemicals segment was 9% for 2012, compared to 5% for 2011.

1.5. Marketing & Services results

Operational data [(a)]	2012	2011	2010
Refined products sales (kb/d)	1,710	1,987	2,116

(a) Excludes trading and bulk sales, includes share of CEPSA, through July 31, 2011, and of TotalErg.

For 2012, the decrease in sales of 14% compared to 2011 was almost entirely attributable to the sale of the Group's interest in CEPSA and the sale of marketing activities in the UK.

Effective July 1, 2012, Marketing & Services includes the activities of New Energies. As a result, certain information has been restated according to the new organization.

Results

(M€)	2012	2011	2010
Sales	86,614	85,325	75,580
Adjusted operating income	1,365	1,187	1,310
Adjusted net operating income	837	813	981
Including New Energies	*(169)*	*(197)*	*n/a*
Cash flow from operating activities	1,132	541	1,105
Adjusted cash flow	1,192	1,103	1,405
Investments	1,301	1,834	1,019
Divestments	152	1,955	83
Return on Average Capital Employed [a]	12%	13%	-

(a) 2009 capital employed was not recalculated according the new organization.

For 2012, Marketing & Services sales were €86.6 billion, an increase of 2% compared 2011.

Adjusted net operating income from the Marketing & Services segment was €837 million in 2012, an increase of 3% compared to €813 million in 2011. This increase is explained principally by the improved performance of New Energies. Marketing activities continued to provide stable results despite sales volumes generally decreasing, due in particular to improved results from activities in the Asia-Pacific and Eastern European regions.

The ROACE for the Marketing & Services segment was 12% for 2012, compared to 13% for 2011.

1.6. TOTAL S.A. 2012 results

Net income for TOTAL S.A., the parent company, was €6,520 million in 2012, compared to €9,766 million in 2011.

1.7. Proposed dividend

After closing the 2012 accounts, the Board of Directors decided to propose at the May 17, 2013, Annual Shareholders' Meeting a dividend of 2.34 euros per share for 2012, an increase of approximately 3% compared to the previous year.

Based on 2012 adjusted net income, the payout ratio would be 43%.

Taking into account the three 2012 interim dividends, the remaining 0.59 euros per share would be paid on June 27, 2013[1].

2. Liquidity and capital resources

2.1. Long-term and short-term capital

Long-term capital
As of December 31,

(M€)	2012	2011	2010
Shareholders' equity	72,894[a]	68,134	58,718
Non-current financial debt	22,274	22,557	20,783
Hedging instruments of non-current financial debt	(1,626)	(1,976)	(1,870)
Total net non-current capital	**93,542**	**88,715**	**77,631**

(a) Based on a 2012 dividend of €2.34 per share.

(1) The ex-dividend date for the remainder of the 2012 dividend would be June 24, 2013 ; for the ADR (NYSE:TOT) the ex-dividend date would be June 19, 2013.

Short-term capital
As of December 31,

(M€)	2012	2011	2010
Current borrowings	11,016	9,675	9,653
Net current financial assets	(1,386)	(533)	(1,046)
Net current financial debt	**9,630**	**9,142**	**8,607**
Cash and cash equivalents	(15,469)	(14,025)	(14,489)

2.2. Cash flow

(M€)	2012	2011	2010
Cash flow from operating activities	22,462	19,536	18,493
Changes in working capital at replacement cost	850	(524)	497
Cash flow from operating activities before changes in working capital at replacement cost	**21,612**	**20,060**	**17,996**
Investments	(22,943)	(24,541)	(16,273)
Total divestments	5,871	8,578	4,316
Net cash flow at replacement cost, before changes in working capital	**4,540**	**4,097**	**6,039**
Dividends paid	(5,288)	(5,312)	(5,250)
Purchase of treasury shares	(68)	-	-
Net-debt-to-equity ratio at December 31	21%	23%	22%

Cash flow from operations was €22,462 million in 2012, an increase of 15% compared with 2011, essentially due to the favorable change in working capital requirements between the two periods.

Adjusted cash flow from operations[(1)] was €21,612 million, an increase of 8%. Expressed in dollars, adjusted cash flow from operations was $27.8 billion, a decrease of 1% compared with 2011.

The Group's net cash flow[(2)] was €5,390 million against €3,573 million in 2011. Expressed in dollars, the Group's net cash flow was $6.9 billion in 2012.

The net-debt-to-equity ratio was 21.4% on December 31, 2012, compared with 23.0% on December 31, 2011.

2.3. Borrowing requirements and funding structure

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, euros or Canadian dollars 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.

The non-current debt is generally raised by the Corporate treasury entities either directly in dollars, euros or Canadian dollars, or in other currencies which are then exchanged for dollars, euros or Canadian dollars through swap issues to appropriately match general Corporate needs.

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 the market capitalization 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 Group also developed a system of margin call that is implemented with significant counterparties.

(1) Cash flow from operations at replacement cost before changes in working capital.
(2) Net cash flow = cash flow from operations + divestments - gross investments.

2.4. External financing available

As of December 31, 2012, the aggregate amount of the major confirmed credit facilities granted by international banks to Group companies (including TOTAL S.A.) was $11,328 million (compared with $11,447 million on December 31, 2011), of which $10,921 million were unused ($11,154 million unused on December 31, 2011).

TOTAL S.A. has confirmed credit facilities granted by international banks, which allow the Company to fund a significant cash reserve. As of December 31, 2012, these credit facilities amounted to $10,519 million (compared with $10,139 million on December 31, 2011), of which $10,463 million were unused (compared with $10,096 million unused on December 31, 2011).

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.

Credit facilities 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.

As of December 31, 2012, no restrictions applied to the use of the Group companies' capital (including TOTAL S.A.) that could significantly impact the Group's activities, directly or indirectly.

2.5. Anticipated sources of financing

Investments, working capital and dividend payments are financed essentially by the cash flow generated from operating activities, asset disposals and, if necessary, by net borrowings.

For the coming years and based on the current financing conditions, the Company intends to maintain this method of financing the Group's investments and activities.

3. Research & Development

In 2012, Research & Development (R&D) expenses amounted to €805 million, compared with €776 million in 2011 and €715 million in 2010. The process initiated in 2004 to increase R&D budgets continued in 2012.

The portfolio managed by the entity tasked with developing SMEs specialized in innovative energy technologies and cleantechs has grown regularly since 2009.

In 2012, 4,110 people were dedicated to R&D activities, compared with 3,946 in 2011 and 4,087 in 2010. This is mainly due to changes in the scope of the Group's activities.

There are six major R&D focuses at TOTAL:

- developing knowledge, tools and technological mastery to discover and profitably operate complex oil and gas resources to help meet the global demand for energy;
- developing and industrializing solar, biomass and carbon capture and storage technologies to help prepare for future energy needs;
- developing practical, innovative and competitive materials and products that meet customers' specific needs, contribute to the emergence of new features and systems, enable current materials to be replaced by materials showing higher performance for users, and address the challenges of improved energy efficiency, lower environmental impact and toxicity, better management of their life cycle and waste recovery;
- developing, industrializing and improving first-level competitive processes for the conversion 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 the Group's economic margins in the long term;
- understanding and measuring the impacts of the Group's operations and products on ecosystems (water, soil, air, biodiversity) to improve environmental safety, as part of the regulation in place, and reduce their environmental footprint to achieve sustainability in the Group's operations; and
- mastering and using innovative technologies such as biotechnologies, materials sciences, 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.

3.1. Upstream

3.1.1. Exploration & Production

In addition to continuously optimizing the development of deep-offshore projects and gas resources, TOTAL continues to improve its computing, exploration, seismic acquisition and processing tools in the long term as well as those for the initial appraisal of hydrocarbon reservoirs and simulation of field evolution during operations, especially for tight, very deep or carbonated reservoirs.

R&D activity has been intensified in the shale gas and oil sector, with a strong focus on water management throughout the production cycle and the search for alternatives to hydraulic fracking.

In 2012, the Group decided to join the consortium that is developing the Intersect simulator. The Group also launched a major effort to develop exploration and operational technologies in very cold regions.

Enhancing oil recovery from mature reservoirs and recovery of heavy oil and bitumen with lesser environmental impacts are also subjects involving major research. In particular, new technologies for the exploitation of oil shales by pyrolysis are being developed.

The oxycombustion CO_2 capture and storage project in the depleted Rousse reservoir in Lacq (France) is about to reach the end of the active reinjection phase, before progressing to the monitoring phase. The Group now has a strong command of the methods used to characterize reservoirs for this type of injection. New projects will look into new and more economical capturing solutions.

Finally, water management and the production of hydrocarbons are also the subject of increased R&D activities.

3.1.2 Gas & Power

The program to develop new LNG (Liquefied Natural Gas) solutions is continuing.

3.2. Refining & Chemicals

3.2.1. Refining & Petrochemicals

R&D in the realm of refining and petrochemicals came under review in 2012 as part of the reorganization of the Group. The priorities are:

- to make the best possible use of synergy between industrial units;
- to maximize value creation, by benefiting from diversified resources;
- to continuously improve the safety, performance and energy efficiency of processes through a better understanding of the mechanisms involved and the relations between the structure and the properties of the loads and products;
- to propose a differentiated variety of products to meet the market's needs, and in particular for fuels and polymers;
- to give the Group the means of meeting the environmental obligations of its units and products, as part of its drive for continuous improvement.

In Refining & Chemicals, TOTAL is preparing for the emergence of tomorrow's resources, including non-conventional oil and biomass, and develops products that meet the market's needs, such as higher-performance and energy-saving fuels and base oils.

Several R&D projects are ongoing in the field of the production of second-generation biofuels, in partnerships with industrial manufacturers (the BioTfueL project) or universities.

Sustained efforts are also being made to continuously improve the performance of processes and to improve the results of the manufacturing sites.

The development of new grades of polymers remains a cornerstone of the Petrochemicals strategy. Futerro, the joint venture formed by Galactic and TOTAL, is the technological leader in the polylactic acid (PLA) production chain, from monomer production to polymer recycling.

The optimization of the UOP-Total olefin production process from methanol (MTO/OCP) has reached its objectives. An industrial project is currently being examined and efforts continue to support the licensing of this technology.

Finally, through Hutchinson, Bostik and Atotech in the Refining & Chemicals segment, Petrochemicals is involved in "Materials Sciences" projects aimed at developing and bringing to light the division's skills and innovations in the field of materials. The third generation of the "Total Car Concept" project aims to demonstrate the benefits of these technologies.

3.2.2. Specialty Chemicals

R&D has strategic importance for the Specialty Chemicals. It is closely linked to the needs of subsidiaries and industrial customers.

Hutchinson is continuing to pursue its four main areas of research: energy efficiency, mass reduction, electrification and control, comfort and safety. Hutchinson develops products and technologies on the strength of its capacity to formulate original and advanced materials and its command of the systems in which its products are integrated. Significant developments have been made in chemical analysis and digital simulation.

Bostik is focusing its research activities on three technology platforms: hot-melt adhesives, reactive elastomers and hydraulic polymer-binder systems. Based on these technologies, R&D is developing practical, sustainable assembly solutions that meet the needs of markets in terms of energy efficiency (construction, transport), material efficiency (health, industry) and environmental impacts throughout their life cycle.

Atotech is one of the world leaders for integrated production systems (chemicals, equipment, know-how and service) for industrial surface finishing and the manufacturing of integrated circuits. Given the environmental challenges related to electroplating, nearly half of Atotech's R&D projects are intended to develop cleaner technologies and create conditions for the Sustainable Development of these industries.

3.3. Marketing & Services

3.3.1. Marketing & Services

The Marketing & Services R&D strategy and organization came under review in 2012 in line with the organization and the challenges facing the sector.

The priorities are:

– the development of fuels, specification and high-performance additives and heating fuels that meet the market's needs, such as the changes in environmental regulations and the adaptation to new resources, including those from the biomass;

– the development of new families of bitumen, by working on its properties and issues of logistics and product applications;

– the development of advanced lubricants for a broad range of sectors and customers;

– the development of analytical and screening methods that optimize the product development process.

Moreover, know-how in the realm of engine tests and analytical product characterization is also deemed to be critical.

3.3.2. New Energies

R&D efforts in New Energies cover both the production processes of SunPower cells, which aim to speed up the reduction of production costs, and the future generations of photovoltaic cells, as part of several partnerships with recognized academic research institutes and start-ups. In particular, TOTAL is a partner in the important institutional project, IPVF, launched by the Université Paris-Saclay.

Energy production from biomass is the other major R&D challenge in the development of New Energies. Through its own biotechnology research team, the Group is taking part in a program to develop several production processes using biomass, and in biotechnological projects to transform the biomass into advanced biofuels or molecules that can be used in chemical applications. The Group's main partnership is with Amyris, in which the Group holds a stake.

3.4. Environment

Environmental issues are important throughout the Group and are taken into account in all R&D projects. They involve environmental risk management, including in particular:

– water management, notably by reducing the use of water from natural continental environments and by lowering emissions in compliance with the regulations in force;

– reduction of greenhouse gases through the improvement of energy efficiency and carbon capture and storage;

– detection and reduction of emissions into the air and simulation of their dissemination;

– prevention of soil contamination and regulatory compliance with regard to historical aspects and the rehabilitation of sites;

– changes in the Group's different products and management of their life cycle, in particular in compliance with the REACH Directive.

3.5. R&D organization

The Group intends to increase R&D in all of its business units through cross-functional themes and technologies. Attention is paid to synergies of R&D efforts between business units.

The Group has twenty-one R&D sites worldwide and has developed approximately 600 partnerships with other industrial groups and academic or highly specialized 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 innovative small businesses are part of the Group's approach.

Each segment is developing an active intellectual property activity, aimed at protecting its innovations, allowing its activity to develop without constraints as well as facilitating its partnerships. In 2012, more than 250 new patent applications were issued by the Group.

4. Trends and outlook

4.1. Outlook

To create profitable and sustainable growth, TOTAL invests in value-creating projects and optimizes its portfolio, in particular by divesting non-core assets and subsidiaries with limited growth potential or those in which the Group has a low working interest.

The net investment budget of TOTAL for 2013 is $22 billion, stable compared to 2011 and 2012. In executing its 2012-14 asset sale program of $15-20 billion, the Group sold $6 billion of assets in 2012 and anticipates reaching the low-end of its target range by the end of 2013 with the closing of the Usan sale and other divestments already in progress. The organic investment budget for 2013 is $28 billion, more than 80% of which will be dedicated to Upstream, principally for highly competitive and profitable projects scheduled to start-up before 2017.

The Group also confirms its commitment with respect to R&D with a budget of about $1.3 billion in 2013.

In the Upstream, TOTAL confirms its production growth targets for 2015, 3% per year on average over the period 2011-2015, and for 2017, a potential of 3 Mboe/d, all based on improved visibility. TOTAL is focused on delivering its projects on time and in budget. In 2013, production growth should be fueled by 2012 start-ups as well as anticipated 2013 start-ups, including Anguille in Gabon, Angola LNG, Kashagan in Kazakhstan, and the extension of OML 58 in Nigeria. In addition, the Group continues to work in cooperation with the UK authorities towards a safe and progressive restart of Elgin-Franklin during the first quarter 2013. Visibility on the Group's production growth targets will be further enhanced this year by the launch of additional major projects, notably in West Africa.

The exploration budget has been increased to $2.8 billion for 2013, and the high-potential exploration program for 2013 reflects the new dynamic of the Group, with prospects to be drilled in Côte d'Ivoire, Gabon, Kenya, and Brazil.

In Refining & Chemicals, the restructuring in progress should yield productivity gains and provide synergies in 2013, and in turn contribute to increased profitability, in line with the objective of a segment ROACE of 13% in 2015. The year 2013 also should be highlighted by the start-up of Jubail in Saudi Arabia. This fully-integrated refinery will have a 400 kb/d capacity for heavy crude and will provide refined products to growth markets like the Middle East and Asia.

Marketing & Services seeks to continue to strengthen its worldwide positions and to capitalize on its ability to respond to its customers' needs. New Energies will pursue its productivity, development, and innovation programs to increase its contribution.

The Group confirms its commitment in favor of a competitive policy for returns to shareholders, in keeping with its objective of sustainable growth.

4.2. Risks and uncertainties

Due to the nature of its business, the Group's activities remain subject to the usual market risks (sensitivity to the environmental parameters of the oil and financial markets), industrial and environmental risks related to its operations, and to political or geopolitical risks stemming from the global presence of most of its activities.

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 General Management, which provide for regular pooling of available cash balances, open positions and management of the financial instruments by the Group's General Management.

Detailed information is given in the Risk Factors section (Chapter 4), of this Registration Document. For more information, also refer to the Chairman's report in paragraph 1.10. of Chapter 5.

4.3. Sensitivity of the 2013 results to market environment[(a)]

Market environment parameters	Scenario	Change	Estimated impact on adjusted operating income	Estimated impact on adjusted net operating income
Dollar	1.30 $/€	+0.1 $ per €	-2.2 B€	-0.95 B€
Brent	100 $/b	+1 $/b	+0.24 B€/0.31 B$	+0.11 B€/0.14 B$
European refining margins (ERMI)	30 $/t	+1 $/t	+0.08 B€/0.1 B$	+0.05 B€/0.06 B$

(a) Sensitivities revised once per year upon publication of the previous year's fourth quarter results. Indicated sensitivities are approximate and based upon TOTAL's current view of its 2013 portfolio. Results may differ significantly from the estimates implied by the application of these sensitivities. The impact of the €-$ sensitivity on adjusted operating income and adjusted net operating income attributable to the Upstream segment are approximately 80% and 70% respectively. The remaining impact of the sensitivity is essentially in the Refining & Chemicals segment.

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1. Financial risks

Financial risks are detailed in Note 31 to the Consolidated Financial Statements (point 7., Chapter 9).

1.1. Sensitivity to market environment

The financial performance of TOTAL is sensitive to a number of factors, the most significant being crude oil and natural gas prices, refining margins 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. For the year 2013, according to the scenarios retained, the Group estimates that an increase or decrease of $1.00 per barrel in the price of Brent crude would respectively increase or decrease the annual adjusted net operating income by approximately €0.11 billion ($0.14 billion[1]). The impact of changes in crude oil prices on downstream operations depends upon the speed at which the prices of finished products adjust to reflect these changes. The Group estimates that an increase or decrease in European refining margins (ERMI) of $1.00 per ton would increase or decrease the annual adjusted net operating income by approximately €0.05 billion ($0.06 billion[1]).

All of the Group's activities are, to various degrees, sensitive to fluctuations in the dollar/euro exchange rate. The Group estimates that a strengthening or weakening of the dollar against the euro by $0.10 per euro would respectively improve or reduce the annual adjusted net operating income, expressed in euro, by approximately €0.95 billion.

The Group's results, particularly in the Chemicals activity, also depend on the overall economic environment.

Summary of sensitivities 2013[a]	Scenario retained	Change	Estimated impact on adjusted operating income	Estimated impact on adjusted net operating income
€-$	1.30 $/€	+ $0.10 per €	-2.2 B€	-0.95 B€
Brent	100 $/b	+1 $/b	+0.24 B€/0.31 B$	+0.11 B€/0.14 B$
European refining margins (ERMI)	30 $/t	+1 $/t	+0.08 B€/0.1 B$	+0.05 B€/0.06 B$

(a) Sensitivities revised once per year upon publication of the previous year's fourth quarter results. The impact of the €-$ sensitivity on adjusted operating income and adjusted net operating income attributable to the Upstream segment are approximately 80% and 70% respectively. The remaining impact of the sensitivity is essentially on the Refining & Chemicals segment. Indicated sensitivities are estimates based upon assumptions of the Group's portfolio in 2013. Results may differ significantly from the estimates implied by the application of these sensitivities.

1.2. 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, power and coal. 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 re-evaluated 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.

(1) Calculated with a base case exchange rate of $1.30 per €1.00.

Trading & Shipping: value-at-risk with a 97.5% probability

As of December 31, (M€)	High	Low	Average	Year end
2012	**13.0**	**3.8**	**7.4**	**5.5**
2011	10.6	3.7	6.1	6.3
2010	23.1	3.4	8.9	3.8

As part of its gas, power and coal 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 market risk exposure, *i.e.* potential loss in fair values, on its trading business is measured 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 and power trading: value-at-risk with a 97.5% probability

As of December 31, (M€)	High	Low	Average	Year end
2012	**20.9**	**2.6**	**7.4**	**2.8**
2011	21.0	12.7	16.0	17.6
2010	13.9	2.7	6.8	10.0

The Group has implemented strict policies and procedures to manage and monitor these market risks. These are based on the separation of control and front-office 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.

1.3. 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 mainly interest rate and currency swaps. The Group may also occasionally use futures contracts and options. These operations and their accounting treatment are detailed in Notes 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 General 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, deposit banks, or major companies 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 results of the Front Office. This unit also prepares marked-to-market valuations of used financial instruments and, when necessary, performs sensitivity analysis.

1.4. 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.

1.5. Currency exposure

The Group seeks to minimize the currency exposure of each entity to its functional currency (primarily the euro, the dollar, the Canadian 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, in euros or in Canadian dollars, 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, in Canadian 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.

1.6. 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 General Management (maintain an adequate level of liquidity, optimize revenue from investments considering existing interest rate yield curves, and minimize 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.

1.7. 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, in euros or in Canadian dollars according to general corporate needs of the Group. 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.

1.8. 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, 2012, 2011 and 2010.

Assets/(Liabilities) (M€)	Carrying amount	Estimated fair value	Change in fair value due to a change in interest rate by +10 basis points	Change in fair value due to a change in interest rate by -10 basis points
As of December 31, 2012				
Bonds (non-current portion, before swaps)	(21,346)	(21,545)	97	(97)
Swaps hedging fixed-rates bonds (liabilities)	*(11)*	*(11)*	-	-
Swaps hedging fixed-rates bonds (assets)	*1,626*	*1,626*	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	1,615	1,615	(58)	58
Current portion of non-current debt after swap (excluding capital lease obligations)	4,251	4,251	4	(4)
Other interest rates swaps	-	-	2	(2)
Currency swaps and forward exchange contracts	(50)	(50)	-	-
As of December 31, 2011				
Bonds (non-current portion, before swaps)	(21,402)	(22,092)	83	(83)
Swaps hedging fixed-rates bonds (liabilities)	*(146)*	*(146)*	-	-
Swaps hedging fixed-rates bonds (assets)	*1,976*	*1,976*	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	1,830	1,830	(49)	49
Current portion of non-current debt after swap (excluding capital lease obligations)	3,488	3,488	3	(3)
Other interest rates swaps	(1)	(1)	3	(3)
Currency swaps and forward exchange contracts	47	47	-	-
As of December 31, 2010				
Bonds (non-current portion, before swaps)	(20,019)	(20,408)	86	(84)
Swaps hedging fixed-rates bonds (liabilities)	*(178)*	*(178)*	-	-
Swaps hedging fixed-rates bonds (assets)	*1,870*	*1,870*	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	1,692	1,692	(59)	59
Current portion of non-current debt after swap (excluding capital lease obligations)	3,483	3,483	4	(4)
Other interest rates swaps	(2)	(2)	3	(3)
Currency swaps and forward exchange contracts	(101)	(101)	-	-

The impact of changes in interest rates on the cost of net debt before tax is as follows:

For the year ended December 31, (M€)	2012	2011	2010
Cost of net debt	(571)	(440)	(334)
Interest rate translation of:			
+10 basis points	(11)	(10)	(11)
-10 basis points	11	10	11
+100 basis points	(106)	(103)	(107)
-100 basis points	106	103	107

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, the Norwegian krone and the Canadian dollar.

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/Dollar exchange rates	Euro/Pound sterling exchange rates
As of December 31, 2012	**1.32**	**0.82**
As of December 31, 2011	1.29	0.84
As of December 31, 2010	1.34	0.86

As of December 31, 2012 (M€)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates
Shareholders' equity at historical exchange rate	74,400	45,999	22,510	4,651	1,240
Currency translation adjustment before net investment hedge	(1,488)	-	(781)	(823)	116
Net investment hedge - open instruments	-	-	-	-	-
Shareholders' equity at exchange rate as of December 31, 2012	72,912	45,999	21,729	3,828	1,356

As of December 31, 2011 (M€)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates
Shareholders' equity at historical exchange rate	69,025	41,396	21,728	4,713	1,188
Currency translation adjustment before net investment hedge	(962)	-	127	(923)	(166)
Net investment hedge - open instruments	(26)	-	(25)	(1)	-
Shareholders' equity at exchange rate as of December 31, 2011	68,037	41,396	21,830	3,789	1,022

As of December 31, 2010 (M€)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates
Shareholders' equity at historical exchange rate	62,909	32,894	22,242	4,997	2,776
Currency translation adjustment before net investment hedge	(2,501)	-	(1,237)	(1,274)	10
Net investment hedge - open instruments	6	-	6	-	-
Shareholders' equity at exchange rate as of December 31, 2010	60,414	32,894	21,011	3,723	2,786

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 (a gain of €26 million in 2012, a gain of €118 million in 2011, nil result in 2010).

1.9. Stock market 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.

1.10. 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, 2012, these lines of credit amounted to $10,519 million, of which $10,463 million was 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, 2012, the aggregate amount of the principal confirmed lines of credit granted by international banks to Group companies, including TOTAL S.A., was $11,328 million, of which $10,921 million was 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, 2012, 2011 and 2010 (see Note 20 to the Consolidated Financial Statements).

As of December 31, 2012

Assets/(Liabilities) (M€)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	-	(3,832)	(3,465)	(2,125)	(3,126)	(8,100)	(20,648)
Current borrowings	(11,016)	-	-	-	-	-	(11,016)
Other current financial liabilities	(176)	-	-	-	-	-	(176)
Current financial assets	1,562	-	-	-	-	-	1,562
Assets and liabilities available for sale or exchange	(756)	-	-	-	-	-	(756)
Cash and cash equivalents	15,469	-	-	-	-	-	15,469
Net amount before financial expense	**5,083**	**(3,832)**	**(3,465)**	**(2,125)**	**(3,126)**	**(8,100)**	**(15,565)**
Financial expense on non-current financial debt	(746)	(625)	(519)	(405)	(352)	(1,078)	(3,725)
Interest differential on swaps	371	335	225	106	62	(37)	1,062
Net amount	**4,708**	**(4,122)**	**(3,759)**	**(2,424)**	**(3,416)**	**(9,215)**	**(18,228)**

As of December 31, 2011

Assets/(Liabilities) (M€)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	-	(4,492)	(3,630)	(3,614)	(1,519)	(7,326)	(20,581)
Current borrowings	(9,675)	-	-	-	-	-	(9,675)
Other current financial liabilities	(167)	-	-	-	-	-	(167)
Current financial assets	700	-	-	-	-	-	700
Cash and cash equivalents	14,025	-	-	-	-	-	14,025
Net amount before financial expense	**4,883**	**(4,492)**	**(3,630)**	**(3,614)**	**(1,519)**	**(7,326)**	**(15,698)**
Financial expense on non-current financial debt	(785)	(691)	(521)	(417)	(302)	(1,075)	(3,791)
Interest differential on swaps	320	331	221	120	55	44	1,091
Net amount	**4,418**	**(4,852)**	**(3,930)**	**(3,911)**	**(1,766)**	**(8,357)**	**(18,398)**

As of December 31, 2010

Assets/(Liabilities) (M€)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	-	(3,355)	(3,544)	(2,218)	(3,404)	(6,392)	(18,913)
Current borrowings	(9,653)	-	-	-	-	-	(9,653)
Other current financial liabilities	(159)	-	-	-	-	-	(159)
Current financial assets	1,205	-	-	-	-	-	1,205
Cash and cash equivalents	14,489	-	-	-	-	-	14,489
Net amount before financial expense	**5,882**	**(3,355)**	**(3,544)**	**(2,218)**	**(3,404)**	**(6,392)**	**(13,031)**
Financial expense on non-current financial debt	(843)	(729)	(605)	(450)	(358)	(1,195)	(4,180)
Interest differential on swaps	461	334	153	33	2	(78)	905
Net amount	**5,500**	**(3,750)**	**(3,996)**	**(2,635)**	**(3,760)**	**(7,665)**	**(16,306)**

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, 2012, 2011 and 2010 (see Note 28 to the Consolidated Financial Statements).

As of December 31, (M€) Assets/(Liabilities)	2012	2011	2010
Accounts payable	(21,648)	(22,086)	(18,450)
Other operating liabilities	(5,904)	(5,441)	(3,574)
including financial instruments related to commodity contracts	*(482)*	*(606)*	*(559)*
Accounts receivable, net	19,206	20,049	18,159
Other operating receivables	6,158	7,467	4,407
including financial instruments related to commodity contracts	*707*	*1,074*	*499*
Total	**(2,188)**	**(11)**	**542**

These financial assets and liabilities mainly have a maturity date below one year.

1.11. 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, (M€) Assets/(Liabilities)	2012	2011	2010
Loans to equity affiliates *(note 12)*	2,360	2,246	2,383
Loans and advances *(note 14)*	2,207	2,055	1,596
Hedging instruments of non-current financial debt *(note 20)*	1,626	1,976	1,870
Accounts receivable *(note 16)*	19,206	20,049	18,159
Other operating receivables *(note 16)*	6,158	7,467	4,407
Current financial assets *(note 20)*	1,562	700	1,205
Cash and cash equivalents *(note 27)*	15,469	14,025	14,489
Total	**48,588**	**48,518**	**44,109**

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, 2012, the net amount received as part of these margin calls was €1,635 million (against €1,682 million as of December 31, 2011 and €1,560 million as of December 31, 2010).

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**

Gas & Power deals with counterparties in the energy, industrial and financial sectors throughout the world. 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.

Refining & Chemicals segment

– **Refining & Chemicals**

Credit risk is primarily related to commercial receivables. Each business unit 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 (provisions may also be calculated based on statistics).

– **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.

Trading & Shipping 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.

Marketing & Services segment

Internal procedures for Marketing & Services business unit 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 subscription of credit insurance and/or 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 risk of credit loss.

2. Industrial and environmental risks

2.1. Types of risks

TOTAL is exposed to risks related to the safety and security of its operations.

TOTAL engages in a broad scope of activities, which include drilling, oil and gas production, processing, transportation, refining and petrochemical activities, storage and distribution of petroleum products, and production of base and specialty chemicals, and involve a wide range of operational risks. These risks include explosions, fires, accidents, equipment failures, leakage of toxic products, emissions or discharges into the air, water or soil, and related environmental and health risks. 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 maritime, river-maritime, pipelines, rail and road), the volumes involved, and the sensitivity of the regions through which the transport passes (quality of infrastructure, population density, environmental considerations). Most of the Group's activities will also eventually require environmental site remediation, closure and decommissioning after production is discontinued.

The following table shows a correlation between TOTAL's operations and the most significant industrial and environmental risks:

Activity/Risk	Fire, explosion	Leakage of toxic products	Accidental pollution	Pollution of soil and subsoil	Consumer health and safety	Emissions into the air, water and soil
Drilling	x	x	x	x	-	x
Hydrocarbon production	x	x	x	x	-	x
On-site processing of hydrocarbons	x	x	x	x	-	x
Transport of petroleum products and chemicals	x	x	x	x	-	x
Refining, petrochemicals	x	x	x	x	x	x
Storage of petroleum products	x	x	x	x	-	x
Distribution of petroleum products	x	-	x	x	x	x
Specialty chemicals	x	x	x	x	x	x

The industrial events that could have the most significant impact are primarily:

– a major industrial accident (fire, explosion, leakage of highly toxic products);

– large-scale accidental pollution.

All the risks described correspond to events that could potentially cause death, damage property, disrupt business activities, cause environmental damage or harm human health. Group's employees, contractors, residents living near the facilities or customers can suffer injuries. Property damage can involve the facilities of the Group as well as the property of third parties. The seriousness of the consequences of these events varies according to the vulnerability of the people, ecosystems and business activities impacted, on the one hand, and the number of people in the impact area and the location of the ecosystems and business activities in relation to TOTAL's facilities or to the trajectory of the products after the event, on the other hand.

Acts of terrorism against the Group's plants and sites, pipelines, transportation or computer systems could also severely disrupt business and operations and could cause harm to people and property damage.

Like most industrial groups, TOTAL is concerned by reports of occupational illnesses, particularly those caused by past exposure of the Group's employees to asbestos. Asbestos exposure has been subject to close monitoring at all of the Group's business segments. As of December 31, 2012, the Group estimates that the ultimate cost of all pending or future asbestos-related claims is not likely to have a material impact on the Group's financial position.

Certain segments or activities face specific additional risks.

TOTAL's Upstream segment activities face risks related to the physical characteristics of oil or gas fields. These risks include eruptions of oil or gas, discovery of hydrocarbon pockets with abnormal pressure, crumbling of well openings, leaks that can harm the environment and explosions or fires. These events, which may cause injury, death or environmental damage, can also damage or destroy oil or gas wells as well as equipment and other property, lead to a disruption of the Group's operations or reduce its production. In addition, since exploration and production activities may take place on sites that are ecologically sensitive (for example, in tropical forests or in a marine environment), each site requires a risk-based approach to avoid or minimize the impact on human health, flora and fauna, the ecosystem and biodiversity. In certain situations where the operator is not a Group entity, the Group may have reduced influence and control over third parties, which may limit its ability to manage and control these risks.

The activities of the Refining & Chemicals and Marketing & Services business segments also entail additional health, safety and environmental risks related to the overall life cycle of the products manufactured, as well as the raw materials used in the manufacturing process, such as catalysts, additives and monomers. These risks can arise from the intrinsic characteristics of the products involved (flammability, toxicity, or long-term environmental impacts such as greenhouse gas emissions), their use (including by customers), emissions and discharges resulting from their manufacturing process, and from recycling or disposing of materials and wastes at the end of their useful life.

Contracts signed by the Group's entities may provide for indemnification obligations either by TOTAL in favor of third parties or by third parties for the benefit of TOTAL if, for example, an event occurs leading to death, personal injury, property damage or discharge of hazardous materials into the environment. With respect to joint ventures the assets of which are operated by an entity of the Group, contractual terms generally provide that this entity assumes liability for damage caused by its gross negligence or willful misconduct. With respect to joint ventures in which an entity of the Group has an interest but the assets of which are operated by others, contractual terms generally provide that the operator assumes liability for damages caused by its gross negligence or willful misconduct. All other liabilities of these types of joint venture are generally assumed by the partners in proportion to their respective ownership interests. With respect to third party providers of goods and services, the amount and nature of the liability assumed by the third party depends on the context and may be limited by contract. With respect to their customers, the Group's entities seek to ensure that their products meet applicable specifications and abide by all applicable consumer protection laws. Failure to do so could lead to personal injury, environmental harm, regulatory violations and loss of customers, and could negatively impact the Group's results of operations, financial condition and reputation.

To manage these risks, TOTAL maintains worldwide third-party liability insurance coverage for all its subsidiaries. TOTAL also maintains insurance to protect against the risk of damage to Group property and/or business interruption at its main refining and petrochemical sites. TOTAL's insurance and risk management policies are described in point 4. of this Chapter ("Insurance and risk management").

Crisis management systems are necessary to respond effectively to emergencies and to avoid potential disruptions in TOTAL's business and operations.

TOTAL has crisis management plans in place to deal with emergencies, such as the leak in the Elgin field in the North Sea (see Chapter 12, paragraph 2.2.3.). If TOTAL does not respond to such emergencies in an appropriate manner, its business and operations could be severely disrupted. TOTAL also has implemented business continuity plans in order to continue or resume operations following a shutdown or incident (see paragraph 2.2.3. below). An inability to timely restore or replace critical capacity could prolong the impact of any disruption and could have a material adverse effect on the Group's business and operations.

TOTAL is subject to stringent environmental, health and safety laws in numerous countries and may incur material costs to comply with these laws and regulations.

TOTAL's workforce and the public are exposed to risks inherent to the Group's operations that potentially could lead to loss of life, injuries, property damage or environmental damage and could result in regulatory action and legal liability against the entities of the Group and damage to its reputation.

TOTAL incurs, and will continue to incur, substantial expenditures to comply with increasingly complex laws and regulations aimed at protecting worker health and safety and the natural environment.

These expenditures include:

– costs incurred to prevent, control, eliminate or reduce certain types of air and water emissions, including those costs incurred in connection with government action to address 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 the Group's activities or accidents;

– increased production costs or costs related to changes in product specifications or sales; and

– costs related to the decommissioning of drilling platforms and other facilities.

If the Group's financial reserves prove inadequate, such expenditures incurred could have a material effect on the results of operations of the Group and its financial position.

Furthermore, in countries where the Group operates or plans to operate, the introduction of new laws and regulations, stricter enforcement or news interpretations of existing laws and regulations or the imposition of tougher license requirements may also cause the Group's entities to incur higher 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 the introduction of any new laws and regulations or other factors, the Group could also be compelled to curtail, modify or cease certain operations or implement temporary shutdowns of facilities, which could diminish the Group's productivity and materially and adversely impact its results of operations, including its profits.

All TOTAL entities monitor legal and regulatory developments in order to remain in compliance with local and international rules and standards for the assessment and management of industrial and environmental risks. With regard to the permanent shutdown of an activity, the Group's environmental contingencies and asset retirement obligations are addressed in the "Asset retirement obligation" and "Provisions for environmental contingencies" sections of the Group's Consolidated Balance Sheet (see Note 19 to the Consolidated Financial Statements, Chapter 9, point 7.). Future expenditures related to asset retirement obligations are accounted for in accordance with the accounting principles described in Note 1Q to the Consolidated Financial Statements (Chapter 9, point 7.).

Laws and regulations related to climate change and its physical effects may adversely affect the Group's business.

Growing public concern in a number of countries over greenhouse gas emissions and climate change, as well as a multiplication of stricter regulations in this area, could adversely affect the Group's businesses and product sales, increase its operating costs and reduce its profitability.

The regulation concerning the market for CO_2 emission allowances in Europe, EU-ETS (European Trading Scheme), entered a third phase on January 1, 2013. This phase marks the end of the overall free allocation of emission allowances, particularly for electricity production plants, which no longer benefit from free allowances, and establishes allowance auctioning by the States. The Group is impacted in Europe by this new phase of the regulation, especially for its refining and petrochemicals facilities and, to a lesser extent, its Upstream operations. In phase 3, free allocations are limited to those resulting from a calculation based on a benchmark within the

same industrial sector. This benchmark is set on the basis of the top 10% most efficient installations in terms of emissions. Installations other than the top 10% must have missing allowances bought at market price. Moreover, the Group's plants will need to indirectly bear the cost of allowances for all electricity consumed, including electricity generated internally at its own facilities. Although the allocations of free allowances for phase 3 have not yet been made public, the Group believes that it will continue to receive free allowances that will cover approximately 80% of its emissions subject to the EU-ETS during the 2013-2020 period. Given the amount of free allocations at the beginning of the period and the ability to use in phase 3 its surplus allowances purchased or received in phase 2, the Group's exposure should be limited during the period in question.

In addition, more of TOTAL's future production is expected to come from unconventional sources in order to help meet the world's growing demand for energy. Since energy intensity of oil and gas production from unconventional sources can be higher than that of production from conventional sources, the CO_2 emissions produced by the Group's activities may increase. Therefore, TOTAL may incur additional costs from delayed projects or reduced production from certain projects.

In addition, TOTAL's business operates in varied locales where the potential physical impacts of climate change, including changes in weather patterns, are highly uncertain and may adversely impact the results of the Group's operations.

2.2. Management and monitoring of industrial and environmental risks

2.2.1. TOTAL policies regarding health, safety and the environment

TOTAL has developed a "Health Safety Environment Quality Charter" (Chapter 12, point 2.) which sets out the basic principles applicable within the Group regarding the protection of people, property and the environment. This charter is rolled out at several levels within the Group by means of management systems.

Along these lines, TOTAL has developed efficient organizations as well as safety, environmental and quality management systems, which it makes every effort to have certified or assessed (standards such as the International Safety Rating System, ISO 14001 and ISO 9001). For example, in 2010, TOTAL received ISO 9001 certification for "development and management of the database of technical businesses" in Exploration and Production.

In most countries, TOTAL's operations are subject to laws and regulations concerning environmental protection and Industrial Safety. The main laws and regulations are:

1) In Europe: IPPC- Large Combustion Plants Directives (recasted by IED Directive), SEVESO Directive, Pressure Equipment Directive, Water Framework Directive, Waste Directive, ETS Directive (CO_2 quotas), Fuel Directive, REACH and CLP Regulations.
2) In France: laws and regulations on natural and technological risks also apply to several sites.
3) In the United States: several activities are subject to the Occupational Safety and Health Administration ("OSHA") Process Safety Management of Highly Hazardous Materials and the Superfund Act.

TOTAL ensures compliance with applicable laws and regulations, including in particular the REACH regulation, the purpose of which is to protect the health and safety of the employees, producers and users of chemicals and chemical substances, such as by providing detailed information through safety data sheets (SDS/ESDS) (see also Chapter 12, point 2.).

2.2.2. Assessment

As part of its policy, TOTAL systematically assesses risks and impacts in the areas of industrial safety (particularly technological risks), the environment and the protection of workers and local residents:

- prior to approving new projects, investments, acquisitions and disposals;
- periodically during operations (safety studies, environmental impact studies, health impact studies and risk prevention plan in France as part of the 2003 legislation on the prevention of major technological risks);
- prior to releasing new substances on the market (toxicological and ecotoxicological studies and life cycle analyses); and
- based on the regulatory requirements of the countries where these activities are carried out and generally accepted professional practices.

In countries where prior administrative authorization and supervision is required, projects are not undertaken without the authorization of the relevant authorities based on the studies provided to the authorities.

In particular, TOTAL has developed a common methodology for analyzing technological risks which must gradually be applied to all activities carried out by the Group's companies.

2.2.3. Management

TOTAL develops risk management measures based on risk and impact assessments. These measures involve facility and structure design, the reinforcement of safety devices and remedies of environmental degradations.

In addition to developing organizations and management systems as described above, TOTAL strives to minimize industrial and environmental risks inherent in its operations by conducting thorough inspections and audits, training personnel and raising awareness among all those involved.

In addition, performance indicators (in the areas of HSE) and risk monitoring have been put in place, objectives have been set and action plans have been implemented to achieve these objectives.

Although the emphasis is on preventing risks, TOTAL takes regular steps to prepare for crisis management based on the risk scenarios identified.

In particular, TOTAL has developed emergency plans and procedures to respond to an oil spill or leak. These plans and procedures are specific to each TOTAL affiliate and adapted to its organization,

activities and environment and are consistent with the Group plan. They are reviewed regularly and tested through exercises (see Chapter 12, point 2).

At the Group level, TOTAL has set up the alert scheme PARAPOL (Plan to Mobilize Resources Against Pollution) to facilitate crisis management and provide assistance by mobilizing both internal and external resources in the event of pollution of marine, coastal or inland waters, without geographical restriction. The PARAPOL procedure is made available to TOTAL subsidiaries and its main goal is to facilitate access to internal experts and physical response resources.

Furthermore, TOTAL and its subsidiaries are currently members of certain oil spill cooperatives that are able to provide expertise, resources and equipment in all geographic areas where TOTAL has operations, including in particular Oil Spill Response Limited, the CEDRE (Center for Documentation, Research and Experimentation on Accidental Water Pollution) and Clean Caribbean & Americas.

Following the blow-out on the Macondo well in the Gulf of Mexico in 2010 (in which the Group was not involved), TOTAL created three Task Forces in order to analyze risks and issue recommendations.

In Exploration & Production, Task Force 1 reviewed the safety aspects of deep offshore drilling operations (well architecture, design of blow-out preventers, training of personnel based on lessons learned from serious accidents that have occurred recently in the industry). Its efforts have led to the implementation of even more stringent controls and audits on drilling operations.

Task Force 2, in coordination with the Global Industry Response Group (GIRG) created by the OGP (International Association of Oil and Gas Producers), is studying deep offshore oil capture and containment operations in case of a pollution event in deep waters. Capture devices will be available in several regions of the world where TOTAL has a strong presence in exploration-production.

Task Force 3 involved plans to fight accidental spills in order to strengthen the Group's ability to respond to major accidental pollution, such as a blow-out or a total loss of containment from an FPSO (Floating Production, Storage and Offloading facility). This initiative has led, in particular, to a sharp increase in the volume of dispersants available within the Group.

The task forces finalized most of their work in 2012, and the Group has continued deploying solutions to minimize such risks. Detailed information on TOTAL's initiatives in the fields of safety and protection of the environment is provided in Chapter 12.

The Group believes that it is impossible to guarantee that the contingencies or liabilities related to the above mentioned concerns will not have a material impact on its business, assets and liabilities, consolidated financial situation, cash flow or income in the future.

3. Other risks

3.1. Economic environment

The operating results and future rate of growth of the Group are exposed to the effects of changing commodity prices.

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

- global and regional economic and political developments in resource-producing 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 unconventional energies as well as changes in the valorization of oil sands, which may affect the Group's realized prices, notably under its long-term gas sales contracts and asset valuations, notably in North America;
- cost and availability of new technology;
- governmental regulations and actions;
- global economic and financial market conditions;
- war or other conflicts;
- 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 the Group's facilities.

Substantial or extended declines in oil and natural gas prices would adversely affect TOTAL's results of operations by reducing its profits. Sensitivity to market environment are described above and discussed in greater detail in point 1.1. of this Chapter 4.

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 a review of the Group's properties and oil and natural gas reserves. Such review would reflect the Company's view based on estimates, assumptions and judgments and could result in a reduction in the Group's reported reserves and/or a charge for impairment that could have a significant effect on the Group's results 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, negatively impact the asset sale program of the Group and reduce liquidity, thereby decreasing the Group's ability to finance capital expenditures and/or causing it to cancel or postpone investment projects. If TOTAL is unable to follow through with investment projects, the opportunities for future revenue and profitability growth with the Group would be reduced, which could materially impact the Group's financial condition.

However, in a high oil and gas price environment, the Group can experience significant increases in cost and fiscal take, and, under some production-sharing contracts, the Group's entitlement to

reserves could be reduced. Higher prices can also reduce demand for the Group's products.

The Group's downstream earnings are primarily dependent upon the supply and demand for refined products and the associated margins on refined product sales, with the impact of changes in oil and gas prices on downstream earnings being dependent upon the speed at which the prices of refined products adjust to reflect movements in oil and gas prices.

3.2. Risks related to oil and gas exploration and production

The Group's long-term profitability depends on cost effective discovery, acquisition and development of new reserves; if the Group is unsuccessful, its results of operations and financial condition would be materially and adversely affected.

A significant portion of the Group revenues and the majority of its operating income are derived from the sale of oil and gas that the Group extract from underground reserves developed as part of its Upstream business. The development of oil and gas fields, the construction of facilities and the drilling of production or injection wells is capital intensive, requires advanced technology and due to difficult environmental challenges, cost projections are uncertain. In order for this Upstream business to continue to be profitable, the Group needs to replace depleted reserves with new proved reserves. Furthermore, the Group needs to accomplish such replacement in a manner that allows subsequent production to be economically viable. However, TOTAL's ability to discover or acquire and develop new reserves successfully is uncertain and can be negatively affected by a number of factors, including:

- the geological nature of oil and gas fields, notably unexpected drilling conditions including pressure or irregularities in geological formations;
- the risk of dry holes or failure to find expected commercial quantities of hydrocarbons;
- equipment failures, fires, blow-outs or accidents;
- the Group's inability to develop or deploy new technologies that permit access to previously inaccessible fields;
- the Group's inability to anticipate market changes in a timely manner;
- adverse weather conditions;
- compliance with both anticipated and unanticipated governmental requirements, including U.S. and EU regulations that may give a competitive advantage to companies not subject to such regulations;
- shortages or delays in the availability or delivery of appropriate equipment;
- industrial action;
- competition from publicly held and state-run oil and gas companies for the acquisition and development of assets and licenses;
- increased taxes and royalties, including retroactive claims; and
- problems with legal title.

Any of these factors could lead to cost overruns and impair the Group's ability to make discoveries and acquisitions or complete a development project, or to make production economical.
It is impossible to guarantee that new reserves of oil and gas will be discovered in sufficient quantities to replace the Group's reserves currently being developed, produced and marketed. Furthermore, some of these factors may also affect the Group's projects and facilities further down the oil and gas chain. If TOTAL fails to develop new reserves cost-effectively on an ongoing basis, the results of the Group's operations, including profits, and the Group's financial condition, would be materially and adversely affected.

The Group's oil and gas reserves data are only estimates, and subsequent downward adjustments are possible. If actual production from such reserves is lower than current estimates indicate, the Group's results of operations and financial condition would be negatively impacted.

The proved reserves figures of the Group are estimates reflecting applicable reporting regulations as they may evolve. Proved reserves are those reserves which, by analysis of geosciences 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. Reserves are estimated by teams of qualified, experienced and trained geoscientists, petroleum engineers and project engineers, who rigorously review and analyze in detail all available geosciences and engineering data (*e.g.*, seismic, electrical logs, cores, fluids, pressures, flow rates, facilities parameters). This process involves making subjective judgments, including with respect to the estimate of hydrocarbons initially in place, initial production rates and recovery efficiency, based on available geological, technical and economic data. Consequently, estimates of reserves are not exact measurements and are subject to revision. In addition, they may be negatively impacted by a variety of factors that are beyond the Group's control and that could cause such estimates to be adjusted downward in the future, or cause the Group's actual production to be lower than its currently reported proved reserves indicate. The main such factors 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 to which the Group is entitled under production sharing and risked service contracts and other contractual terms;
- changes in tax rules and other government regulations that make reserves no longer economically viable to exploit; and
- the actual production performance of the Group's reservoirs.

The Group's reserves estimates may therefore require substantial downward revisions to the extent its subjective judgments prove not to have been conservative enough based on the available geosciences and engineering data, or the Group's assumptions regarding factors or variables that are beyond its control prove to be incorrect over time. Any downward adjustment would indicate lower future production amounts, which could adversely affect the Group's results of operations, including profits as well as its financial condition.

3.3. Major projects and production growth

The Group's production growth depends on the delivery of its major development projects.

The Group's targeted production growth relies heavily on the successful execution of its major development projects, which are complex and capital-intensive. These major projects are subject to a number of challenges, including:

- negotiations with partners, governments, suppliers, customers and others;
- cost overruns and delays related to the availability of skilled labor or delays in manufacturing and delivery of critical equipment, or shortages in the availability of such equipment;
- unforeseen technical difficulties that could delay project startup or cause unscheduled project downtime;
- the actual performance of the reservoir and natural field decline; and
- timely issuance or renewal of permits and licenses by government agencies.

Poor delivery of any major project that underpins production or production growth could adversely affect the Group's financial performance.

3.4. Equity affiliates

Many of the Group's projects are conducted by equity affiliates. This may reduce the degree of control, as well as the ability of the Group to identify and manage risks.

A significant and growing number of the Group's projects are conducted by equity affiliates. In cases where a company in which the Group holds an interest is not the operator, it may have limited influence over, and control of, the behavior, performance and costs of the partnership, its ability to manage risks may be limited and it may, nevertheless, be pursued by regulators or claimants in the event of an incident. Additionally, the partners of the Group (particularly local partners in developing countries) may not be able to meet their financial or other obligations to the projects, which may threaten the viability of a given project, and they may not have the financial capacity to fully indemnify the Group in the event of an incident.

3.5. Risks related to economic or political factors

TOTAL has significant production and reserves located in politically, economically and socially unstable areas, where the likelihood of material disruption of the Group's operations is relatively high.

A significant portion of TOTAL's oil and gas production and reserves is located in countries outside of the Organisation for Economic Co-operation and Development (OECD). In recent years, a number of these countries have experienced varying degrees of one or more of the following: economic instability, political volatility, civil war, violent conflict and social unrest and actions of terrorist groups. Any of these conditions alone or in combination could disrupt the Group's operations in any of these regions, causing substantial declines in production. In Africa, which represented 31% of the Group's 2012 combined liquids and gas production, certain of the countries in which the Group has production have recently suffered from some of these conditions, including Nigeria, where the Group had in 2012 its highest hydrocarbon production, and Libya. The Middle East, which represented 21% of the Group's 2012 combined liquids and gas production, has recently suffered increased political volatility in connection with violent conflict and social unrest, including Syria, where European Union (EU) economic sanctions have prohibited TOTAL from producing oil and gas, and Yemen. In South America, which represented 8% of the Group's 2012 combined liquids and gas production, certain of the countries in which TOTAL has production have recently suffered from some of above-mentioned conditions, including Argentina and Venezuela. In addition, uncertainties surrounding enforcement of contractual rights in these regions may adversely impact the Group's results. Furthermore, in addition to current production, TOTAL is 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 TOTAL has 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 the Group's production and operations in the future and/or cause certain investors to reduce their holdings of TOTAL's securities.

TOTAL, like other major international energy 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 political and economic risks. However, there can be no assurance that such events will not have a material adverse impact on the Group.

The Group's operations throughout emerging countries are subject to intervention by the governments of these countries, which could have an adverse effect on its results of operations.

TOTAL has significant exploration and production activities, 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, the Group's 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, TOTAL has seen governments and state-owned enterprises imposing more stringent conditions on companies pursuing exploration and production activities in their respective countries, increasing the costs and uncertainties of its business operations, which is a trend the Group expects 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 quota controls and export limits;
- nationalization or expropriation of assets;
- unilateral cancellation or modification of license or contract rights;
- increases in taxes and royalties, including retroactive claims;
- 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 TOTAL has substantial operations, including exploration, could cause the Group to incur material costs or cause the Group's production or the value of the Group's assets to decrease, potentially having a material adverse effect on its results of operations, including profits.

For example, the Nigerian government has been contemplating new legislation to govern the petroleum industry which, if passed into law, could have an impact on the existing and future activities of the Group in that country through increased taxes and/or costs of operation and could adversely affect financial returns from projects in that country.

3.6. Ethical misconduct and non compliance risks

Ethical misconduct or breaches of applicable laws by the Group's employees could expose TOTAL to criminal and civil penalties and be damaging to TOTAL's reputation and shareholder value.

The Code of Conduct of the Group, which applies to all of its employees, defines the Group's commitment to integrity, compliance with all applicable legal requirements, high ethical standards and the behaviors and actions the Group expects of the businesses and people of the Group wherever it operates. Ethical misconduct or non-compliance with applicable laws and regulations, including non-compliance with anti-bribery, anticorruption and other applicable laws by TOTAL, its partners, agents or others that acts on the Group's behalf, could expose TOTAL and its employees to criminal and civil penalties and could be damaging to TOTAL's reputation and shareholder value. In addition to such penalties, a monitor is likely to be appointed to review the Group's compliance and internal control procedures and may, if need be, recommend improvements of such procedures. Refer to paragraph 5.6. in Chapter 7 Legal and arbitration proceedings - Iran for an overview of the investigation since 2003 by the SEC and Department of Justice (DoJ) concerning the pursuit of business in Iran by certain oil companies, including TOTAL. At this point, the Company considers that the resolution of this matter is not expected to have a significant impact on the Group's financial situation or its future planned operations.

The Group has been deploying ethics and compliance programs since 2009, as a priority of the General Management. Refer to paragraph 1.10.1. in Chapter 5 of this Registration Document for more details.

3.7. Legal aspects of the Group's activities

3.7.1. Legal aspects of the Upstream segment's activities

TOTAL's Upstream segment conducts activities in various countries which are therefore subject to a broad range of regulations. These cover virtually all aspects of exploration and production operations, including 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. 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 contracts.

In the framework of oil concession agreements, 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.

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 there are other contractual models, TOTAL's license portfolio is comprised mainly of concession agreements.

In every country, 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 “risked service contracts”, which are similar to production sharing contracts. However, the profit oil is replaced by risked monetary

remuneration, agreed by contract, which depends notably on the field performance. Thus, the remuneration under the Iraqi contract is based on an amount calculated per barrel produced.

Oil and gas exploration and production activities are subject to authorization granted by public authorities (licenses), which are granted for specific and limited periods of time and include an obligation to return a large portion, or the entire portion in case of failure, of the area covered by the license at the end of the exploration period.

TOTAL pays taxes on income generated from its oil and gas production and sales activities under its concessions, production sharing contracts and risked service contracts, as provided for by local regulations. In addition, depending on the country, TOTAL's production and sales activities may be subject to a number of other taxes, fees and withholdings, including special petroleum taxes and fees. The taxes imposed on oil and gas production and sales activities may be substantially higher than those imposed on other industrial or commercial 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 that, in certain cases, can reduce or challenge the protections offered by this legal framework.

3.7.2. Legal aspects of the Group's other activities

The activities of the Group's Refining & Chemicals and Marketing & Services are also subject to a wide range of regulations.

In European countries and in the United States, sites and products are subject to environmental (water, air, soil, noise, protection of biodiversity, waste management, impact studies, etc.), health (on-the-job safety, chemical product risks) and safety (safety of personnel and residents, major risk facilities) regulations. Product quality and consumer protection are also subject to regulations. Within the European Union, EU regulations must be transposed into Member States' national laws or directly enforced. In such Member States, EU legislation and regulations may be in addition to national and local government regulations. In addition, in all Member States of the European Union, industrial facilities operate pursuant to licenses issued by competent local authorities that are based on national laws and EU regulations. It is the same in the United States, where federal rules are in addition to those of the various states.

In other countries where the Group operates, legislation is often inspired by EU and U.S. regulations. These countries may more fully develop certain aspects of regulation in particular fields, for example those relating to protecting water, nature and health.

Irrespective of the particular country in which the Group operates, TOTAL has developed standards based on best practices existing in countries with strong regulations and progressively upgrades policies with respect to these standards.

In addition, depending on the country where the Group operates, its other activities are subject to specific sector requirements that impose constraints with respect to, for example, strategic oil reserves holding requirements or and shipping capacities owned or in chartered.

3.7.3. Competition law

Competition laws apply to the Group's companies in the vast majority of countries in which it does business. Violations of competition laws carry fines and expose the Group and its employees to criminal sanctions and civil suits. Furthermore, it is now common for persons or corporations allegedly injured by violations of competition laws to sue for damages.

The broad range of activities and countries in which the Group operates requires local analysis, by business segment, of the legal risks in terms of competition law. Some of the Group's business segments have already been implementing competition law conformity plans for a long time. In 2012, a Group policy for compliance with competition law and prevention of violations in this area was adopted. Its deployment is based on a dedicated organization, the involvement of hierarchies and staff, and a warning process.

3.8. Critical IT system services and information security

Disruption of the Group's critical IT services or breaches of information security could adversely affect its operations.

The businesses of the Group depend heavily on the reliability and security of its information technology ("IT") systems. If the integrity of the IT systems were compromised due to, for example, technical failure or cyber attack, the business operations and assets of the Group could sustain serious damage, material intellectual property could be divulged and, in some cases, personal injury, environmental harm and regulatory violations could occur potentially having a material adverse effect on the Group's results of operations, including profits.

The Information Technology Department has developed and distributed governance and security rules that describe the recommended infrastructure, organization and procedures to maintain information systems that are appropriate to the organization's needs and to limit information security risks. These rules are implemented across TOTAL under the responsibility of the various business segments.

3.9. Countries targeted by economic sanctions

TOTAL has activities in certain countries that are targeted by economic sanctions under relevant U.S. and EU laws, and if the Group's activities are not conducted in accordance with the relevant conditions, TOTAL could be sanctioned or otherwise penalized.

The United States has adopted various laws and regulations designed to restrict trade with Cuba, Iran, Sudan and Syria, and the U.S. Department of State has identified these countries as state sponsors of terrorism. The European Union ("EU") has similar restrictions with respect to Iran and Syria. A violation of these laws or regulations could result in criminal and material financial penalties, including being prohibited from transacting in U.S. dollars. The Group currently has limited marketing and trading activities in Cuba and a limited presence in Iran and Syria (for more information, see paragraph 3.9.2. below). Since the independence of the Republic of South Sudan on July 9, 2011, TOTAL is no longer present in Sudan.

3.9.1. U.S. and European restrictions

With respect to Iran, the United States has adopted a number of measures since 1996 that provide for the possible imposition of sanctions against non-U.S. companies engaged in certain activities in and with Iran, especially in Iran's energy sector. The United States first adopted legislation in 1996 authorizing sanctions against non-U.S. companies doing business in Iran and Libya (the Iran and Libya Sanctions Act, referred to as "ILSA"). In 2006, ILSA was amended to concern only business in Iran (then renamed the Iran Sanctions Act, referred to as "ISA"). Pursuant to ISA, which as described below has since been amended and expanded, the President of the United States is authorized to initiate an investigation into the activities of non-U.S. companies in Iran's energy sector and the possible imposition of sanctions 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 ISA 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 any of TOTAL's other activities in Iran. In each of the years since the passage of 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. Since 2011, TOTAL has had no production in Iran.

ISA was amended in July 2010 by the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010 ("CISADA"), which expanded both the list of activities with Iran that could lead to sanctions and the list of sanctions available. In particular, CISADA authorized sanctions for knowingly providing refined petroleum products above certain monetary thresholds to Iran and for providing goods, services, technology, information or support that could directly and significantly either facilitate Iran's domestic production of refined petroleum products or contribute to Iran's ability to import refined petroleum products. Investments in the petroleum sector commenced prior to the adoption of CISADA appear to remain subject to the pre-amended version of ISA. The new sanctions added by CISADA would be available with respect to new investments in the petroleum sector or any other sanctionable activity occurring on or after July 1, 2010.

Prior to CISADA's enactment, TOTAL discontinued potentially sanctionable sales of refined petroleum products to Iran. On September 30, 2010, the U.S. State Department announced that the U.S. government, pursuant to the "Special Rule" provision of ISA added by CISADA that allows it to avoid making a determination of sanctionability under ISA with respect to any party that provides certain assurances, would not make such a determination with respect to TOTAL. The U.S. State Department further indicated at that time that, as long as TOTAL acts in accordance with its commitments, TOTAL will not be regarded as a company of concern for its past Iran-related activities.

Since the applicability of the "Special Rule" to TOTAL was announced by the U.S. State Department, the United States has imposed a number of additional measures targeting activities in Iran. On November 21, 2011, President Obama issued Executive Order 13590, which authorized sanctions for knowingly, on or after November 21, 2011, selling, leasing, or providing to Iran goods, services, technology or support above certain monetary thresholds that could directly and significantly contribute to the maintenance or expansion of Iran's ability to develop petroleum resources located in Iran, or domestic production of petrochemical products. TOTAL does not conduct activities in Iran that could be sanctionable under Executive Order 13590. In any event, there is no provision in Executive Order 13590 that modifies the aforementioned "Special Rule", and the U.S. State Department issued guidance that completion of existing contracts is not sanctionable under Executive Order 13590.

On July 30, 2012, President Obama issued Executive Order 13622, which authorized sanctions for, amongst other activities, (i) knowingly, on or after July 30, 2012, engaging in a significant transaction for the purchase or acquisition of petroleum, petroleum products or petrochemical products from Iran, and (ii) materially assisting, sponsoring or providing financial, material, or technological support for, or goods or services in support of, the National Iranian Oil Company, the Naftiran Intertrade Company, or the Central Bank of Iran. There is no provision in Executive Order 13622 that modifies the aforementioned "Special Rule". In addition, Executive Order 13622 contains an exception for the Shah Deniz gas field pipeline project, in which TOTAL (10%) and Naftiran Intertrade Company ("NICO") (10%) participate, to supply natural gas from the Shah Deniz gas field in Azerbaijan to Europe and Turkey. TOTAL does not conduct activities targeted by Executive Order 13622.

On August 10, 2012, President Obama signed into law the Iran Threat Reduction and Syria Human Rights Act of 2012 ("ITRSHRA"), which, amongst other things, amended ISA and CISADA. ITRSHRA, like CISADA before it, expanded both the list of activities with Iran that could lead to sanctions and the list of sanctions available. Amongst other things, ITRSHRA authorized sanctions for (i) provision to Iran of goods, services, technology, information or support above a certain market value that could directly and significantly facilitate the maintenance or expansion of Iran's domestic production of refined petroleum products, including any direct and significant assistance with the construction, modernization, or repair of petroleum refineries or infrastructure directly associated with petroleum refineries, (ii) participation in a joint venture established on or after January 1, 2002 with respect to the development of petroleum resources outside of Iran where either the Government of Iran is a substantial partner or investor or where the joint venture could enhance Iran's ability to develop petroleum resources in Iran, and (iii) owning,

operating, controlling or insuring a vessel used to transport crude oil from Iran to another country. ITRSHRA also contains an exception for the Shah Deniz gas field project. TOTAL does not conduct activities targeted by ITRSHRA.

ITRSHRA also added a new Section 13(r) to the Securities Exchange Act of 1934, as amended ("Exchange Act"), which requires TOTAL to disclose whether it or any of its affiliates has engaged during the calendar year in certain Iran-related activities, including those targeted under ISA, without regard to whether such activities are sanctionable under ISA, and any transaction or dealing with the Government of Iran that is not conducted pursuant to a specific authorization of the U.S. government (see paragraph 3.9.2., below). Section 13(r) also requires TOTAL to file a separate notice to the United States Securities and Exchange Commission ("SEC") concerning any Section 13(r)-related disclosure provided in its annual report. Following receipt of this notice, the SEC must transmit a report to the President and Congress, and the President must initiate an investigation and make a sanctions determination within 180 days after initiating the investigation. TOTAL believes that its Iran-related activities required to be disclosed by Section 13(r) are not sanctionable.

Also with regard to Iran, France and the EU 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. In July and October 2010, the EU adopted new restrictive measures regarding Iran. Among other things, the supply of key equipment and technology in the following sectors of the oil and gas industry in Iran are prohibited: refining, Liquefied Natural Gas, exploration and production. The prohibition extends to technical assistance, training and financial assistance in connection with such items. Extension of loans or credit to, acquisition of shares in, entry into joint ventures with or other participation in enterprises in Iran (or Iranian-owned enterprises outside of Iran) engaged in any of the targeted sectors also is prohibited. Moreover, with respect to restrictions on transfers of funds and on financial services, any transfer of at least €40,000 or equivalent to or from an Iranian individual or entity shall require a prior authorization of the competent authorities of the EU Member States. TOTAL conducts its activities in compliance with these EU measures.

On January 23, 2012, the Council of the EU prohibited the purchase, import and transport of Iranian oil and petroleum and petrochemical products by European persons and by entities constituted under the laws of an EU Member State. Prior to that date, TOTAL had ceased these now-prohibited activities.

With respect to Syria, the EU adopted measures in May 2011 with criminal and financial penalties that prohibit the supply of certain equipment to Syria, as well as certain financial and asset transactions with respect to a list of named individuals and entities. These measures apply to European persons and to entities constituted under the laws of an EU Member State.
In September 2011, the EU adopted further measures, including, notably, a prohibition on the purchase, import or transportation from Syria of crude oil and petroleum products. Since early September 2011, the Group ceased to purchase hydrocarbons from Syria. On December 1, 2011, the EU extended sanctions against, among others, three state-owned Syrian oil firms, including General Petroleum Corporation, TOTAL's co-contracting partner in PSA 1988 (Deir Es Zor licence) and the Tabiyeh contract.

The U.S. also has various measures regarding Syria. Since early December 2011, the Group has ceased its activities that contribute to oil and gas production in Syria.

The U.S. Treasury Department's Office of Foreign Assets Control (referred to as "OFAC") administers and enforces economic sanctions programs, some of which are based on the United Nations Security Council resolutions referred to above, against targeted foreign countries, territories, entities and individuals (including those engaged in activities related to terrorism or the proliferation of weapons of mass destruction and other threats to the national security, foreign policy or economy of the United States). The activities that are restricted depend on the sanctions program and targeted country or parties, and civil and/or criminal penalties, imposed on a per transaction basis, can be substantial. 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, among others, Cuba, Iran, Sudan and Syria. TOTAL does not believe that these sanctions are applicable to any of its activities in the OFAC-targeted countries.

In addition, many U.S. states have adopted legislation requiring state pension funds to divest themselves of securities in any company with active business operations in Iran, and state contracts not to be awarded to such companies. State insurance regulators have adopted similar initiatives relating to investments by insurance companies in companies doing business with the Iranian oil and gas, nuclear, and defense sectors. If TOTAL's presence in Iran was determined to fall within the prohibited scope of these laws, and TOTAL was not to qualify for any available exemptions, certain U.S. institutions holding interests in TOTAL may be required to sell their interests. If significant, sales of securities resulting from such laws and/or regulatory initiatives could have an adverse effect on the prices of TOTAL's securities.

TOTAL continues to closely monitor legislative and other developments in France, the EU and the United States in order to determine whether its limited activities or presence in sanctioned or potentially sanctioned jurisdictions could subject TOTAL to the application of sanctions. TOTAL cannot assure that current or future regulations or developments will not have a negative impact on its business or reputation.

3.9.2. Cuba, Iran and Syria

Provided in this section is certain information relating to TOTAL's activities in Cuba and its presence in Iran and Syria. For more information on U.S. and EU restrictions relevant to TOTAL in these jurisdictions, see paragraph 3.9.1. above.

Cuba

In 2012, Marketing & Services had limited marketing activities for the sale of specialty products to non-state entities in Cuba and paid taxes on such activities. In addition, Trading & Shipping purchased hydrocarbons pursuant to spot contracts from a state-controlled entity for approximately €62 million.

Iran

The Iran Threat Reduction and Syria Human Rights Act of 2012 ("ITRSHRA"), signed into law by President Obama on August 10, 2012, added a new Section 13(r) to the Securities Exchange Act of 1934, as amended, which requires TOTAL to disclose whether it or any of its affiliates has engaged during the 2012 calendar year in certain Iran-related activities. While the Group has not engaged in any activity that would be required to be disclosed pursuant to subparagraphs (A), (B), (C), (D)(i) or (D)(ii) of Section 13(r)(1), affiliates of TOTAL may be deemed to have engaged in a transaction or dealing with the government of Iran pursuant to Section 13(r)(1)(D)(iii), as discussed below.

The Group has no exploration and production activities in Iran. Some payments are yet to be reimbursed to the Group with respect to past expenditures and remuneration under buyback contracts entered into between 1997 and 1999 with the National Iranian Oil Company ("NIOC") for the development of the South Pars 2&3 and Dorood fields. With respect to these contracts, development operations have been completed and the Group, which is no longer involved in the operation of these fields, has no information on the production from these fields. The Group maintains a local office in Iran solely for non-operational functions. In 2012, Total E&P Iran (100%), Elf Petroleum Iran (99.7%) and Total South Pars 2&3 (99.7%) collectively made payments of approximately €1 million to the Iranian administration with respect to certain taxes and social security in relation to payments made in 2012 to the Group under the Dorood and South Pars 2&3 buyback contracts and the maintenance of the local office mentioned above and its personnel. TOTAL did not recognize any revenues or profits from the aforementioned in 2012. Payments for taxes and social security are expected to be made in 2013.

In 2012, as part of its ongoing global strategy for the protection of its intellectual property, TOTAL filed two patent applications in Iran that it had filed in many other countries. The filing of an application to obtain a patent in Iran is an activity that OFAC licenses, and, although TOTAL is not a U.S. person, it believes its activity is consistent with this license.

Total E&P UK Limited ("TEP UK"), a wholly-owned affiliate of TOTAL, had limited contacts in 2012 with the Iranian Oil Company UK Ltd ("IOC"), a subsidiary of NIOC. These contacts related to agreements governing certain transportation, processing and operation services formerly provided to a joint venture at the Rhum field in the UK, co-owned by BP (50%, operator) and IOC (50%), by a joint venture at the Bruce field between BP (37%, operator), TEP UK (43.25%), BHP Billiton Petroleum Great Britain Ltd (16%) and Marubeni Oil & Gas (North Sea) Limited (3.75%) and by TEP UK's Frigg UK Association pipeline (100%). To TOTAL's knowledge, no services have been provided under the aforementioned agreements since November 2010, when the Rhum field stopped production following the adoption of EU sanctions, other than critical safety-related services (*i.e.*, monitoring and marine inspection of the Rhum facilities). These agreements led to the signature in 2005 of an agreement by TEP UK and Naftiran Intertrade Co. ("NICO") (IOC's parent company and a subsidiary of NIOC) for the purchase by TEP UK of Rhum field natural gas liquids from NICO. There have been no purchases under this agreement since November 2010. TEP UK's contacts with IOC and NICO in 2012 in regard to the aforementioned agreements were limited to exchanging letters and notifications regarding contract administration and declarations of force majeure. TEP UK may have similar limited contacts with IOC and NICO in 2013. TOTAL did not recognize any revenues or profits from the aforementioned in 2012.

The Group does not own or operate any refineries or chemicals plants in Iran. Until December 2012, at which time TOTAL sold its entire interest, it held a 50% interest in the company Beh Total along with Behran Oil (50%), a company controlled by entities with ties to the government of Iran. Beh Total produced and marketed in 2012 small quantities of lubricants (16,885 t) for sale to domestic consumers in Iran. In 2012, revenue generated from Beh Total's activities in Iran was approximately €50 million, net income was approximately €3 million and Beh Total paid approximately €1 million in taxes and approximately €4 million of dividends for fiscal year 2010 (share of TOTAL: approximately €2 million).

Total Marketing Middle East FZE ("TMME"), a wholly-owned affiliate of TOTAL, sold in 2012 lubricants and additives to Beh Total in Iran. In 2012, these activities generated gross revenue of approximately €3.9 million and a net profit of approximately €0.8 million. TMME stopped such sales at the end of 2012.

Total Oil Turkiye A.S. ("TOT A.S."), a company wholly-owned by the Group and by two Group Employees, obtained in 2012, after discussions with Beh Total, administrative authorizations from the French authorities to export to Iran additives for blending by Beh Total with base oils to produce lubricants for sale by Beh Total. However, no transactions with or payments to Beh Total took place in 2012 in relation to such proposed activity, and TOT A.S. does not anticipate pursuing this business activity with Beh Total.

Total Ethiopia Ltd ("TEL"), an Ethiopian company wholly-owned by the Group and by three Group employees, paid approximately €70,000 in 2012 to Merific Iran Gas Co, an Ethiopian company majority-owned by entities affiliated with the government of Iran, pursuant to a contract for the transport and storage of LPG in Ethiopia purchased by TEL from international markets. TEL will continue such activity until it secures access to other local facilities, which is expected in late 2013.

Total Raffinage Marketing S.A., a French company wholly-owned by the Group and by five Group Employees, and Total Belgium NV, a company held 99.99% by the Group and by an individual, provided in 2012 fuel payment cards to Iranian diplomatic missions in France and in Belgium, respectively, for use in the Group's service stations. In 2012, these activities generated gross revenue of approximately €50,000 and a net profit of approximately €2,000. The Group has terminated these contractual agreements in France and is in the process of terminating them in Belgium.

In addition, the Group holds a 50% interest in, but does not operate, Samsung Total Petrochemicals Co. Ltd ("STC"), a South Korean incorporated joint venture with Samsung General Chemicals Co., Ltd. (50%). During the first six months of 2012 and prior to Executive Order 13622, STC purchased 292,000 t of condensates directly or indirectly from companies affiliated with the Iranian government for approximately €264 million. As such condensates are used by STC as inputs for its manufacturing processes, it is not possible to estimate the revenues from sales or net income attributable to such purchases. In reliance on the exemption provided in Section 1245(d)(4)(D) of the National Defense Authorization Act (NDAA) announced on December 7, 2012, STC contracted to recommence such purchases. However, STC's management has recently stated that STC would no longer take deliveries under such contractual arrangement as from March 31, 2013. In addition STC sold 1,450 t of polymers for approximately €1 million to two Korean

traders, Skyplast and Tera Korea, which may have subsequently exported some or all of this product to Iran. Taking into account the uses for such polymers (*e.g.*, food packaging, pipes, car interiors), the end-customers likely were private companies. STC may make similar sales in the future.

Prior to January 23, 2012, Trading & Shipping ceased its purchase of Iranian hydrocarbons. Before this date, Total International Limited, a wholly-owned subsidiary of TOTAL, purchased in Iran during 2012 pursuant to a mix of spot and term contracts approximately 2 million barrels of hydrocarbons from state-controlled entities for approximately €189 million, which it subsequently resold for approximately €176 million. As the Group hedges the risk associated with a fluctuation in hydrocarbon prices during its trading activities, the net income before tax attributable to such activity was €3 million. Trading & Shipping owed to state controlled entities in Iran approximately €235 million as of December 31, 2011 and €83 million as of December 31, 2012, which represented the value of the hydrocarbons purchased prior to the cessation of such activity.

Syria

Since early December 2011, TOTAL has ceased its activities that contribute to oil and gas production in Syria and maintains a local office solely for non-operational administrative functions. In 2012, TOTAL made payments of less than €2 million to Syrian government agencies in the form of taxes and contributions for services rendered by the Syrian public sector in relation to the maintenance of the aforementioned office and its personnel.

3.10. Risks related to competition

TOTAL's competitors are comprised of national oil companies and international oil companies. The evolutions of the energy sector have opened the door to new competitors, increased market price volatility and called the viability of long-term contracts into question.

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 as well as for the sale of manufactured products based on crude and refined oil. In the gas sector, major producers are becoming interested in the downstream value chain and are competing directly with established distribution companies, including those that belong to the Group. Increased competitive pressure could have a significant negative effect on the sales prices, margins and market shares of the Group's companies.

The pursuit of unconventional gas development, particularly in the United States, has contributed to falling market prices and a marked difference between spot and long-term contract prices. The competitiveness of long-term contracts indexed to oil prices could be affected if this discrepancy persists and if it should prove difficult to invoke price revision clauses.

The major international oil companies in competition with TOTAL are ExxonMobil, Royal Dutch Shell, Chevron and BP. As of December 31, 2012, TOTAL ranked fifth among these companies in terms of market capitalization[1].

3.11. Legal and arbitration proceedings

The principal legal proceedings in which the Group's companies are involved are described in Chapter 7 of this Registration Document.

4. Insurance and risk management

4.1. Organization

TOTAL has its own reinsurance company, Omnium Reinsurance Company (ORC). ORC is integrated within the Group's insurance management and is used as a centralized global operations tool for covering the Group companies' insurable risks. It allows the Group's worldwide insurance program to be implemented in compliance with the specific requirements of local regulations applicable in the countries where the Group operates.

Some countries may 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, ORC negotiates a retrocession of the covered risks from the local insurer. As a result, ORC enters into reinsurance contracts with the subsidiaries' local insurance companies, which transfer most of the risk to ORC.

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

In 2012, the net amount of risk retained by ORC after reinsurance was a maximum of $90 million per third-party liability insurance claim and $75 million per property damage and/or business interruption insurance claim. Accordingly, in the event of any loss giving rise to an aggregate insurance claim, the effect on ORC would be limited to its maximum retention of $165 million per occurrence.

(1) Source: Reuters.

4.2. 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 should a catastrophic event occur;
- help to implement measures to limit the probability that a catastrophic event occurs and the financial consequences if such event should occur; and
- manage the level of risk from such events to be either covered internally by the Group or transferred to the insurance market.

4.3. Insurance policy

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

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 oil and gas industry practice. In 2012, the Group's third-party liability insurance for any liability (including potential accidental environmental liabilities) was capped at $850 million (onshore) and $750 million (offshore).
- Property damage and business interruption: the amounts insured vary by sector and by site and are based on the estimated cost of and scenarios of reconstruction under maximum loss scenarios and on insurance market conditions. The Group subscribed for business interruption coverage in 2012 for its main refining and petrochemical sites.

For example, for the Group's highest risks (North Sea platforms and main refineries and petrochemical plants), in 2012 the insurance limit for the Group share of the installations was approximately $1.7 billion for the Refining & Chemicals segment and approximately $1.6 billion for the Upstream segment.

Deductibles for property damage and third-party liability fluctuate between €0.1 and €10 million depending on the level of risk and liability, and are borne by the relevant subsidiaries. For business interruption, coverage is triggered sixty days after the occurrence giving rise to the interruption.

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 mostly underwritten by outside insurance companies.

The above-described policy is given as an example of a situation as of a given date 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 the General Management's assessment of the risks incurred and the adequacy of their coverage.

TOTAL believes that its insurance coverage is in line with industry practice and sufficient to cover normal risks in its operations. The Group is however not insured against all potential risks. In the event of a major environmental disaster, for example, TOTAL's liability may exceed the maximum coverage provided by its third-party liability insurance. The loss TOTAL could suffer in the event of such disaster would depend on all the facts and circumstances of the event and would be subject to a whole range of uncertainties, including legal uncertainty as to the scope of liability for consequential damages, which may include economic damage not directly connected to the disaster. The Group cannot guarantee that it will not suffer any uninsured loss and there can be no guarantee, particularly in the case of a major environmental disaster or industrial accident, that such loss would not have a material adverse effect on the Group.

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1. Report of the Chairman of the Board of Directors (Article L. 225-37 of the French Commercial Code)

Pursuant to Article L. 225-37 of the French Commercial Code, the following report presents information for the year 2012 related to the composition of the Board of Directors, the application of the men/women balanced representation principle in the Board of Directors, internal control and risk management procedures implemented by the Company, any limits set by the Board of Directors concerning the powers of the Chief Executive Officer, as well as information related to corporate governance. This report also sets forth the provisions of the by-laws concerning participation in Shareholders' Meetings and presents the principles and rules applied to determine the compensation and other benefits granted to the corporate executive officers.

This report was prepared based on input from several of the Company's functional divisions, including in particular the Legal, Finance and Group Internal Control and Audit departments.

This report was approved by the Board of Directors at its meeting on February 12, 2013, after the Board's committees reviewed the sections relevant to their respective duties.

1.1. Composition of the Board of Directors

Directors are appointed by the shareholders for a three-year term (Article 11 of the Company's by-laws).

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 and to ensure the continuity of the Board of Directors' work.

The Board of Directors appoints the Chairman of the Board 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.

1.1.1. Composition of the Board of Directors as of December 31, 2012

As of December 31, 2012, the Board of Directors had fifteen members, including one director appointed by the shareholders to represent employee shareholders. Twelve of the members of the Board were independent (see paragraph 1.8. below).

The following individuals were members of the Board of Directors of TOTAL S.A. (information as of December 31, 2012[(1)]):

Christophe de Margerie

Born on August 6, 1951 (French).

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. In 1995, he was appointed President of Total Middle East. In May 1999, he joined the Executive Committee as President of the Exploration & Production division. 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. On May 21, 2010, he was named Chairman and Chief Executive Officer of TOTAL. Mr. de Margerie is also a Director of the Institut du monde arabe.

Director of TOTAL S.A. since 2006 - Last renewal: May 11, 2012 until 2015.

Chairman of the Strategic Committee.

Holds 105,556 TOTAL shares and 59,419 shares of the "TOTAL ACTIONNARIAT FRANCE" collective investment fund.

Current directorships

- Chairman and Chief Executive Officer of TOTAL S.A.* since May 21, 2010 (Chief Executive Officer since February 14, 2007)
- Chairman of Total E&P Indonésie
- Director of Shtokman Development AG (Switzerland)
- Member of the Supervisory Board of Vivendi*
- Manager of CDM Patrimonial SARL

Directorships that expired in the previous five years

- Chairman and Chief Executive Officer of Elf Aquitaine until June 21, 2010
- Director of Total E&P Russia until 2008
- Director of Total Exploration and Production Azerbaijan until 2008
- Director of Total E&P Kazakhstan until 2008
- Director of Total Profils Pétroliers until 2008
- Director of Abu Dhabi Petroleum Company Ltd (ADPC) until 2008
- Director of Abu Dhabi Marine Areas Ltd (ADMA) until 2008
- Director of Iraq Petroleum Company Ltd (IPC) until 2008
- Permanent representative of TOTAL S.A. on the Board of Total Abu al Bukhoosh until 2008

Thierry Desmarest

Born on December 18, 1945 (French).

A graduate of the *École Polytechnique* and an Engineer of the French *Corps des Mines*, Mr. Desmarest served as Director of Mines and Geology in New Caledonia, then as technical advisor at the Offices 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

(1) Including information pursuant to paragraph 4 of Article L. 225-102-1 of the French Commercial Code or under item 14.1 of Annex I of EC Regulation No. 809/2004 of April 29, 2004.
* Company names marked with an asterisk are publicly-listed companies.
Underlined companies are companies that do not belong to the group in which the director has his or her main duties.

until February 2007, and then as Chairman of the Board of TOTAL until May 21, 2010. He was appointed Honorary Chairman and remains a director of TOTAL and Chairman of the TOTAL Foundation.

Director of TOTAL S.A. since 1995 - Last renewal: May 21, 2010 until 2013.

Chairman of the Nominating & Governance Committee, member of the Compensation Committee and the Strategic Committee.

Holds 186,576 shares.

Current directorships

- Director of TOTAL S.A.*
- Director of Sanofi*(1)
- Director of L'Air Liquide*
- Director of Renault S.A.*
- Director of Renault S.A.S.
- Director of Bombardier Inc.* (Canada)

Directorships that expired in the previous five years

- Chairman of the Board of Directors of TOTAL S.A.* until May 21, 2010
- Member of the Supervisory Board of Areva* until March 4, 2010

The Honorary Chairman performs representation missions of the Group at a high level in accordance with the decision of the Board of Directors on May 21, 2010.

Patrick Artus

Born on October 14, 1951 (French).

Independent director.

A graduate from the *École Polytechnique*, the *École Nationale de la Statistique et de l'Administration Économique* (ENSAE) 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 modeling. 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 an 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 *Cercle des Économistes*.

Director of TOTAL S.A. since 2009. Last renewal: May 11, 2012 until 2015.

Member of the Compensation Committee and, since February 9, 2012, member of the Nominating & Governance Committee.

Holds 1,000 shares.

Current directorships

- Director of TOTAL S.A. *
- Director of IPSOS

Directorships that expired in the previous five years

None.

Patricia Barbizet

Born on April 17, 1955 (French).

Independent director.

A graduate of the *École Supérieure de Commerce* of Paris in 1976, Ms. Barbizet started her career in the Renault Group as the Treasurer of Renault Véhicules Industriels and then Chief Financial Officer of Renault Crédit International. She joined the Pinault group in 1989 as the Chief Financial Officer. In 1992, she became the Chief Executive Officer of Financière Pinault. She was the President of the Supervisory Board of the Pinault Printemps Redoute group until May 2005 and became Vice-President of the Board of Directors of PPR in May 2005. Patricia Barbizet is also a member of the Board of Directors of TOTAL, TF1, Air France-KLM and *Fonds stratégique d'investissement*.

Director of TOTAL S.A. since 2008 - Last renewal: May 13, 2011 until 2014.

Chairperson of the Audit Committee and member of the Strategic Committee.

Holds 1,000 shares.

Current directorships

- Director of TOTAL S.A.*
- Vice Chairman of the Board of Directors of PPR *
- Chief Executive Officer and Director of Artémis
- Member of the Supervisory Board of Financière Pinault
- Chief Executive Officer (non-Director) of Financière Pinault
- Director of Société Nouvelle du Théâtre Marigny
- Permanent representative of Artémis at the Board of Directors of Agefi
- Permanent representative of Artémis at the Board of Directors of Sebdo le Point
- Member of the Management Board of Société Civile du Vignoble de Château Latour
- Member of the Supervisory Board of Yves Saint Laurent
- *Administratore Delagato* and *administratore* of Palazzo Grazzi
- Chairman of the Board of Directors of Christie's International Plc
- Board member of Gucci
- Director of Air France-KLM*
- Director of Bouygues*
- Director of TF1*
- Director of the Fonds stratégique d'investissement (French government sovereign fund)

Directorships that expired in the previous five years

- Non-executive Director of Tawa Plc* until June 2012
- Deputy Chief Executive Officer of Société Nouvelle du Théâtre Marigny until January 2012
- Director of Fnac until May 2011
- Director of Piaza until 2008
- Chairman of the Board of Directors of Piaza until 2008

(1) Non-consolidated company which was removed from the scope of consolidation on July 1, 2010.
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Underlined companies are companies that do not belong to the group in which the director has his or her main duties.

Gunnar Brock

Born on April 12, 1950 (Swedish).

Independent director.

A graduate of the Stockholm School of Economics with an MBA in Economics and Business Administration, Mr. Brock held various international positions at Tetra Pak. He served as Chief Executive Officer of Alfa Laval from 1992 to 1994 and as Chief Executive Officer of Tetra Pak from 1994 to 2000. After serving as Chief Executive Officer of Thule International, he was appointed Chief Executive Officer of Atlas Copco AB from 2002 to 2009. He is currently Chairman of the Board of Stora Enso Oy. Mr. Brock is also a member of the Royal Swedish Academy of Engineering Sciences and of the Board of Directors of the Stockholm School of Economics.

Director of TOTAL S.A. since May 21, 2010 and until 2013.

Member of the Strategic Committee and, since February 9, 2012, member of the Compensation Committee and the Nominating & Governance Committee.

Holds 1,000 shares.

Current directorships

- Director of TOTAL S.A.*
- Chairman of the Board of Stora Enso Oy
- Chairman of the Board of Mölnlycke Health Care Group
- Member of the Board of Investor AB
- Chairman of the Board of Rolling Optics
- Member of the Board of Stena AB*
- Member of the Board of Syngenta AG*

Directorships that expired in the previous five years

- Member of the Supervisory Board of Spencer Stuart Scandinavia until 2011
- Chief Executive Officer of Atlas Copco until 2009
- Chairman of the Board of Lego AS until 2008

Claude Clément

Born on November 17, 1956 (French).

Mr. Clément joined the Group in February 1977 and started his career at Compagnie Française de Raffinage, which offered him professional training. He held various positions at the Refining Manufacturing Department in French and African refineries (Gabon, Cameroon). He is currently Manager of the Refining Manufacturing Methods at the Refining Manufacturing Division. Mr. Clément has been an elected member of the Supervisory Board of the "TOTAL ACTIONS EUROPÉENNES", "TOTAL DIVERSIFIÉ À DOMINANTE ACTIONS" and "TOTAL ÉPARGNE SOLIDAIRE" collective investment funds since 2010, and an elected member of the Supervisory Board of the "TOTAL DIVERSIFIÉ À DOMINANTE OBLIGATIONS", "TOTAL MONÉTAIRE" and "TOTAL OBLIGATIONS" collective investment funds since 2010.

Director of TOTAL S.A. since May 21, 2010 and until 2013.

Holds 1,060 TOTAL shares and 3,640 shares of the "TOTAL ACTIONNARIAT FRANCE" collective investment fund.

Current directorships

- Director of TOTAL S.A.* representing employee shareholders

Directorship that expired in the previous five years

- Elected member of the Supervisory Board of the "TOTAL ACTIONNARIAT FRANCE" collective investment fund until 2012,
- President of the Supervisory Board of the "TOTAL ACTIONS EUROPÉENNES" collective investment fund until 2011.

Marie-Christine Coisne-Roquette

Born on November 4, 1956 (French).

Independent director.

A graduate of the University of Paris X Nanterre (law and English) and admitted to the Paris and New York Bar Associations in 1980, Ms. Coisne-Roquette worked as an attorney in Paris and New York until 1988, when she joined the family-owned Sonepar group. From 1988 to 1998, while also serving as Chief Executive Officer of the family-owned Colam Entreprendre holding company, she held several consecutive operational directorships at Sonepar S.A., where she was appointed Chairman of the Board in 1998. She has served as Chairman and Chief Executive Officer of Sonepar since 2002. A member of the Executive Board of MEDEF since 2000, Ms. Coisne-Roquette has chaired that organization's Tax Commission since 2005. Ms. Coisne-Roquette is also a director of the Association Nationale des Sociétés par Actions (ANSA).

Director of TOTAL S.A. since May 13, 2011 and until 2014.

Member of the Audit Committee.

Holds 1,130 shares.

Current directorships

- Director of TOTAL S.A.*
- Chairperson and Chief Executive Officer of Sonepar S.A.
- Chairperson and Chief Executive Officer of Colam Entreprendre
- Director of Hagemeyer Canada, Inc.
- President of the Supervisory Board of OTRA N.V.
- Director of Sonepar Canada, Inc.
- President of the Supervisory Board of Sonepar Deutschland GmbH
- Director of de Sonepar Ibérica
- Director of de Sonepar Italia Holding
- Director of de Sonepar Mexico
- Member of the Supervisory Board of Sonepar Nederland B.V.
- Director of Sonepar USA Holdings, Inc.
- Director of Feljas and Masson SAS
- Permanent representative of Colam Entreprendre, member of the Board of Directors at Cabus & Raulot (S.A.S)
- Permanent representative of Colam Entreprendre and Sonepar, co-managers of Sonedis (*société civile*)
- Permanent representative of Sonepar, Director of Sonepar France
- Permanent representative of Sonepar, President of Sonepar International (S.A.S)
- Permanent representative of Colam Entreprendre, Director of Sovemarco Europe (S.A.)
- Co-manager of Développement Mobilier & Industriel (D.M.I.) (*société civile*)
- Manager of Ker Coro (*société civile immobilière*)

Directorship that expired in the previous five years

- Chairperson of the Board of Directors of Sonepar Mexico until 2012
- Director of Encon Safety Products, Inc. until 2010
- Director of Hagemeyer North America, Inc. until 2010

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Underlined companies are companies that do not belong to the group in which the director has his or her main duties.

- Director of Hagemayer PPS Ltd until 2010
- Chairperson of the Board of Directors of Hagemayer PPS Ltd until 2008
- Chairperson of the Board of Directors of Sonepar Canada, Inc. until 2009
- Chairperson of the Board of Directors of Sonepar France until 2009
- Chairperson of the Board of Directors and acting Managing Director of Sonepar Iberica until 2009
- Chairperson of the Board of Directors of Sonepar Italia Holding until 2009
- Chairperson of the Board of Directors of Sonepar Mexico until 2010
- Chairperson of the Supervisory Board of Sonepar Nederland B.V. until 2009
- Chairperson of the Board of Directors of Sonepar Nordic A/S until 2009
- Chairperson of the Board of Directors and CEO of Sonepar USA Holdings, Inc. until 2009
- Director of Vallen Corporation until 2010
- Permanent representative of Sonepar, Director of A.E.D. until 2010
- Permanent representative of Sonepar, Director of C.S.O. until 2010
- Permanent representative of Sonepar, Director of Collin Sigmadis until 2010
- Permanent representative of Sonepar, Director of G.M.T. until 2010
- Permanent representative of Sonepar, Director of S.N.E. until 2010
- Permanent representative of Sonepar, Director of S.S.E. until 2010
- Permanent representative of Sonepar, General Partner of Sonepar Belgium until 2009
- Permanent representative of Sonepar, Director of Teissier until 2010

Bertrand Collomb

Born on August 14, 1942 (French).

Independent director.

A graduate of the *École Polytechnique* and a member of France's engineering *Corps des Mines*, Mr. Collomb held a number of positions within the Ministry of Industry and other cabinet 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 Chairman since 2007. He is also Chairman of the *Institut des Hautes Études pour la Science et la Technologie* (IHEST).

Director of TOTAL S.A. since 2000 - Last renewal: May 11, 2012 until 2015.

Member of the Nominating & Governance Committee and, until February 9, 2012, member of the Compensation Committee.

Holds 4,932 shares.

Current directorships

- Director of TOTAL S.A.*
- Director of DuPont* (United States of America)
- Director of Atco* (Canada)

Directorships that expired in the previous five years

- Director of Lafarge* until 2012
- Chairman of the Institut Français des Relations Internationales (IFRI) until 2011

Paul Desmarais, jr

Born on July 3, 1954 (Canadian).

Independent director.

A graduate of McGill University in Montreal and of the *Institut européen d'administration des affaires* (INSEAD) in Fontainebleau, Mr. Desmarais was elected Vice Chairman (1984) and then Chairman of the Board (1990) of Corporation Financière Power, a company he helped 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 - Last renewal: May 13, 2011 until 2014.

Holds 2,000 ADRs (corresponding to 2,000 shares).

Current directorships

- Director of TOTAL S.A.*
- Chairman of the Board, Co-Chief Executive Officer and Member of the Executive Committee of Power Corporation of Canada*
- Co-Chairman of the Board and member of the Executive Committee of Corporation Financière Power* (Canada)
- Vice Chairman and Acting Managing Director of Pargesa Holding SA* (Switzerland)
- Director and member of the Executive Committee of La Great-West, compagnie d'assurance-vie (Canada)
- Director and member of the Executive Committee of Great-West Life & Annuity Insurance Company (United States of America)
- Director and member of the Executive Committee of Great-West Lifeco Inc.* (Canada)
- Director of Great-West Financial (Canada) Inc. (Canada)
- Director and member of the Permanent Committee of Groupe Bruxelles Lambert SA* (Belgium)
- Director and member of the Executive Committee of Groupe Investors Inc. (Canada)
- Director and member of the Executive Committee of Groupe d'assurance London Inc. (Canada)
- Director and member of the Executive Committee of London Life, compagnie d'assurance-vie (Canada)
- Director and member of the Executive Committee of Mackenzie Inc.
- Director and Deputy Chairman of the Board of La Presse, ltée (Canada)
- Director and Deputy Chairman of Gesca ltée (Canada)
- Director of GDF Suez* (France)
- Director of Lafarge* (France)
- Director and member of the Executive Committee of Compagnie d'Assurance du Canada sur la Vie (Canada)
- Director and member of the Executive Committee of the Corporation Financière Canada Life-Vie (Canada)
- Director and member of the Executive Committee of IGM Inc.* (Canada)
- Director and Chairman of the Board of 171263 Canada Inc. (Canada)
- Director of 152245 Canada Inc. (Canada)
- Director of GWL-A Financial Inc. (United States of America)
- Director of Great-West Financial (Nova Scotia) Co. (Canada)
- Director of Great-West Life & Annuity Insurance Company of New York (United States of America)
- Director of Power Communications Inc. (Canada)
- Director and Vice Chairman of the Board of Power Corporation International (Canada)

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Underlined companies are companies that do not belong to the group in which the director has his or her main duties.

- Director and member of the Executive Committee of Putnam Investments LLC (United States of America)
- Member of the Supervisory Board of Power Financial Europe B.V. (Netherlands)
- Director of Canada Life Capital Corporation Inc. (Canada)
- Director and member of the Executive Committee of The Canada Life Insurance Company of Canada (Canada)
- Director and member of the Executive Committee of Crown Life Insurance Company (Canada)
- Director and Deputy Chairman of the Board of Groupe de Communications Square Victoria Inc. (Canada)
- Member of the Supervisory Board of Parjointco N.V. (Netherlands)

Directorship that expired in the previous five years

- Assistant Chairman of the Board of 3819787 Canada Inc. (Canada) until 2010
- Member of the Board of Les Journaux Trans-Canada (1996) Inc. (Canada) until 2009
- Director and Vice Chairman of the Board of Directors of Imerys* (France) until 2008

Anne-Marie Idrac

Born on July 27, 1951 (French).

Independent director.

A graduate of the *Institut d'Etudes Politiques de Paris* and formerly a student at the *École Nationale d'Administration* (ENA – 1974), Ms. Idrac began her career holding various positions as a senior civil servant at the Ministry of Infrastructure (*Ministère de l'Équipement*) in the fields of environment, housing, urban planning and transportation. She served as Executive Director of the public development authority of Cergy-Pontoise from 1990 to 1993 and Director of land transport from 1993 to 1995. Ms. Idrac was State Secretary for Transport from May 1995 to June 1997, elected member of Parliament for Yvelines from 1997 to 2002, regional councilor for Ile-de-France from 1998 to 2002, and State Secretary for Foreign Trade from March 2008 to November 2010. She also served as Chairperson-CEO of RATP from 2002 to 2006 and then as Chairperson of SNCF from 2006 to 2008.

Director of TOTAL S.A. since May 11, 2012 and until 2015.

Holds 1,000 shares.

Current directorships

- Director of TOTAL S.A.*
- Director of Bouygues*
- Director of Saint Gobain*
- Member of the Supervisory Board of Vallourec*
- Director of Mediobanca S.p.A.* (Italy)

Directorships that expired in the previous five years

- Chairperson of SNCF until 2008

Barbara Kux

Born on February 26, 1954 (Swiss).

Independent director.

Holder of an MBA (with honors) from INSEAD in Fontainebleau, Ms. Kux joined McKinsey & Company in 1984 as a Management Consultant, where she was responsible for strategic assignments for international groups. After serving as manager for development of emerging markets at ABB and then at Nestlé between 1989 and 1999, she was appointed Executive Director of Ford in Europe from 1999 to 2003. In 2003, Ms. Kux became a member of the Management Committee of the Philips group and, starting in 2005, was in charge of sustainable development. Since 2008, she has been a member of the Management Board of Siemens AG. She is also responsible for sustainable development at the Group and is in charge of the Group's supply chain.

Director of TOTAL S.A. since May 13, 2011 and until 2014.

Member of the Strategic Committee.

Holds 1,000 shares.

Current directorships

- Director of TOTAL S.A.*
- Member of the Management Board of Siemens AG*

Directorships that expired in the previous five years

- Member of the Board of Directors of INSEAD until 2011
- Member of the Board of Directors of ZF Friedrichshafen AG until 2011
- Member of the Board of Directors of Firmenich S.A. until 2010
- Member of the Board of Directors of COFRA Holding AG until 2008
- Member of Group Management Committee of Royal Philips Electronics N.V. until 2008

Gérard Lamarche

Born July 15, 1961 (Belgian).

Independent director.

Mr. Lamarche graduated in economic science from Louvain-La-Neuve University and the INSEAD business school (Advanced Management Program for Suez Group Executives). He also followed the Global Leadership Series course of training at the Wharton International Forum in 1998-99. He started his career in 1983 at Deloitte Haskins & Sells in Belgium, before becoming a consultant in mergers and acquisitions in Holland in 1987. In 1988, Mr. Lamarche joined Société Générale de Belgique as an investment manager and management controller between 1989 and 1991, then as a consultant in strategic operations from 1992 to 1995. He joined Compagnie Financière de Suez as a project manager for the Chairman and Secretary of the Executive Committee (1995-1997), before taking part in the merger between Compagnie de Suez and Lyonnaise des Eaux, which became Suez Lyonnaise des Eaux (1997), and then being appointed as the acting Managing Director in charge of Planning, Management Control and Accounts. In 2000, Mr. Lamarche pursued his career in industry by joining NALCO (the American subsidiary of the Suez group and the world leader in the treatment of industrial water) as the Director and Chief Executive Officer. In March 2004, he was appointed Chief Executive Officer in charge of Finance of the Suez group, before being appointed Senior Executive and Vice President in charge of Finance and member of the Management Committee and the Executive Committee of the GDF Suez group in July 2008. On April 12, 2011, Mr. Lamarche became a director on the Board of Directors of Groupe Bruxelles Lambert (GBL). He has been the acting Managing Director since January 2012. Mr. Lamarche is also a director of Legrand. In January 2012, he was also appointed by co-option

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as director of TOTAL S.A. for a one-year term. He is also a member of TOTAL S.A.'s Audit Committee and Strategic Committee. In April 2012, he was appointed as a non-voting member (*censeur*) of GDF Suez and in May 2012 as director of Lafarge for a four-year term.

Director of TOTAL S.A. since 2012 – Appointment by co-option: January 12, 2012, confirmed on May 11, 2012 until 2013.

Member of the Audit Committee and the Strategic Committee since January 12, 2012.

Holds 2,775 shares.

Current directorships

- Acting Managing Director and Director of Groupe Bruxelles Lambert*
- Director of TOTAL S.A.*
- Director and Chairman of the Audit Committee of Legrand*
- Director of Lafarge*
- Non-voting member (censeur) of GDF Suez*

Directorships that expired in the previous five years

- Director of Electrabel until 2011
- Director of Suez Environnement Company until 2011
- Director of International Power PLC until 2011
- Director of Europalia International until 2011
- Director of GDF Suez Belgium until 2011
- Director of Agua de Barcelona until 2011
- Director of GDF Suez E.S. until 2011
- Director of Suez Tractebel until 2011
- Director of Fortis Banque until 2010
- Director of Leo Holding Company until 2009
- Director of Suez Environnement North America until 2009
- Chairman and Director of Genfina until 2008
- Director of Distrigaz until 2008
- Director and Chairman of GDF Suez CC until 2008
- Director of Suez Environnement* until 2008

Anne Lauvergeon

Born on August 2, 1959 (French).

Independent director.

Chief Mining Engineer and a graduate of the *École Normale Supérieure* with a doctorate in physical sciences, Ms. 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 and international affairs. Ms. Lauvergeon served as Chairperson of the Management Board of Areva from July 2001 to June 2011 and Chairperson and Chief Executive Officer of Areva NC (formerly Cogema) from June 1999 to June 2011.

Director of TOTAL S.A. since 2000 - Last renewal: May 11, 2012 until 2015.

Member of the Strategic Committee.

Holds 2,000 shares.

Current directorships

- Director of TOTAL S.A.*
- Director of Vodafone Group Plc*
- Chairperson of the Supervisory Board of Libération

Directorships that expired in the previous five years

- Director of GDF Suez* until April 23, 2012
- Chairperson of the Management Board of Areva* until June 30, 2011
- Chairperson and Chief Executive Officer of Areva NC June 30, 2011
- Vice Chairperson and Member of the Supervisory Board of Safran* until 2009

Claude Mandil

Born on January 9, 1942 (French).

Independent director.

A graduate of the *École Polytechnique* and a General Engineer from France's engineering school *Corps des Mines*, Mr. Mandil served as a Mining Engineer in the Lorraine and Bretagne regions. He then served as Project Manager at the *Délégation de l'Aménagement du Territoire et de l'Action Régionale* (City and Department planning - DATAR) and as Interdepartmental Head of Industry and Research and regional delegate of the Agence nationale de valorisation de la recherche (State technology transfer agency - ANVAR). From 1981 to 1982, he served as 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 - IDI) until 1988. He was Chief Executive Officer of the *Bureau de Recherches Géologiques et Minières* (BRGM) from 1988 to 1990. From 1990 to 1998, Mr. Mandil served as Chief Executive Officer for Energy and Commodities at the French Industry Ministry and became France's first representative to the Management Board of the International Energy Agency (IEA). He served as Chairman of the IEA from 1997 to 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 for Oil). From 2003 to 2007, he was the Executive Director of the IEA. Mr. Mandil is also director of the Institut Veolia Environnement and of Schlumberger SBC Energy Institute.

Director of TOTAL S.A. since 2008 - Last renewal: May 13, 2011 until 2014.

Member of the Strategic Committee and, since February 9, 2012, member of the Compensation Committee and the Nominating & Governance Committee.

Holds 1,000 shares.

Current directorships

- Director of TOTAL S.A.*

Directorships that expired in the previous five years

- Director of GDF Suez* from July to December 2008

Michel Pébereau

Born on January 23, 1942 (French).

Independent director.

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 Chief Executive Officer of Crédit Commercial de France (CCF). He was Chairman and Chief Executive Officer of BNP then BNP

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Paribas from 1993 to 2003, Chairman of the Board of Directors from 2003 to 2011, and is currently Honorary Chairman of BNP Paribas and Chairman of the BNP Paribas foundation. He is also a member of the Académie des Sciences Morales et Politiques, member of the Executive Board of the Mouvement des entreprises de France, member of the Policy Board of the Institut de l'Entreprise, Honorary Chairman of the Supervisory Board of the Institut Aspen, Chairman of the Governing Board of the Institut d'études politiques de Paris, and director of the ARC foundation.

Director of TOTAL S.A. since 2000 - Last renewal: May 11, 2012 until 2015.

Chairman of the Compensation Committee and, until February 9, 2012, member of the Nominating & Governance Committee.

Holds 2,356 shares.

Current directorships

- Director of TOTAL S.A.*
- Director of BNP Paribas*
- Director of Compagnie de Saint-Gobain*
- Director of AXA*
- Director of EADS N.V.*
- Director of Pargesa Holding S.A.* (Switzerland)
- Director of BNP Paribas SA (Switzerland)
- Member of the Supervisory Board of Banque Marocaine pour le Commerce et l'Industrie*
- Non-voting member (*censeur*) of Galeries Lafayette

Directorships that expired in the previous five years

- Chairman of the Board of Directors of BNP Paribas until December 2011
- Director of Lafarge* until May 2011
- Chairman of the European Banking Federation until 2008

1.1.2. Expired directorship of TOTAL S.A. in 2012

Daniel Bouton

Born on April 10, 1950 (French).

Independent director.

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 served as Chairman of the Société Générale group until May 12, 2008 and has been the Honorary Chairman since May 6, 2009.

Director of TOTAL S.A. since 1997 - Last renewal: May 15, 2009 - Term of office: May 11, 2012.

Current directorships (as of May 11, 2012)

- Director of Veolia Environnement*
- Chairman of DMJB Conseil

Directorships that expired in the previous five years

- Chairman of TOTAL S.A.* until May 11, 2012
- Chairman and Chief Executive Officer of Société Générale* until 2008, and then Chairman of the Board until 2009

Thierry de Rudder

Born on September 3, 1949 (Belgian and French).

Independent director.

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 - Last renewal: May 21, 2010 until January, 12, 2012.

Member of the Audit Committee and the Strategic Committee until January, 12, 2012.

Current directorships (as of January 12, 2012)

- Director of TOTAL S.A.*
- Acting Managing Director of Groupe Bruxelles Lambert*
- Director of Brussels Securities (Belgium)
- Director of GBL Treasury Center (Belgium)
- Director of Sagerpar (Belgium)
- Director of GBL Energy Sàrl (Luxembourg)
- Director of GBL Verwaltung Sàrl (Luxembourg)
- Director of GBL Verwaltung GmbH (Germany)
- Director of Ergon Capital Partners (Belgium)
- Director of Ergon Capital Partners II (Belgium)
- Director of Ergon Capital Partners III (Belgium)
- Director of GDF Suez*
- Director of Lafarge*
- Director of Electrabel

Directorships that expired in the previous five years

- Director of Compagnie Nationale à Portefeuille* until 2011
- Director of Suez-Tractebel (Belgium) until April 2010
- Director of Imerys* until 2010
- Director of GBL Participations (Belgium) until 2010
- Director of GBL Finance S.A. (Luxembourg) until 2009

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Underlined companies are companies that do not belong to the group in which the director has his or her main duties.

1.1.3. Composition of the Board of Directors as of February 12, 2013

As of February 12, 2013, the Board of Directors had fifteen members, including one director appointed by the shareholders to represent employee shareholders.

Twelve of the members of the Board are independent (see paragraph 1.8. below).

The Board of Directors has five female members (*i.e.* one-third of the directors) and four directors of foreign nationality (*i.e.* 27% of the directors). The profiles, qualifications and expertise of the Directors are provided in the biographies which appear in paragraphs 1.1.1. to 1.1.2. above.

Directors	Independence	Participation in Board Committees[a]
Christophe de Margerie Chairman and Chief Executive Officer		Chairman of the Strategic Committee
Thierry Desmarest Honorary Chairman		Chairman of the Nominating & Governance Committee Member of the Compensation Committee Member of the Strategic Committee
Patrick Artus	Independent director	Member of the Nominating & Governance Committee[b] Member of the Compensation Committee
Patricia Barbizet	Independent director	Chairperson of the Audit Committee Member of the Strategic Committee
Gunnar Brock	Independent director	Member of the Nominating & Governance Committee[b] Member of the Compensation Committee[b] Member of the Strategic Committee
Claude Clément	Director representing employee shareholders	
Marie-Christine Coisne-Roquette	Independent director	Member of the Audit Committee
Bertrand Collomb	Independent director	Member of the Nominating & Governance Committee
Paul Desmarais, jr	Independent director	
Anne-Marie Idrac	Independent director	
Barbara Kux	Independent director	Member of the Strategic Committee
Gérard Lamarche	Independent director	Member of the Audit Committee[c] Member of the Strategic Committee[c]
Anne Lauvergeon	Independent director	Member of the Strategic Committee
Claude Mandil	Independent director	Member of the Nominating & Governance Committee[b] Member of the Compensation Committee[b] Member of the Strategic Committee
Michel Pébereau	Independent director	Chairman of the Compensation Committee

(a) For more details on the composition of the Board Committees, refer to paragraph 1.5. below.
(b) Since February 9, 2012.
(c) Since January 12, 2012.

At its meeting held on February 12, 2013, the Board of Directors decided to propose at the May 17, 2013 Shareholders' Meeting the renewal of the directorships of Messrs. Desmarest, Brock and Lamarche. In addition, given that the term of office of Mr. Clément, director representing the employee shareholders, is due to expire, the Shareholders' Meeting will be called to appoint the director representing the employee shareholders.

1.2. Other information

At its meeting on September 15, 2009, the Board of Directors appointed Mr. Paris de Bollardière Secretary of the Board.

Representatives of the Worker's Council: pursuant to Article L. 2323-62 of the French Labor Code, members of the Worker's Council attend, with consultative rights, all meetings of the Board. In compliance with the second paragraph of such article, since July 7, 2010 four members of the Worker's Council attend Board meetings.

1.3. Corporate Governance Code

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 refer to the Corporate Governance Code for Listed Companies published by the principal French business confederations, the *Association Française des Entreprises Privées* (AFEP) and the *Mouvement des Entreprises de France* (MEDEF) ("AFEP-MEDEF Code") for corporate governance matters.

The AFEP-MEDEF Code is available on the MEDEF website (medef.com/medef-corporate/publications).

The AFEP-MEDEF Code was amended in April 2010 to make recommendations related to the balanced number of men and women sitting in Board meetings. The code recommends that a target of at least 20% of women be reached before April 2013 and at least 40% before April 2016. These requirements were also stipulated in the French law of January 27, 2011 regarding balanced representation of men and women on Boards of Directors and Supervisory Boards and equal opportunity. The law states that the 20% threshold must be attained at the end of the 2014 Shareholders' Meeting and that the 40% threshold must be attained at the end of the 2017 Shareholder's Meeting.

As of December 31, 2012, the Company's Board of Directors had five female members out of a total of fifteen members (*i.e.* one-third of the directors) and four directors of foreign nationality (*i.e.* 27% of the directors). The Board of Directors will continue its reflections in order to further diversify its composition in the years to come.

The following table shows the recommendations made in the AFEP-MEDEF Code which the Company has not followed, as well as the reasons for such decision, pursuant to Article L. 225-37 of the French Commercial Code.

Recommendations not followed	Explanation
Director independence criteria (paragraph 8 of the Code) Criteria to be examined for a director to be considered independent: – Has not been a director of the Company for more than 12 years.	In assessing the independence of three directors, the Board has disregarded the criterion of a maximum term of office of 12 years. The Board was of the opinion that this criterion has no relevance, given the specific characteristics of the oil and gas sector, which relies on long-term investment cycles on one hand, and given the objectivity that these three directors have demonstrated in the Board's activity on the other hand. Besides, it deemed that the experience acquired on the Board by these three directors strengthened their freedom of speech and their independence of judgment and benefited the Group. The Board also noted that the criterion related to the length of term of office was not one of the independence criteria required by the New York Stock Exchange (NYSE). See paragraph 1.8. below.
The Board's assessment (paragraph 9 of the Code) – The purpose of the Board's assessment must be to "measure each director's actual contribution to the Board's work as a result of his/her competence and involvement in the deliberations". – It is recommended that directors who are external to the company meet periodically without the participation of the "in house" directors.	The Board deemed that it is not appropriate to measure each director's actual contribution to the Board's work given the collegial nature of this body. It nevertheless ensured of the full involvement of the directors in the Board's work in view of the attendance rate of directors in the meetings of the Board and the Committees (see paragraph 5.2. below) and observed that important matters had been properly prepared and debated. Moreover, as part of the review of the composition of the Board and its committees, the Nominating & Governance Committee checked whether the various qualifications of the directors were well-balanced. Also because of the collegiate nature of the Board of Directors, no formal meeting of the directors without the participation of the "in house" directors is planned.
Fixed compensation of the Chairman and Chief Executive Officer (paragraph 20.2.1 of the Code) – In principle, the fixed compensation must be reviewed at relatively long intervals, e.g. every three years.	The principles and rules applied to determine the compensation of the corporate executive officers, as set out by the Board of Directors, stipulate that the fixed compensation of the Chairman and the Chief Executive Officer is reviewed with a minimum frequency of two years (see paragraph 1.13. below). Following such reviews, the fixed compensation of the Chairman and Chief Executive Officer has remained unchanged since the time of his appointment as Chairman and Chief Executive Officer.

Recommendations not followed	Explanation
Grant of performance shares (paragraph 20.2.3 of the Code) It is necessary to ensure that: – Awards are made in the same calendar periods, e.g. after the disclosure of the financial statements for the previous financial year, and probably each year, in order to limit any windfall effects. The number of awarded options and shares must not be markedly different from the company's earlier practices, unless a material change to the scope of business justifies a revision of the scheme. – In accordance with terms determined by the Board and announced upon the award, the performance shares awarded to the Chairman and the Chief Executive Officer are conditional upon the acquisition of a defined quantity of shares upon the availability of the awarded shares.	The Board of Directors decided to award performance shares at its meeting on July 26, 2012 rather than in September given its decision to not award stock subscription or stock purchase options in 2012. The volumes awarded to the relevant categories of recipients were adapted accordingly. Given the share holding requirement to which the Chairman and the Chief Executive Officer are subject (see paragraph 5.6.2. below) and the large number of TOTAL shares and shares of the "Total Actionnariat France" collective investment fund (invested exclusively in TOTAL shares) effectively held by the Chairman and Chief Executive Officer (see paragraph 1.1.1. above), the Board of Directors, on the recommendation of the Compensation Committee, deemed that it was not necessary, at the time of grant, to make the performance shares awarded to the Chairman and Chief Executive Officer subject to the purchase of a quantity of shares at the time of availability of the performance shares.
Additional pension schemes (paragraph 20.2.5 of the Code) – Additional pension schemes with defined benefits must be subject to the condition that the beneficiary is a director or an employee of the company when asserting his or her pension rights pursuant to applicable rules.	It appeared justified not to deprive the concerned beneficiaries of the benefit of the pension commitments made by the Company, in special cases of the disability or departure of a beneficiary over 55 years of age at the initiative of the Group.

1.4. 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.

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. They are reviewed on a regular basis to match the changes in rules and practices related to governance.

At its meeting on October 30, 2012, the Board of Directors, on the recommendation of the Nominating & Governance Committee, decided to amend the Board's rules of procedure in order to increase the abstention period for trading in the Company's financial instruments from fifteen days to thirty days prior to each disclosure of periodic earnings, as well as on the disclosure date. It also decided to more precisely formalize, in the Board's rules of procedure, the preventive rules applicable to directors for transactions in the financial instruments of the Company, subsidiaries of the Company and listed companies in which TOTAL holds an interest, as well as the rules prohibiting them from carrying out any transactions in financial instruments related to the Company's share, buying on margin or short selling these financial instruments and using hedging products on shares held by them and options granted to them, where applicable.

The unabridged version of these rules of procedure is available herein, in its latest version dated October 30, 2012.

The rules of procedure are also available on the Company's website.

The Board of Directors of TOTAL S.A.[1] approved the rules of procedure.

1. MISSION OF THE BOARD OF DIRECTORS

The mission of the Board of Directors 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 corporate officers[2] 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;
- 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;
- conducting audits and investigations as it may deem appropriate. The Board, with the assistance of the Audit Committee where appropriate, ensures that:
  - the proper definition of authority within the Company and the proper exercise of duties and responsibilities by the bodies of the Company are in place;
  - 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;
  - the committees it has created duly perform their responsibilities;
- monitoring the quality of the information provided to the 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 or meetings of bond holders;
- preparing, for each year, a list of the directors it deems to be independent under generally recognized corporate governance criteria.

2. OBLIGATIONS OF THE DIRECTORS OF TOTAL S.A.

Before accepting a directorship, every candidate receives a copy of TOTAL S.A.'s by-laws and these rules of procedure. He ensures that he has broad knowledge of the general and particular commitments related to his duty, especially the laws and regulations governing directorships in French limited liability companies (société anonyme) whose shares are listed in one or several regulated markets.

Accepting a directorship involves upholding the Directors' ethical rules as described in the Code of Corporate Governance to which the Company refers. It also involves upholding the rules of procedure and the Group's values as described in its Code of Conduct.

When directors participate in and vote at Board meetings, they are required to represent the interest of the shareholders and the Company as a whole.

2.1. INDEPENDENCE OF JUDGMENT

Directors undertake, under any circumstance, to maintain the independence of their analysis, judgment, decision-making and actions as well as not to be unduly influenced, directly or indirectly, by other directors, particular groups of shareholders, creditors, suppliers and, more generally, any third party.

2.2. PARTICIPATION IN THE BOARD'S WORK

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 and Chief Executive Officer. Directors, if they consider it necessary, may request training on the Company's specificities, businesses and activities, and any other training that is of use in the exercise of their duties as Directors.

Directors attend all Board meetings and all committees or Shareholders' Meetings, unless they have previously contacted the Chairman to inform him of scheduling conflicts.

Files reviewed at each meeting of the Board as well as the information collected before or during the meetings are confidential. Directors cannot use them for or share them with a third party whatever the reason. Directors take any necessary measures to keep them confidential. Confidentiality and privacy are lifted when such information is made publicly available by the Company.

The Chairman of the Board makes sure that the Company provides the directors with the relevant information, including criticisms, in particular financial statement reports and press releases, and the main press articles about the Company.

(1) TOTAL S.A. is referred to in the rules of procedure as the "Company" and collectively with all its direct and indirect subsidiaries as the "Group".
(2) "Corporate officer" means the Chairman and Chief Executive Officer if the Chairman of the Board of Directors is the Chief Executive Officer of the Company, and otherwise the Chairman of the Board of Directors and the Chief Executive Officer, as well as, where applicable, any Deputy Chief Executive Officer, based on the organization adopted by the Board of Directors.

2.3. DUTY OF LOYALTY

Directors cannot take advantage of their office or duties to ensure, for themselves or a third party, any monetary or non-monetary benefit.

They notify the Board of Directors of any potential conflicts of interest with the Company or any other company of the Group. They refrain from participating in the vote relating to the corresponding resolution or even to the debate preceding the vote.

Directors must inform the Board of Directors of their entering into a transaction that involves directly the Company or any other company of the Group before such transaction is closed.

Directors cannot take any responsibility in a personal capacity in companies or businesses that are competing with the Company or any other company of the Group without previously informing the Board.

Directors are committed not to seek or accept directly or indirectly from the Company or any other company of the Group benefits that may be considered as compromising their independence.

2.4. DUTY OF EXPRESSION

Directors are committed to clearly expressing their opposition if they deem that a decision made by the Board of Directors is contrary to the Company's corporate interest and should strive to convince the Board of the relevancy of their position.

2.5. TRANSACTIONS IN THE COMPANY'S SECURITIES AND STOCK EXCHANGE RULES

While in office, directors are required to hold the minimum number of registered shares of the Company as set by the by-laws.

In general, directors must act with the highest degree of prudence and vigilance when completing any personal transaction involving the financial instruments of the Company, its subsidiaries and affiliates which are listed or issue listed financial instruments.

To this purpose, directors act in compliance with the following procedures:

1. Any shares and ADRs of TOTAL S.A. and its publicly-traded subsidiaries are to be held in registered form, either with the Company or its agent, or administered registered shares with a French broker (or U.S. broker for ADRs) whose contact details are communicated to the Board's Secretary by the director.
2. Directors refrain from directly or indirectly completing (or recommending the completion of) any transaction involving the financial instruments (shares, ADRs or any other financial instruments related to such financial instruments) of the Company, its publicly-traded subsidiaries or affiliates or listed financial instruments for which the director has inside information.
Inside information is specific information which has not yet been made public and which directly or indirectly concerns one or more issuers of financial instruments or one or more financial instruments and which, if it were made public, could have a significant impact on the price of the financial instruments concerned or on the price of financial instruments related to them.
3. Any transaction on the Company's financial instruments (share, ADR or related financial instruments) is strictly prohibited on the day when the Company discloses its periodic earnings (quarterly, interim and annual) as well as the thirty calendar days preceding such date.
4. Moreover, directors comply, where applicable, with the provisions of Article L. 225-197-1 of the French Commercial Code, which stipulates that free shares may not be sold:
– during the ten trading days preceding and the three trading days following the date on which the consolidated financial statements or, failing that, the annual financial statements, are made public;
– during the period between the date on which the Company's corporate bodies have knowledge of information which, if it were made public, could have a significant impact on the price of the shares of the Company, and ten trading days following the date on which such information is made public.
5. Directors are prohibited from carrying out any transaction on financial instruments related to the Company's share (Paris option market (MONEP), warrants, exchangeable obligations, etc.) and from buying on margin or short selling such financial instruments.
6. Directors are also prohibited from hedging the shares of the Company and any financial instruments related to them, and in particular:
– all shares of the Company which they hold, and, where applicable,
– Company share subscription or purchase options,
– rights to the shares of the company which may be awarded free of charge,
– shares of the Company from the exercise of options or granted free of charge.
7. Directors make all necessary arrangements to declare to the French Financial Markets Authority (Autorité des marchés financiers) and inform the Board's secretary, under the form and timeframe provided for by applicable laws, of any transaction on the company's securities entered into by himself or any other individual with whom he is closely related.

3. WORKINGS OF THE BOARD OF DIRECTORS

The Board of Directors meets at least four times a year and as often as circumstances may require.

Before each meeting of the Board, the agenda is sent out to directors and, whenever possible, it is sent together with the documents that are necessary to consider.

Directors can delegate their authority to another director at the meetings of the Board, within the limit of one delegation per director per meeting. Each director may represent only one of his/her colleagues during the same Board meeting.

Whenever authorized by the law, those directors attending the meeting of the Board via video conference (in compliance with the technical requirements set by applicable regulations) are considered present for the calculation of the quorum and majority.

The Board allocates directors' fees to, and may allocate additional directors' fees to, directors who participate on specialized committees within the total amount established by the Shareholders' Meeting. 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. Such assessment is carried out possibly under the supervision of an independent director or with the contribution of an outside counsel. In addition, the Board of Directors conducts an annual discussion of its methods.

4. 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 coordinates the activity of the Board and its committees. He sets the agenda for the meeting by including the issues proposed by the Chief Executive Officer.

He ensures that directors have in due course clear and appropriate information that is necessary to carry out their duties.

He is responsible, with the Group's general 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 general 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 relating to the strategy, organization, monthly financial reporting, major investment and divestment projects and major financial operations. He may request that the Chief Executive Officer or other Company directors, provided the Chief Executive Officer is informed, provide any useful information for the Board or its committees to carry out their duties.

He may meet with the statutory auditors in order to prepare the work of the Board of Directors and the Audit Committee.

He presents every year in a report to the Shareholders' Meeting on the conditions surrounding the preparation and organization of the Board's work, the potential limits set by the Board of Directors concerning the powers of the Chief Executive Officer, and the internal control procedures implemented by the Company. For this purpose, he receives from the Chief Executive Officer the relevant information.

5. 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 and in particular the rules of procedure of the Board of Directors, 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 or to Shareholders' meetings.

The Chief Executive Officer is responsible for periodic reporting of the Group's results and outlook to shareholders and the financial community.

At each meeting of the Board, the Chief Executive Officer reports the highlights of the Group's activity.

6. COMMITTEES OF THE BOARD OF DIRECTORS

The Board of Directors approved the creation of:

– an Audit Committee,
– a Nominating & Governance Committee,
– a Compensation Committee, and
– a Strategic Committee.

The missions and composition of these committees are defined in their relevant rules of procedure approved by the Board of Directors.

The Committees carry out their duty for and report to the Board of Directors.

Each committee reports on its activities to the Board of Directors.

1.5. Committees of the Board of Directors

The unabridged version of the rules of procedure of the Committees of the Board of Directors is available herein, followed by the composition of each Committee.

1.5.1. Audit Committee

At its meeting on February 12, 2013, the Board of Directors decided to amend the rules of procedure of the Audit Committee in order to more precisely formalize the missions and practices of the Committee.

The unabridged version of the rules of procedure of the Audit Committee, as approved by the Board of Directors on February 12, 2013, is available herein.

Rules of procedure (unabridged version)

The Board of Directors of TOTAL S.A. (hereafter referred to as the "Company" and, collectively with all its direct and indirect subsidiaries, as the "Group") has approved the following rules of procedure of the Company's Audit Committee (hereafter, the "Committee").

The members of the Committee are directors of the Company and therefore uphold the rules of procedure of the Board of Directors of TOTAL S.A.

I. DUTIES

To allow the Board of Directors of TOTAL S.A. to ensure that internal control is effective and that published information available to shareholders and financial markets is reliable, the duties of the Committee include:

- recommending the appointment of statutory auditors and 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 statutory financial statements and consolidated financial statements;
- examining the assumptions used to prepare the financial statements, assessing the validity of the methods used to handle significant transactions and examining the Company's statutory financial statements and consolidated annual, semi-annual, and quarterly financial statements prior to their examination by the Board of Directors, after regularly monitoring the financial situation, cash position and commitments included in the annual financial statements 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 report, etc.);
- reviewing the choice of appropriate accounting principles and methods used to prepare the company's consolidated and statutory financial statements and ensuring the continuity of the methods;
- reviewing the Group's policy for the use of derivative instruments;
- reviewing, if requested by the Board of Directors, major transactions contemplated by the Group;
- reviewing significant litigation annually;
- implementing and monitoring compliance with the financial code of ethics;
- proposing to the Board of Directors, 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;
- where applicable, reviewing significant transactions of the Group during which a conflict of interest may have occurred; and
- reviewing the procedure for booking the Group's proved reserves.

II. COMPOSITION

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 of Directors pays particular attention to their independence and their financial and accounting qualifications.

The Board of Directors appoints one of the members of the Committee to serve as the "financial expert" on the Committee.

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 Committee may not receive from the Company and its subsidiaries, either directly or indirectly, any compensation other than: (i) 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 (ii) 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 term of office of the members of the Committee coincides with the term of their appointment as director. The term of office as a member of the Committee may be renewed at the same time as the appointment as director.

However, the Board of Directors can change the composition of the Committee at any time.

III. ORGANIZATION OF ACTIVITIES

The Committee appoints its own Chairman. The Chairman appoints the Committee secretary, who may be the Chief Financial Officer of the Company.

The Committee deliberates when at least one-half of its members are present. A member of the Committee cannot be represented.

The Committee meets at least seven times a year: each quarter to review the statutory financial statements of TOTAL S.A., the annual and quarterly consolidated financial statements, and at least three other times a year to review matters not directly related to the review of the quarterly financial statements.

The Committee may also meet at the request of its Chairman, at least one half of its members, the Chairman and Chief Executive Officer, and, if the functions of Chairman of the Board of Directors and Chief Executive Officer are separate, the Chairman of the Board of Directors or the Chief Executive Officer.

The Committee Chairman prepares the schedule of its meetings.

At each committee meeting where the quarterly financial statements are reviewed, the Group's Chief Financial Officer presents the consolidated and statutory financial statements of TOTAL S.A. as well as the Group's financial position and, in particular, its liquidity, cash flow and debt situation. A memo describing the company's risk exposure and off-balance sheet commitments is communicated to the Audit Committee. This review of the financial statements includes a presentation by the Statutory Auditors underscoring the key points observed during their work.

As part of monitoring the efficiency of the internal control and risk management systems, the Committee is informed of the work program of the Group Internal Control and Audit Department and its organization, on which it may issue an opinion. The Committee also receives a summary of the internal audit reports, which is presented at each committee meeting where the quarterly financial statements are reviewed. The risk management processes implemented within the Group and updates to them are presented regularly to the Audit Committee.

The Committee may meet with the Chairman and Chief Executive Officer and, if the functions of Chairman of the Board of Directors and Chief Executive Officer are separate, the Chairman of the Board of Directors, 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 Chairman of the committee gives prior notice of such meeting to the Chairman and Chief Executive Officer and, if the functions of Chairman of the Board of Directors and Chief Executive Officer are separate, both the Chairman of the Board of Directors and the Chief Executive Officer. In particular, the Committee is authorized to consult with those involved in preparing or auditing the financial statements (Chief Financial Officer and principal Finance Department managers, Audit Department, Legal Department) by asking the Company's Chief Financial Officer to call them to a meeting.

The Committee consults with the statutory auditors and, at least once a year, without any Company representative being present. If it is informed of a substantial irregularity, it recommends that the Board of Directors take all appropriate action.

If it deems it necessary to accomplish its duties, the Committee may request from the Board of Directors the resources to engage external consultants.

The proposals made by the Committee to the Board of Directors are adopted by a majority of the members present at the Committee meeting. The Chairman of the Committee casts the deciding vote if an even number of members is present at the meeting.

The Committee can adopt proposals intended for the Board of Directors without meeting if all the members of the Committee so agree and sign each proposal.

A written summary of Committee meetings is drawn up.

IV. REPORT

The Committee submits written reports to the Board of Directors regarding its work.

It periodically evaluates its performance based on these rules of procedure and, if applicable, offers suggestions for improving its performance.

Members of the Audit Committee in 2012

The Committee is made up of three members.

The Committee's members are Ms. Barbizet, Ms. Coisne-Roquette and, since January 12, 2012, Mr. Lamarche, who was appointed to replace his predecessor, Mr. de Rudder, who resigned from his position.

All of the members of the Committee are independent directors (see paragraph 1.8. below) and have recognized experience in the financial and accounting fields, as illustrated in their summary professional background (see paragraph 1.1. above).

The Committee is chaired by Ms. Barbizet.

At its meeting on July 28, 2011, the Board of Directors decided to appoint Ms. Barbizet to serve as the Audit Committee financial expert based on a recommendation by the Audit Committee.

A summary of the Committee's activities in 2012 is provided in paragraph 1.6.1. below.

1.5.2. Compensation Committee

The unabridged version of the rules of procedure of the Compensation Committee, as approved by the Board of Directors on February 9, 2012, is available herein.

Rules of procedure (unabridged version)

The Board of Directors of TOTAL S.A. (hereafter referred to as the "Company" and, collectively with all its direct and indirect subsidiaries, as the "Group") has approved the following rules of procedure of the Company's Compensation Committee (hereafter, the "Committee").

The members of the Committee are directors of the Company and therefore uphold the rules of procedure of the Board of Directors of TOTAL S.A.

The Committee is focused on:
- examining the executive compensation policies implemented by the Group and the compensation of members of the Executive Committee;
- evaluating the performance and recommending the compensation of each corporate executive officer; and
- preparing reports which the Company must present in these areas.

I. DUTIES

The Committee's duties include:

1. examining the main objectives proposed by the Company's general management regarding compensation of the Group's executive officers, including stock option and restricted share grant plans and equity-based plans, and advising on this subject;
2. presenting recommendations and proposals to the Board of Directors concerning:
   - compensation, pension and life insurance plans, in-kind benefits and other compensation (including severance benefits) for the corporate executive officers of the Company; in particular, the Committee proposes compensation structures that take into account the Company's strategy, objectives and earnings and market practices,
   - stock option and restricted share grants, particularly grants of registered shares to the corporate executive officers;
3. examining the compensation of the members of the Executive Committee, including stock option and restricted share grant plans and equity-based plans, pension and insurance plans and in-kind benefits;
4. preparing and presenting reports in accordance with these rules of procedure;
5. examining, for the parts within its remit, reports to be sent by the Board of Directors or its Chairman to the shareholders; and
6. preparing recommendations requested at any time by the Chairman of the Board of Directors or the general management of the Company regarding compensation.

II. COMPOSITION

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: (i) 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; (ii) 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 term of office of the members of the Committee coincides with the term of their appointment as director. The term of office as a member of the Committee may be renewed at the same time as the appointment as director.

However, the Board of Directors can change the composition of the Committee at any time.

III. ORGANIZATION OF ACTIVITIES

The Committee appoints its Chairman and its secretary. The secretary is a Company senior executive.

The Committee deliberates when at least one-half of its members are present. A member of the Committee cannot be represented.

The Committee meets at least twice a year. It meets on an as-needed basis through notice by its Chairman or by one-half of its members.

The Committee invites 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 the Committee's deliberations regarding his own situation. If the Chairman of the Board is not the Chief Executive Officer of the Company, the Chief Executive Officer may not be present during the Committee's deliberations regarding the situation of the Chairman of the Board.

While maintaining the appropriate level of confidentiality for its discussions, the Committee may request from the Chief Executive Officer to be assisted by 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 of Directors the resources to engage external consultants.

The proposals made by the Committee to the Board of Directors are adopted by a majority of the members present at the Committee meeting. The Chairman of the Committee casts the deciding vote if an even number of Committee members is present at the meeting.

The Committee can adopt proposals intended for the Board of Directors without meeting if all the members of the Committee so agree and sign each proposal.

A written summary of Committee meetings is drawn up.

IV. REPORT

The Committee reports on its activities to the Board of Directors.

At the request of the Chairman of the Board, the Committee examines all draft reports of the Company regarding compensation of the executive officers or any other issues relevant to its area of expertise.

Members of the Compensation Committee in 2012

The Compensation Committee has had five members since February 9, 2012, the date on which the Board of Directors decided to change the composition of the Committee.

The Committee's members are Messrs. Artus, Desmarest and Pébereau, and, since February 9, 2012, Messrs. Brock and Mandil. The Committee is chaired by Mr. Pébereau.

80% of the Committee members are independent directors, given that the Board of Directors considers Messrs. Artus, Brock, Mandil and Pébereau independent (see paragraph 1.8. below).

A summary of the Committee's activities in 2012 is provided in paragraph 1.6.2. below.

1.5.3. Nominating & Governance Committee

The unabridged version of the rules of procedure of the Nominating & Governance Committee, as approved by the Board of Directors on February 9, 2012, is available herein.

Rules of procedure (unabridged version)

The Board of Directors of TOTAL S.A. (hereafter referred to as the "Company" and, collectively with all its direct and indirect subsidiaries, as the "Group") has approved the following rules of procedure of the Company's Nominating & Governance Committee (hereafter, the "Committee").

The members of the Committee are directors of the Company and therefore uphold the rules of procedure of the Board of Directors of TOTAL S.A.

The Committee is focused on:
- recommending to the Board of Directors the persons that are qualified to be appointed as directors, so as to guarantee the scope of coverage of the Directors' competencies and the diversity of their profiles;
- recommending to the Board of Directors the persons that are qualified to be appointed as corporate executive officers;
- preparing the Company's corporate governance rules and supervising their implementation; and
- examining any questions referred to it by the Board or the Chairman of the Board, in particular questions related to ethics and situations of conflicting interests.

I. DUTIES

The Committee's duties include:

1. presenting recommendations to the Board for its membership and the membership of its committees, and the qualification in terms of independence of each candidate for Directors' positions on the Board of Directors;
2. proposing annually to the Board of Directors the list of directors who may be considered as "independent directors";
3. examining, for the parts within its remit, reports to be sent by the Board of Directors or its Chairman to the shareholders;
4. assisting the Board of Directors in the selection and evaluation of the corporate executive officers and examining the preparation of their possible successors, including cases of unforeseeable absence;
5. recommending to the Board of Directors the persons that are qualified to be appointed as directors;
6. recommending to the Board of Directors the persons that are qualified to be appointed as members of a Committee of the Board of Directors;
7. proposing methods for the Board of Directors to evaluate its performance, and in particular preparing means of regular self-assessment of the workings of the Board of Directors, and the possible assessment thereof by an external consultant;
8. proposing to the Board of Directors the terms and conditions for allocating directors' fees and the conditions under which expenses incurred by the directors are reimbursed;
9. developing and recommending to the Board of Directors the corporate governance principles applicable to the Company;
10. examining any questions referred to it by the Board or the Chairman of the Board, in particular questions related to ethics and situations of conflicting interests;
11. preparing recommendations requested at any time by the Board of Directors or the general management of the Company regarding appointments or governance.
12. examining the conformity of the Company's governance practices with the recommendations of the Code of Corporate Governance adopted by the Company; and
13. examining changes in the duties of the Board of Directors.

II. COMPOSITION

The Committee is made up of at least three directors designated by the Board of Directors. At least one half of the members must be independent directors.

Members of the Nominating & Governance Committee, other than the Company's corporate executive officers, may not receive from the Company and its subsidiaries any compensation other than: (i) 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; (ii) 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 term of office of the members of the Committee coincides with the term of their appointment as director. The term of office as a member of the Committee may be renewed at the same time as the appointment as director.

However, the Board of Directors can change the composition of the Committee at any time.

III. ORGANIZATION OF ACTIVITIES

The Committee appoints its Chairman and its secretary. The secretary is a Company senior executive.

The Committee deliberates when at least one-half of its members are present. A member of the Committee cannot be represented.

The Committee meets at least twice a year. It meets on an as-needed basis through notice by its Chairman or by one-half of its members.

The Committee invites the Chairman of the Board or the Chief Executive Officer of the Company, as applicable, to present recommendations. The corporate executive officers, whether they are members of the Committee or invited to its meetings, may not be present at deliberations concerning their own situation.

While maintaining the appropriate level of confidentiality for its discussions, the Committee may request from the Chief Executive Officer to be assisted by 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 of Directors the resources to engage external consultants.

The proposals made by the Committee to the Board of Directors are adopted by a majority of the members present at the Committee meeting. The Chairman of the Committee casts the deciding vote if an even number of Committee members is present at the meeting.

The Committee can adopt proposals intended for the Board of Directors without meeting if all the members of the Committee so agree and sign each proposal.

A written summary of Committee meetings is drawn up.

IV. REPORT

The Committee reports on its activities to the Board of Directors.

Members of the Nominating & Governance Committee in 2012

The Nominating & Governance Committee has had five members since February 9, 2012, the date on which the Board of Directors decided to change the composition of the Committee.

The Committee's members are Messrs. Collomb and Desmarest, and, since February 9, 2012, Messrs. Artus, Brock and Mandil.

The Committee is chaired by Mr. Desmarest.

80% of the Committee members are independent directors, given that the Board of Directors considers Messrs. Artus, Brock, Collomb and Mandil independent (see paragraph 1.8. below).

A summary of the Committee's activities in 2012 is provided in paragraph 1.6.3. below.

1.5.4. Strategic Committee

The unabridged version of the rules of procedure of the Strategic Committee, as approved by the Board of Directors on July 28, 2011, is available herein.

Rules of procedure (unabridged version)

The members of the Committee are directors of the Company and therefore uphold the rules of procedure of the Board of Directors of TOTAL S.A.

I. DUTIES

To allow the Board of Directors of TOTAL S.A. to ensure the Group's development, the Committee's duties include:
- examining the overall strategy of the Group proposed by the Company's general management;
- examining operations that are of particular strategic importance; and
- reviewing competition and the resulting medium and long-term outlook for the Group.

II. COMPOSITION

The Committee is made up of at least five directors designated by the Board of Directors.

Members of the 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, or another Group company, which are not dependent upon future work or activities.

The term of office of the members of the Committee coincides with the term of their appointment as director. The term of office as a member of the Committee may be renewed at the same time as the appointment as director.

However, the Board of Directors can change the composition of the Committee at any time.

III. ORGANIZATION OF ACTIVITIES

The Chairman of the Board of Directors of the Company chairs the Committee. The Chairman appoints the Committee secretary, who may be the Secretary of the Board of Directors.

The Committee deliberates when at least one-half of its members are present. A member of the Committee cannot be represented.

The Committee meets at least once a year and at the request of its Chairman, at least one-half of its members, or the Chief Executive Officer of the Company. The Committee Chairman prepares the schedule of its meetings.

Directors who are not members of the Committee are free to participate in the Committee's meetings. This voluntary participation entitles them to the same directors' fees as those paid to the members of the Committee for attending meetings.

The Committee may meet with the Chief Executive Officer, and, if applicable, any acting Managing Director of the Company and consult with managers of operating or non-operating departments, as may be useful in performing its duties. The Chairman of the Committee [if the latter is not the Chief Executive Officer of the Company] gives prior notice of such meeting to the Chief Executive Officer. In particular, the Committee is authorized to consult with the Vice President Strategy & Business Intelligence of the Company or the person delegated by the latter, by asking the Company's Chief Executive Officer to call them to a meeting.

If it deems it necessary to accomplish its duties, the Committee may request from the Board of Directors the resources to engage external consultants.

A written summary of Committee meetings is drawn up.

IV. REPORT

The Committee submits written reports to the Board of Directors regarding its work.

It periodically evaluates its performance based on these rules of procedure and, if applicable, offers suggestions for improving its performance.

Members of the Strategic Committee in 2012

The Strategic Committee has been made up of eight members since its creation.

The Committee's members are Mmes. Barbizet, Kux and Lauvergeon and Messrs. de Margerie, Brock, Desmarest, Mandil and, since January 12, 2012, Mr. Lamarche, who was appointed to replace his predecessor, Mr. de Rudder, who resigned from his position.

Mr. de Margerie chairs the Committee.

Three-fourths of the Committee members are independent directors, given that the Board of Directors considers Mmes. Barbizet, Kux and Lauvergeon and Messrs. Brock, Lamarche and Mandil independent (see paragraph 1.8. below).

A summary of the Committee's activities in 2012 is provided in paragraph 1.6.4. below.

1.6. Activity of the Board of Directors and its Committees in 2012

Directors are generally given written notice during the week prior to Board meetings. Whenever possible, documents to be considered for decisions to be made at Board meetings are sent with the notice of meetings. The minutes of the previous meeting are expressly approved at each Board meeting.

The Board of Directors held nine meetings in 2012. The attendance rate for all the directors was 96.3%.

The Audit Committee held eight meetings. The attendance rate for its members was 91.7%.

The Compensation Committee held three meetings, with 92.9% attendance.

The Nominating & Governance Committee held two meetings, with 100% attendance.

The Strategic Committee held one meeting, with 100% attendance.

A table summarizing individual attendance at the Board of Directors and Committee meetings is provided in paragraph 5.2. below.

Board of Directors' meetings in 2012

The meetings included, but were not limited to, a review of the following subjects:

January 12

- resignation of a director;
- nomination of a new director;
- strategic perspectives for Chemicals, including lines of development for reducing energy consumption, priority for safety and prevention of major environmental risks;
- 2012 Budget;
- Group insurance policy;
- approval of the proposed investment in the Ichthys LNG project, giant gas field located offshore in northwestern Australia, for which environmental authorisations were obtained in 2011; and
- information on other ongoing projects: Midstream Open Seasons (Canada), Fort Hills Upgrader (Suncor – Canada), Utica (USA), Termokarstovoye (Russia), Tempa Rossa (Italy), Hild (Norway), with environmental information for each (Group's requirements, impacts, etc.).

February 9

- 2011 accounts (consolidated financial statements, parent company accounts);
- main financial communications, including industrial safety and social aspects;
- comparison of earnings with those of major oil companies;
- debate on the Board of Directors' practices;
- amendment of the rules of procedure of the Board of Directors, the Nominating & Governance Committee and the Compensation Committee;
- assessment of the directors' independence and report on the absence of conflicts of interest;
- proposal to renew directorships and appoint a new director;
- proposal to renew and appoint Committees' members;
- review of the amount of directors' fees allocated to directors and Committees' members;
- compensation of the corporate executive officers (without the Chairman and Chief Executive Officer present);
- amendment of the principles and rules applied to determine the compensation of the corporate executive officers;
- Shareholders' Meeting notice and approval of the documents related to this meeting;
- review of contributions of securities of subsidiaries by TOTAL S.A. as part of the reorganization of marketing.

March 23

- preparation of the Shareholders' Meeting: review of various Chapters of the Registration Document forming the Management Report within the meaning of the French Commercial Code (particularly, risk factors, compensation, legal and arbitration proceedings, corporate, environmental and social responsibility); review of requests made by the central works council to include draft resolutions on the Shareholders' Meeting agenda;
- approval of the startup of the Egina field development project in Nigeria;
- summary of the Ethics Committee activities, including a description of policies implemented for the prevention of and the fight against fraud and corruption;
- Group financial policy; and
- establishment of the schedule related to the payment of interim dividends and the balance of the dividend for 2013.

April 26

- notification of the Board regarding the situation at the Elgin field (United Kingdom) and the OML 58 license (Nigeria);
- results for the first quarter 2012; and
- payment of an interim dividend.

May 11 – pre-shareholders' meeting

- review of the draft responses to the written questions submitted by shareholders.

May 11 – post-shareholders' meeting

- nomination of the Chairman and Chief Executive Officer and maintenance of the form of management;
- compensation of the Chairman and Chief Executive Officer and commitments made to him by the Company (without the Chairman and Chief Executive Officer present).

July 26

- strategic perspectives of the Refining & Chemicals segment including safety aspects and prevention of major environmental risks;

- results for the second quarter and the first half 2012;
- payment of an interim dividend;
- presentation of the Company's equal opportunity and salary equality policy and comparative status of overall employment and training conditions for women and men in the company;
- grant of performance shares.

September 18

- strategic perspectives of the Upstream segment (Exploration & Production and Gas & Power) with a presentation of safety indicators and environmental objectives (particularly, greenhouse gases);
- financial communication at mid-2012; and
- information on the proposed development of the Kashagan field in Kazakhstan;
- capital increase reserved for Group employees.

October 30

- summary of the Strategic Committee activities;
- strategic perspectives of the Marketing & Services segment (including New Energies, particularly solar and biomass);
- Group 5-year plan;
- results for the third quarter 2012;
- payment of an interim dividend; and
- approval of the proposed sale of the Group's share in the Usan (OML 138) field in Nigeria.

1.6.1. Audit Committee activity

In 2012, the members of the Audit Committee reviewed the following matters:

- At its meeting on **February 7**, the Committee reviewed the accounts for the fourth quarter of 2011, the annual consolidated statements report for the Group and the statutory accounts of parent company TOTAL S.A. for 2011. The statutory auditors presented a summary of their work performed in accordance with French and American professional audit standards. The Committee reviewed the Group's financial position. The Vice President of Internal Control and Corporate Audit presented the conclusions of the audits conducted in 2011 and the audit plan proposed for 2012. He commented on the results of the assessment of internal control on financial reporting conducted for fiscal year 2011 as part of the implementation of the Sarbanes-Oxley Act. The statutory auditors also presented a summary of their assessments of internal control related to financial reporting as part of the SOX 404 process. The Committee also reviewed the draft of the Chairman's report on internal control and risk management procedures. The Vice President of the Group Risk and Insurance Assessment Department presented the insurance policy to the Committee. The Vice President of the Group Legal Department presented the background and status of the pending proceedings related to the investigation launched by the SEC and the US Department of Justice (DoJ) concerning the pursuit of business in Iran.
- On **April 2**, the Committee met to assess the impact for the group of the gas leak in the G4 well on the Elgin field platform (North Sea). The Committee also took note of the operational difficulties occurred on the OML 58 license in Nigeria.
- At its meeting on **April 11**, the Committee was informed of developments related to the Elgin and OML 58 accidents. The Committee then reviewed the hydrocarbon reserves evaluation process at year-end 2011. A presentation on the controls and management of employee benefits and assets under management related to retirement risk coverage was made to the Committee. The Committee also reviewed the mapping of the Accounting Department's risks and the functions of the consolidation department in terms of accounting standards. It was informed of the main changes in standards in progress.
- the Committee met on **April 24** to assess the progress made in handling the Elgin and OML 58 accidents, to review the consolidated and statutory financial statements of TOTAL S.A for the first quarter 2012, and to review the Group's financial and tax position as well as its tax risk management and prevention policy. The statutory auditors presented a summary of their limited review. As part of the risk management process, the guidelines proposed for Group internal control and risk management managers were presented to the Committee, along with a proposed Risk Management, Internal Control and Audit Charter.
- At its meeting on **July 24**, the Committee reviewed the consolidated financial statements for the second quarter and the first half of 2012 and the statutory financial statements of TOTAL S.A. The statutory auditors presented a summary of their limited review. The Committee was informed of the status of the negotiations with the US authorities and the proposed settlements in the pending proceedings on the pursuit of business in Iran. Additional information regarding the latest developments related to the proposed settlements was provided to the Audit Committee at a special meeting held on **July 26**.
- On **October 10**, the Committee conducted a review of an adjustment item in the context of the determination of the main indicators of the information by business segment, "the effects of changes in fair value". It also reviewed the Group's significant litigation. It then received an update on the mapping of the risks of the Trading & Shipping division, which began in 2010. It was also informed of the methods for managing the Group's long-term debt and the choice of financing currencies. The statutory auditors presented to the Committee their analysis of the specific important points noted during the audit of the 2012 financial statements. At this meeting, the Committee also reviewed the budget allocated to the statutory auditors' fees. The members of the Committee then met with the statutory auditors without management being present.
- The meeting held on **October 26** concerned the review of the consolidated and statutory financial statements of TOTAL S.A. for the third quarter of 2012 and for the first nine months of 2012. The statutory auditors presented a summary of their limited review. The Committee was informed that the relevant employees acted in compliance with the provisions of the Financial Code of Ethics and approved the proposed update of this Financial Code of Ethics to take into account the changes made in the business segments.

At each committee meeting related to the quarterly financial statements, the Committee reviewed the Group's financial position in terms of liquidity, cash flow and debt, as well as its significant risks and off-balance sheet commitments. The Audit Committee was periodically informed of the risk management processes implemented within the Group and the work carried out by the Internal Audit Department which was presented at each committee meeting where the quarterly financial statements were reviewed.

The Audit Committee reviewed the accounts within the time limits required by the AFEP-MEDEF Code, namely two days prior to the review by the Board of Directors.

The statutory auditors attended all Audit Committee meetings held in 2012, except the meeting on July 26.

The Chief Financial Officer, the Vice President Accounting, the Vice President Internal Control and Audit and the Treasurer attended all the Audit Committee meetings, except the meeting on July 26 in which only the Chief Financial Officer participated.

The Chairman of the Committee reported to the Board of Directors on the Committee's activities.

1.6.2. Compensation Committee activity

At its meeting on **February 8, 2012**, the Committee reviewed:

- the proposed changes to the principles and rules applied to determine the compensation and other benefits of the corporate executive officers with regard to the procedures for revising their fixed and variable compensation and monitoring of this compensation by the Board of Directors, as well as the provisions concerning the award and holding of performance shares
- the commitments regarding the Chairman and Chief Executive Officer related to insurance and pension conditions and his severance benefits, subject to the renewal of his appointments as director and Chairman and Chief Executive Officer;
- the 2012 compensation policy for corporate executive officers. The Committee proposed the compensation for the Chairman and Chief Executive Officer (variable portion for his duties in 2011), after considering the compensation paid to the corporate executives of the main CAC 40 companies. It also decided on restrictions on share transfers by the Chairman and Chief Executive Officer;
- the compensation policy for the members of the Executive Committee;
- the proposed course of action regarding the share subscription option and performance share grant policy;
- for the parts within its remit, the information and reports of the Board of Directors or its Chairman to be provided to the shareholders.

At its meeting held on **July 25, 2012**, the Committee decided to propose to the Board an amendment to the stock options and performance shares grant policy and to grant only performance shares for 2012. It then approved the proposed performance share grant plan for 2012.

The Committee was also informed of the recommendations and avenues of reflection regarding the compensation of executive officers published in AMF recommendation No. 2012-02 of February 9, 2012, as well as the rules published by the SEC on June 21, 2012 pursuant to Section 592 of the Dodd-Frank Act regarding the independence of the members of the Compensation Committee and compensation consultants.

On **October 29**, the Committee met to review the performance share grant policy and certain pension plans. It was also informed of the conclusions of the 2012 AMF report on corporate governance and compensation of executive officers of listed companies.

1.6.3. Nominating & Governance Committee activity

At its meeting on **February 8, 2012**, the Nominating & Governance Committee reviewed the following:

- results of the formal evaluation of the Board's results of the formal evaluation of the Board's work carried out by means of a detailed questionnaire completed by all of the directors. The Committee suggested improvements mainly relating to more in-depth strategic reflection, which has already been put in place with the Strategic Committee;
- composition of the Board of Directors and Committees, particularly with regard to diversity and independence criteria, following the Committee's proposal to change the composition of the Compensation Committee and the Nominating & Governance Committee;
- proposals to the Board of Directors regarding the assessment of the independence of the directors based on the independence criteria specified in the AFEP-MEDEF Code;
- proposals to the Board of Directors regarding the list of directors to be recommended for appointment by the 2012 Shareholders' Meeting, which included the recommendation of one woman.
- review of the terms and conditions for allocating directors' fees to directors and Committees' members. The Committee decided to not propose changing the amount of the limit allocated by the 2007 Shareholders' Meeting and, if necessary, to pay directors prorated amounts in order to remain within this limit.
- review of the rules of procedure of the Board of Directors, the Nominating & Governance Committee and the Compensation Committee. The committee approved proposed changes to be submitted to the Board of Directors in order to take into account the creation of the Strategic Committee and to specify the objectives and certain duties of the committees;
- review, for the parts within its remit, reports of the Board of Directors or its Chairman to be provided to the shareholders.

At its meeting on **October 29, 2012**, the Committee discussed changes in the composition of the Board of Directors to be anticipated in 2013. It reviewed the proposed changes to the rules of procedure of the Board of Directors regarding transactions in the Company's financial instruments, and more specifically the abstention periods preceding the publication of the periodic financial statements, by proposing that this period be increased from fifteen days to thirty days. It also proposed a more precise formalization of the preventive rules applicable to directors for transactions in the financial instruments of the Company, subsidiaries of the Company and listed companies in which TOTAL holds an interest, as well as the rules prohibiting transactions in financial instruments related to the Company's share, buying on margin or short selling these financial instruments, and hedging transactions.

The Committee was also informed of the recommendations and avenues of reflection regarding corporate governance published in AMF recommendation No. 2012-02 of February 9, 2012, the AMF's 2012 report on corporate governance and the compensation of executive officers of publicly-traded companies.

1.6.4. Strategic Committee activity

The Strategic Committee met on **September 18, 2012**. It was informed of the unconventional hydrocarbon development plan. It then reviewed the comparison between the Company and leading national and international oil companies.

1.7. Board of Directors practices

1.7.1. Management form

On May 21, 2010, the Board of Directors decided to reunify the positions of Chairman and Chief Executive Officer and appoint the Chief Executive Officer as Chairman of the Board. This decision was made further to the work done by the Nominating & Governance Committee and in the best interests of the Company, taking into account the advantage of the unified management and the majority of independent directors appointed at the Committees, which ensures balanced authority.

The Board of Directors deemed that the unified management form was the most appropriate to the Group's organization, modus operandi and business, and the specificities of the oil and gas sector. It respects the respective prerogatives of the various Company instances (Shareholders' Meeting, Board of Directors, general management).

It was confirmed during the Board of Directors' meeting held on May 11, 2012, at which Mr. Christophe de Margerie was reappointed as Chairman and Chief Executive Officer.

Moreover, the Company by-laws and the respective rules of procedure of the Board of Directors and the Committees provide the guarantees required to implement best governance practices within a unified management framework. In particular, the by-laws allow the Board to nominate one or two Vice-Chairmen. They also state that the Board of Directors can be summoned by any means, even verbally, or at short notice in the event of an emergency, by the Chairman, a Vice-Chairman, or one-third of the members, at any time and whenever the Company's interest so requires. The rules of procedure of the Board of Directors also state that each director is required to inform the Board of Directors of any conflicts of interest, actual or potential, with the Company or with any other company in the Group, and to abstain from voting on the resolution in question, and even to refrain from taking part in the debate preceding the vote.

In addition, the current composition of the Board of Directors and its Committees ensures a balance of power within the Company's bodies given the high proportion of independent directors serving on the Board and Committees (see paragraph 1.8. below), the full involvement of the directors in the activity of the Board and Committees (see paragraph 5.2. below), and the diversity of their profiles, skills and expertise (see paragraph 1.1. above).

1.7.2. Performance and evaluation

At its meeting of February 9, 2012, the Board of Directors discussed its practices on the basis of a formal evaluation carried out by means of a detailed questionnaire completed by all of the directors. The responses were then submitted for examination by the Nominating & Governance Committee and summarized. This summary was discussed by the Board of Directors.

The formal evaluation showed a generally positive opinion of the practices of the Board of Directors and the Committees, which highlighted that the improvements requested by the directors in 2011 had been made. The Board therefore stated that it was generally satisfied with its practices and suggested improvements mainly relating to more in-depth strategic reflection. This has already been put in place with the Strategic Committee, and work in this area will continue for the benefit of the Board of Directors and the Group.

At its meeting on February 12, 2013, the Board of Directors discussed its practices on the basis of a formal evaluation organized by an external consultant. This evaluation was carried out in the form of interviews conducted by the external consultant with each Director based on a detailed questionnaire.

The evaluation showed that the Directors were satisfied with the workings of the Board of Directors and its Committees and that the Directors noted an improvement. Suggestions for progress were made in the conclusions of the report. At the recommendation of the Nominating & Governance Committee, the Board of Directors approved the proposed guidelines, which mainly entail increasing the number of Strategic Committee meetings and holding a Board meeting at an industrial site.

1.8. Director independence

At its meeting on February 12, 2013, the Board of Directors, on the recommendation of the Nominating & Governance Committee, reviewed the independence of the Company's directors as of December 31, 2012. At the Committee's suggestion, the Board considered that, pursuant to the AFEP-MEDEF Code, a director is independent when "he or she has no relationship of any kind with the Company, its Group or its Management, that may compromise the exercise of his or her freedom of judgment".

For each director, this assessment relies on the independence criteria set forth in the AFEP-MEDEF Code as reminded hereafter:

- not to be an employee or a director of the Company, or a Group company, and not having been in such a position for the previous five years;
- not to be a director of a company in which the Company holds a directorship or in which an employee appointed as such or an executive director of the company is a director;
- not to be a material customer, supplier, investment banker or commercial banker of the Company or Group, and for which the Company or the Group is not a material part of their business;
- not to be related by close family ties to a corporate executive officer;
- not to have been an auditor of the Company within the previous five years;
- not to have been a director of the Company for more than twelve years (upon expiry of the term of office during which the 12-year limit was reached).

The AFEP-MEDEF Code expressly stipulates that the Board can decide that the implementation of certain defined criteria is not relevant or induces an interpretation that is particular to the Company.

With regard to the criterion applicable to twelve years of service, the Board, at its meeting on February 12, 2013, pursuant to the report of the Nominating & Governance Committee, observed that Mr. Collomb, Ms. Lauvergeon and Mr. Pébereau had exceeded 12 years of service on December 31, 2012. In assessing the independence of these directors, the Board disregarded this criterion considering that it has no relevance given the specific characteristics of the oil and gas sector, which relies on long-term investment cycles on one hand and given the objectivity that these three directors have demonstrated in the Board's activity on the other hand. Besides,

it deemed that the experience acquired on the Board by these three directors strengthened their freedom of speech and their independence of judgment and benefited the Group. The Board also noted that the criterion related to the length of term of office was not one of the independence criteria required by the New York Stock Exchange (NYSE). Accordingly, it held that Mr. Collomb, Ms. Lauvergeon and Mr. Pébereau could be deemed as independent.

Concerning "material" relationships, as a customer, supplier, investment banker or finance banker, between a director and the Company, the Board deemed that the level of activity between Group companies and a bank at which Mr. Pébereau is a former corporate executive officer, which is less than 0.1% of its net banking income[1] 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 could be considered independent.

Likewise, the Board of Directors also deemed that the level of activity between Group companies and one of its suppliers, Vallourec, of which Ms. Idrac is a member of the Supervisory Board, which is less than 3.1% of Vallourec's turnover[2] and less than 0.6% of the Group's purchasing in 2012, represents neither a material portion of the supplier's overall activity nor a material portion of the Group's purchasing. The Board concluded that Ms. Idrac could be considered independent.

Furthermore, the Board deemed that the level of activity between Group companies and Stena AB of which Mr. Brock is a director, was nil in 2012. The Board concluded that Mr. Brock could be considered independent.

Mmes. Barbizet, Coisne-Roquette, Idrac, Kux and Lauvergeon, and Messrs. Artus, Brock, Collomb, Desmarais, Lamarche, Mandil, and Pébereau were deemed to be independent directors.

80% of the directors were independent on December 31, 2012.

1.9. Additional information on the members of the Board of Directors

1.9.1. Absence of conflicts of interest

The Board also noted the absence of potential conflicts between the Directors' duties in the best interests of the Company and the private interests of its directors. To the Company's knowledge, the members of the Board of TOTAL S.A. are not related by close family ties; there are no arrangements or agreements with clients or suppliers that facilitated their appointment; there is no service agreement binding a director of TOTAL S.A. to one of its subsidiaries and providing for special benefits upon termination of such agreement.

1.9.2. Absence of a conviction

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.

1.10. Internal control and risk management

General Management constantly strives to maintain an efficient internal control system, based on clear organizational principles, an effective system to identify and manage risks and suitable governance instances and control activities. The internal control framework adopted by the Group is that of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In this framework, internal control is a process intended to provide reasonable assurance that the following will be achieved: effective and efficient execution of operations, accurate reporting of financial and accounting information, compliance with applicable laws and regulations and the protection of assets. As for any system for internal control, there can be no guarantee that all risks are completely managed or eliminated. In terms of risk management, the Group draws on the principal international (COSO and ISO 31000: 2009) and national standards (frame of reference of the French Financial Markets Authority).

The Group's internal control and risk management system is organized around three operational levels: Group, business segments and entities. Each level is directly involved in and responsible for designing and implementing internal control, in line with the degree of centralization targeted by General Management.

At each of the three levels, specific internal control procedures cover organization, delegations of authority and employee education and training that conform to the Group's overall framework. The Group has implemented a shared database of its key documents (REFLEX), which contains the various standards broken down into categories (charters, policies, guidelines, rules, procedures, guides and manuals). The governance framework of these standards and the principles regarding their adoption by the business segments are being finalized.

The Group is structured around three business segments (Upstream, Refining & Chemicals, Marketing & Services) to which the Group's business units report. The business segment managers are responsible, within their area of responsibility, for ensuring that operations are carried out in accordance with the strategic objectives defined by the Board of Directors and General Management.

The functional divisions help General Management define and oversee the norms and standards and monitor activities. They also lend their expertise to the operational divisions.

The functional divisions mainly include the Finance Department (to which the Group Risk and Insurance Assessment Department and the Group Information Technology Department report), the Legal Department and Corporate Affairs (to which the Group Internal Control and Audit Department and the Sustainable Development and Environment, Human Resources, Security and Industrial Safety departments report).

(1) 2012 net banking income estimated based on BNP Paribas financial statements as of September 30, 2012.
(2) Based on the 2011 consolidated turnover published by Vallourec.

In line with previous action taken in the area of internal control and risk management, in 2012 General Management formalized a Risk Management, Internal Control and Audit charter, which forms the common framework within which the Group manages its activities.

The Group's internal control system covers the processes of the fully consolidated subsidiaries, and a study is underway regarding the implementation of a more structured internal control system at the equity affiliates.

Under these internal control principles, which are part of the corporate governance organization, the Audit Committee is responsible for monitoring the efficiency of internal control and risk management procedures, assisted by the Internal Audit Department and the internal control teams from the business segments. These rules are designed to allow the Board of Directors to ensure that internal control is effective and that published information available to shareholders and financial markets is reliable.

The Group's internal control and risk management system is based on the five factors below, which are derived from the COSO.

1.10.1. Control environment

The control environment is based on the Group's core values that are deeply rooted in its culture, including the integrity, ethical conduct and professional competence of its employees.

The Group's values and business principles are set out in the Code of Conduct and the Ethics Charter, circulated to employees and available on the Group's Internet site, and in the Financial Code of Ethics which, referring to 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 managers of its principal activities.

These values and principles are also cascaded in codes, procedures and guidelines governing the significant processes of the business segments or the Group. These codes explain the Group's values and describe its business and behavior principles with regard to employees, shareholders, customers, suppliers and competitors. They also set out the rules of individual behavior applicable to all employees and expected in host countries.

More specifically, the Group has been deploying ethics and compliance programs since 2009, as a priority defined by General Management.

This is why, at the end of 2009, the Executive Committee formally approved a conformity policy and program designed to prevent corruption.

The Group has therefore defined and published a series of internal standards (guidelines, procedures) since 2011. These specific standards, which take into account relevant applicable laws, cover various subjects (business partnerships, intermediaries, purchases and sales, gifts, etc.).

To support the launch of this program,

- an e-learning module has been designed in twelve languages. At the end of December 2012, more than 40,000 employees had followed this module, and
- over 350 Conformity Managers have been appointed and trained at the business segments, subsidiaries and entities. Their role is to ensure that the program is actually implemented at the local level.

The Group has also issued guidelines in order to consolidate its policies designed to prevent and respond to instances of fraud of any type. These guidelines reaffirm the zero tolerance principle as it relates to fraud, and supplement and clarify the rules of ethical behavior applicable to all the Group's employees.

In the same way as efforts to prevent corruption are organized, a network of Fraud Risk coordinators has been set up to implement this program.

A policy aimed at ensuring compliance with competition law and preventing violations in this area was also adopted as a follow-up to the various measures previously taken by the business segments. Its deployment is based on a dedicated organization, the involvement of hierarchies and staff, and a warning process.

The Group's Ethics Department implements a policy to prevent insider trading on the financial markets which is based, in particular, on the Group's internal ethical rules. These rules are updated on a regular basis and widely distributed to employees who are permanently or occasionally in possession of insider knowledge about the Group. These ethical rules require, in particular, that permanent insiders refrain from carrying out any transactions, including hedging transactions, in TOTAL shares or ADRs and in shares in collective investment plans (FCPE) invested primarily in TOTAL shares (as well as derivatives related to such shares) on the day on which the Company discloses its periodic earnings (quarterly, interim and annual) and during the 30 calendar days preceding such date.

The Group's senior management receives regular training on the content and the importance of the rules of behavior set out in the Code of Conduct.

In this regard, in order to prevent conflicts of interest and at the initiative of the Ethics Department, each of the Group's executive officers completes an annual declaration regarding any conflicts of interest to which he or she may be subject. By completing this declaration, each executive officer also agrees to report to the Ethics Committee or to his or her supervisor any conflict of interest that he or she has had or of which he or she is aware in performing his or her duties.

Each year, the entities' general managers and financial managers provide internal written representations to the Chief Financial Officer that they have complied with internal control procedures and that the financial reporting under their responsibility is reliable.

1.10.2. Risk identification, assessment and management

The Executive Committee is responsible for analyzing the internal and external risks that could impact TOTAL's performance, with the assistance of the Group Risk Committee and the internal control and internal audit departments.

Set up in April 2011, the Group Risk Committee (GRC) organizes and oversees the global risk management system.

The GRC reports to the Executive Committee and is made up of managers from the central functional divisions and the general secretaries or chief financial officers of the business segments. It meets at least six times a year. Its two main functions are to identify risks that could prevent the Group from achieving its objectives and to ensure the existence and effectiveness of risk management systems that they are adapted to the Group's needs.

The GRC relies on the work done by the business segments and the functional divisions, which draw up their risk maps and regularly report to the Audit Committee on their state of progress.

The entities are responsible for implementing a risk management

policy best suited to their specific activities. However, today certain inter-departmental risks are more closely coordinated by the respective functional divisions.

The principal risks monitored at Group level are: sensitivity to the oil market environment (oil prices and refining, marketing and petrochemical margins); exposure to oil and gas trading risks; financial markets risks (foreign exchange risk, particularly related to the dollar, and interest rate); political and legal risks related to the operating and contractual environment of the Exploration & Production activities; and industrial and environmental risks related to the sectors in which the Group is active.

With regard to risks connected to the trading of oil and gas and related financial instruments, the departments concerned, whose activity is governed by limits set by the Executive Committee, measure their positions and exposure daily and analyze their market risk, in particular using value-at-risk assessment methods.

With regard to counterparty risks, credit limits and risk analysis processes are set and updated regularly, for each activity.

The broad range of activities and countries in which the Group operates requires local analysis, by business segment, of the related legal, contractual and political risks. Compliance programs with regard to competition and bribery law matters are implemented by the Group to ensure compliance with applicable legislation.

Operating entities are responsible for assessing their industrial and environmental risks and for implementing the regulatory requirements of the countries where they operate, as well as any relevant guidelines and recommendations defined at the Group or business segment level. They are also responsible for actively monitoring changes in legislation in order to comply with local and international standards concerning industrial and environmental risk assessment and management. Risk assessments lead to the establishment of management measures to prevent and reduce environmental impact, minimize the risks of accidents and contain their consequences.

The Group also has a crisis management process which relies on a permanent on-call system, regular exercises conducted at the industrial sites of the fully consolidated subsidiaries, a benchmark of the best practices of international companies, training courses in crisis management and communication, as well as procedures, emergency booklets and tools that can be used in the event of a crisis.

The organization set up in the event of a crisis is deployed at two levels:

– at the local level (country, site or entities), a crisis unit is responsible for ensuring operational management and implementing the emergency plans;

– at the head office level, a crisis unit made up of a multi-disciplinary team is tasked with assessing the situation and overseeing crisis management. This central unit provides the necessary expertise and mobilizes additional resources to assist the local crisis unit, when necessary.

These two units coordinate their actions closely.

This process was fully implemented in the spring of 2012 following the accidents in the North Sea (Elgin platform) and in Nigeria (Ibewa).

The “Risk Factors” section of this Registration Document (Chapter 4) contains a formal and extensive description of the principal risks faced by the Group and how the Group manages these risks and secures appropriate insurance coverage.

1.10.3. Control activities

Control activities and financial reporting systems are designed to take into account the specific nature of these risks and the degree to which operational control is delegated to the business segments and entities.

General Management exercises operational control over TOTAL’s activities through the Executive Committee’s approval of investments and commitments for projects, based on defined thresholds. These projects are subject to prior vetting by the Risk Committee (CORISK), whose assessments are transmitted to the Executive Committee. As part of this review, the CORISK verifies the analysis of the various project-related risks.

Control activities are primarily based on a strategic plan that is reviewed annually, an annual budget, monthly management financial reports with detailed analysis of differences between actual and budgeted expenditures, and a reconciliation between quarterly published consolidated financial statements and reporting. These processes are supervised by the Accounting and Budget/Financial Control Departments, which are part of the Finance Department, and are performed in compliance with financial reporting standards, consistent and compliant with the accounting standards used for the published financial statements. Financial indicators and the accounting methods used allow appropriate assessment of risks and return on average capital employed (ROACE).

Moreover, the Group’s Accounting Department draws up a quarterly report of consolidated off-balance sheet commitments as part of the closure of the consolidated financial statements. The financial reporting manual contains a procedure to identify and escalate off-balance sheet commitments.

The Group’s Accounting Department centralizes the interpretation of accounting standards applicable to the Group’s consolidated financial statements and distributes these standards through formal procedures and a financial reporting manual. It monitors the effective implementation of standards across TOTAL through periodic, formal communication with functional managers in the business segments. The Department also periodically reports any exceptions to the Chief Financial Officer.

The Treasury Department monitors and manages risks related to cash management activities and interest rate-related and foreign exchange-related financial instruments in accordance with strict rules defined by General Management. Cash and cash equivalents, financial positions and financial instruments are centralized by the Treasury Department.

Oil and gas reserves are reviewed by a committee of experts (the Reserves Committee), approved by the Exploration & Production division’s senior management and then confirmed by the Group’s General Management.

The Disclosure Committee, whose members are the managers of the main corporate departments, establishes and maintains procedures designed to ensure the quality and accuracy of external communications intended for financial markets.

At the business segments and entity level, control activities are organized around the principal operational processes: exploration and reserves, purchasing, capital expenditures, production, sales, oil, gas and petroleum product trading, inventories, human resources, financing and cash management, as well as the account closure process including in particular control of amortization, depreciation, provisions and identification of off-balance sheet commitments.

The Group has implemented a range of procedures and programs that help to prevent, detect and limit different types of fraud. This

effort is supported by the business principles and rules of individual behavior described in the Code of Conduct and in procedures, charters and codes issued at the Group business segment level. The Group has also issued “Guidelines” for handling incidents of fraud which have been widely distributed to employees. These guidelines create a whistleblowing system which employees can use to report circumstances that might amount to fraud. In addition, a specific process is in place for reporting irregularities related to accounting, internal control and auditing matters. This warning process, implemented at the request of the Audit Committee is monitored by this committee and may be used by shareholders, employees and third parties.

The Company also has a Financial Code of Ethics which the Audit Committee ensures is implemented and observed. This Code makes reference to the Group’s Code of Conduct and sets forth specific rules for its Chairman, Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer and the financial and accounting managers of its principal activities. In 2012, this Code was updated to reflect the new organization of the Group’s activities. The changes were approved by the Audit Committee at its meeting held on October 26, 2012.

The Information Technology Department has developed and distributed governance and security rules that describe the recommended infrastructure, organization and procedures to maintain information systems that are appropriate to the organization’s needs and to limit information security risks. These rules are implemented across the Group under the responsibility of the various business segments.

Control activities to prevent industrial and environmental risks are implemented in the business units. External certification or third-party audits are conducted for some of the management systems related to this type of risk. More detailed information on the Group’s safety and environmental initiatives is provided in the Group’s CSR (Corporate Social Responsibility) report.

1.10.4. Information and communication

Internal control procedures are defined at each of the three operational levels: general rules at the corporate level; sector-specific procedures at the business line level; and others at the entity level. These procedures are circulated in memorandums and are also available on the intranet sites of the Group and, the business segments whenever they are common.

The principal procedures regarding financial controls established at the corporate level cover acquisitions and disposals, capital expenditure, financing and cash management, budget control and financial reporting. Disclosure controls and procedures are in place. At the operating levels, they mainly consist of procedures, guidelines and recommendations covering safety and security (both industrial and information technology), health, the environment and sustainable development.

The procedures for the business sectors primarily concern financial control specific to each sector. At the entity level, the principles of the Group’s overall framework are implemented through specific procedures tailored to the size and environment of operations.

1.10.5. Monitoring

Together, the holding company, the business segments and the entities are responsible for monitoring internal control in their respective operations.

Internal Control and Group Audit are the two components of the Internal Control and Group Audit department, which reports to the Executive Committee through the Chief Administrative Officer.

The Group Internal Control department is tasked with managing the Group’s internal controls, and in particular:

- organizing and maintaining the global internal control system, ensuring that it is distributed and adopted throughout the Group and that it is continuously improved;
- making sure that the Group complies with regulations applying to the internal control of financial information, and in particular the Sarbanes-Oxley act and the law on Financial Security;
- coordinating the Group-wide risk management measures, in particular with regard to combating fraud, and contributing to all the integrity policy initiatives.

The central Group Audit function is mainly responsible for auditing the internal control system. An audit work schedule is set annually. The audit reports are periodically summarized and presented to the Audit Committee and, thereby, to the Board of Directors.

In 2012, the Group Internal Control and Audit Department’s 70 auditors conducted more than 160 audits. The Vice President of Group Internal Control and Audit attended all Audit Committee meetings and reported quarterly on Group Audit activity and annually on the conclusions of Internal Control activity.

The Group’s General Management is responsible for implementing and assessing internal control over financial reporting. In this context, TOTAL evaluated awareness and implementation of its internal control system, based on the COSO framework, in its main entities.

With the assistance of its main entities and the Group Internal Control and Audit Department, the Group also examined and assessed the design and effectiveness of the key operational, information systems and financial controls related to internal control over financial reporting in financial year 2012 pursuant to section 404 of the Sarbanes-Oxley Act. The system used is based on the following categorization:

- significant entities assess their key operational controls based on their significant processes and respond to a Group questionnaire for assessing the internal control system, and;
- other less significant entities respond only to the Group questionnaire for assessing the internal control system.

These two categories of entities account for approximately 80% of the financial items in the Group’s financial statements. The system covers all processes that directly or indirectly contribute to the reliability of financial reporting.

Based on these internal reviews, General Management has reasonable assurance of the effectiveness of the Group’s internal control.

If points of progress are identified by these internal audits and operational checks, then corrective action plans are drawn up and closely monitored by the operatives and the Group Internal Control and Audit Department.

The statutory auditors perform those internal control audits that they deem necessary as part of their mission to certify the financial statements and present their observations to the Audit Committee.

For 2012, the statutory auditors reviewed the implementation of the Group’s internal control framework and the design and effectiveness of key internal controls at its main entities concerning financial reporting. Based on the work performed, the statutory auditors declared that they had no comments on the information and conclusions related to this subject presented in this report.

1.11. Particular conditions regarding participation in Shareholder's Meetings

Shareholders' Meetings are convened and deliberate under the conditions provided by law. However, pursuant to Article 18 of the Company's by-laws, double voting rights are granted to of the shares held in the name of the same shareholder for at least two years. This same article also provides that 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%.

For more detailed information on these conditions, see Chapter 8 (General Information - Shareholders' Meetings) of this Registration Document.

1.12. Information mentioned in Article L. 225-100-3 of the French Commercial Code

This information is provided in Chapter 8 (General information - Agreements mentioned in Article L. 225-100-3 of the French Commercial Code) of this Registration Document.

1.13. Principles and rules applied to determine the compensation and other benefits of the corporate executive officers

The principles and rules applied to determine the compensation and other benefits received by the corporate executive officers, which was approved by the Board of Directors on February 9, 2012, is reproduced below.

Based on a proposal by the Compensation Committee, the Board adopted the following principles for determining the compensation and other benefits of the corporate executive officers (the Chairman and 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 obtained and responsibilities held.

- Compensation for the Chairman and the Chief Executive Officer includes both a fixed portion and a variable portion. The fixed portion is reviewed at least every two years.

- The amount of variable compensation is reviewed each year and may not exceed a stated percentage of fixed compensation. Variable compensation is determined based on pre-defined quantitative and qualitative criteria that are periodically reviewed by the Board of Directors. 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 compensation is determined in line with the annual assessment of the performance of the Chairman and the Chief Executive Officer and the company's medium-term strategy.

  The Board of Directors keeps track of the fixed and variable portions of the compensation of the Chairman and the Chief Executive Officer over several years and in light of the company's performance.

- The Group does not have a specific pension plan for the Chairman and the Chief Executive Officer. They are eligible for retirement benefits and pensions schemes available to certain employee categories in the Group under conditions determined by the Board.

- Stock options and performance shares are designed to align the long-term interests of the Chairman and the Chief Executive Officer with those of the shareholders.

  The allocation of options and performance shares to the Chairman and the Chief Executive Officer is examined in light of all the forms of compensation of each person.

  The exercise price for stock options awarded is not discounted compared with the market price, at the time of the grant, for the underlying share.

  Stock options and performance shares are awarded at regular intervals to prevent any opportunistic behavior.

  The exercise of options and the definitive allocation of performance shares to which the Chairman and the Chief Executive Officer are entitled are subject to performance criteria that must be met over several years.

  The Board puts in place restrictions on the transfer of a portion of shares held upon the exercise of options and the definitive allocation of performance shares, applicable to the Chairman and the Chief Executive Officer until the end of their term of office.

  The Chairman and the Chief Executive Officer may not be granted stock options or performance shares when they leave office.

- After three years in office, the Chairman and the Chief Executive Officer are required to hold at least the number of Company shares set by the Board.

- The components of the compensation of the Chairman and the Chief Executive Officer are made public after the Board of Directors' meeting at which they are approved.

Christophe de Margerie
Chairman of the Board and Chief Executive Officer

2. Statutory auditor's report (Article L. 225-235 of the French Commercial Code)

This is a free translation into English of a report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction and construed in accordance with French law and the relevant professional auditing standards applicable in France.

Year ended December 31, 2012

Statutory Auditors' report, prepared in accordance with Article L.225-235 of the French Commercial Law (*Code de commerce*), on the report prepared by the Chairman of the Board of Directors of the company TOTAL S.A.

To the Shareholders,

In our capacity as Statutory Auditors of TOTAL S.A., and in accordance with Article L.225-235 of the French Commercial Law (*Code de commerce*), we hereby report on the report prepared by the Chairman of your company in accordance with Article L.225-37 of the French Commercial Law (*Code de commerce*) for the year ended December 31, 2012.

It is the Chairman's responsibility to prepare, and submit to the Board of Directors for approval, a report on the internal control and risk management procedures implemented by the Company and containing the other disclosures required by Article L.225-37 of the French Commercial Law (*Code de commerce*) relating especially to Corporate Governance.

It is our responsibility to:

– report to you on the information contained in the Chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information, and

– attest that the report contains the other disclosures required by Article L.225-37 of the French Commercial Law (*Code de commerce*), being specified that we are not responsible for verifying the fairness of these other disclosures.

We conducted our work in accordance with professional standards applicable in France.

Information on the internal control and risk management procedures relating to the preparation and processing of accounting and financial information

These standards require that we perform the necessary procedures to assess the fairness of the information provided in the Chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information. These procedures consisted mainly in:

– obtaining an understanding of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information on which the information presented in the Chairman's report is based and of the existing documentation;

– obtaining an understanding of the work involved in the preparation of this information and of the existing documentation;

– obtaining an understanding of the evaluation process in place and assessing the quality and appropriateness of its documentation with respect to the information on the evaluation of internal control and risk management procedures;

– determining if any significant weaknesses in the internal control procedures relating to the preparation and processing of the accounting and financial information that we would have noted in the course of our engagement are properly disclosed in the Chairman's report.

On the basis of our work, we have nothing to report on the information in respect of the Company's internal control and risk management procedures relating to the preparation and processing of accounting and financial information contained in the report prepared by the Chairman of the Board in accordance with Article L.225-37 of the French Commercial Law (*Code de commerce*).

Other information

We hereby attest that the Chairman's report includes the other disclosures required by Article L.225-37 of the French Commercial Law (*Code de commerce*).

Paris-La Défense, March 27, 2013

The statutory auditors

French original signed by

KPMG Audit
A division of KPMG S.A.
Jay Nirsimloo

ERNST & YOUNG Audit
Pascal Macioce
Laurent Vitse

3. General Management

3.1. Management Form

Based on the recommendation of the Nominating & Governance Committee, the Board of Directors decided at its meeting on May 21, 2010 to reunify the positions of Chairman of the Board and Chief Executive Officer and to appoint the Chief Executive Officer to the position of Chairman of the Board until his term of office expires, *i.e.* until the Shareholders' Meeting called to approve the financial statements for fiscal year 2011.

As a result, Mr. de Margerie has served as Chairman and Chief Executive Officer of TOTAL S.A. since May 21, 2010.

The Board of Directors deemed that the unified management form was the most appropriate to the Group's business and to the specificities of the oil and gas sectors. This decision took into account the advantage of unified management and the composition of the Board Committees which include a large proportion of independent directors, thereby ensuring balanced authority (for further information regarding the reasons for selecting the unified management form, see paragraph 1.7.1. of this Chapter 5).

The management form selected will remain in effect until a decision to the contrary is made by the Board of Directors.

3.2. The Executive Committee

The Executive Committee, under the responsibility of the Chairman and Chief Executive Officer, is the decision-making body of the Group.

It implements the strategy formulated by the Board of Directors and authorizes related investments, subject to the approval of the Board of Directors for investments exceeding 3% of the Group's equity or notification of the Board for investments exceeding 1% of equity.

In 2012, the Executive Committee met at least twice a month, except in August when it met only once.

As of December 31, 2012, the members of TOTAL's Executive Committee were as follows:

- Christophe de Margerie, Chairman of the Executive Committee, Chairman and Chief Executive Officer;
- Philippe Boisseau, President of Marketing & Services and New Energies;
- Yves-Louis Darricarrère, President of Upstream (Exploration & Production division and Gas & Power division);
- Jean-Jacques Guilbaud, Chief Administrative Officer;
- Patrick de La Chevardière, Chief Financial Officer; and
- Patrick Pouyanné, President of Refining & Chemicals.

3.3. The Management Committee

The Management Committee facilitates coordination among the different entities of the Group and monitors the operating results of the operational divisions and the activity reports of the functional divisions.

In addition to the members of the Executive Committee, the following 26 individuals from various operating divisions and non-operating departments served as members of the Management Committee as of December 31, 2012:

Corporate
René Chappaz, Peter Herbel, Jean-Marc Jaubert, Helle Kristoffersen, Manoelle Lepoutre, Françoise Leroy, Jean-François Minster, Jacques-Emmanuel Saulnier, François Viaud.

Upstream
Marc Blaizot, Arnaud Breuillac, Olivier Cleret de Langavant, Isabelle Gaildraud, Michel Hourcard, Jacques Marraud des Grottes, Philippe Sauquet.

Refining & Chemicals
Pierre Barbé, Bertrand Deroubaix, Jacques Maigné, Jean-Jacques Mosconi, Bernard Pinatel, Bernadette Spinoy.

Marketing & Services
Benoît Luc, Momar Nguer, Jérôme Paré, Jérôme Schmitt.

4. Statutory auditors

4.1. Statutory auditors

ERNST & YOUNG Audit

1/2, place des Saisons, 92400 Courbevoie-Paris-La Défense, Cedex 1
Appointed on May 14, 2004
Appointment renewed on May 21, 2010, for an additional 6-fiscal year term
P. Macioce, L. Vitse

KPMG Audit

A division of KPMG S.A.
1, cours Valmy, 92923 Paris-La Défense
Appointed on May 13, 1998
Appointment renewed on May 21, 2010, for an additional 6-fiscal year term
J. Nirsimloo

4.2. Alternate auditors

Cabinet Auditex

1/2, place des Saisons, 92400 Courbevoie-Paris-La Défense, Cedex 1
Appointed on May 21, 2010 for a 6-fiscal year term

KPMG Audit IS

3, cours du Triangle, Immeuble “Le Palatin”, Puteaux, 92939 Paris-La Défense, Cedex
Appointed on May 21, 2010 for a 6-fiscal year term

4.3. Auditor’s term of office

French law provides that the statutory and alternate auditors are appointed for renewable 6-fiscal year terms. The terms of office of the statutory auditors and of the alternate auditors will expire at the end of the Shareholders’ Meeting called in 2016 to approve the financial statements for fiscal year 2015.

4.4. Fees received by the statutory auditors (including members of their network)

	Ernst & Young Audit				KPMG Audit			
	Amount in millions of euros (excluding VAT)		%		Amount in millions of euros (excluding VAT)		%	
	2012	2011	2012	2011	2012	2011	2012	2011
Audit								
Audit and certification of the parent company and consolidated accounts								
TOTAL S.A.	3.3	3.0	14.8	15.7	3.0	3.0	15.1	15.2
Fully-consolidated subsidiaries	15.2	12.6	68.2	66.0	11.3	11.1	56.8	56.4
Other work and services directly related to the responsibilities of statutory auditors								
TOTAL S.A.	0.6	0.1	2.7	0.5	1.1	1.0	5.5	5.1
Fully-consolidated subsidiaries	1.0	1.8	4.5	9.4	2.7	2.8	13.6	14.2
Subtotal	**20.1**	**17.5**	**90.2**	**91.6**	**18.1**	**17.9**	**91.0**	**90.9**
Other services provided by the network to fully-consolidated subsidiaries								
Legal, tax, labor law	2.1	1.4	9.4	7.3	1.8	1.6	9.0	8.1
Other	0.1	0.2	0.4	1.1	-	0.2	-	1.0
Subtotal	**2.2**	**1.6**	**9.8**	**8.4**	**1.8**	**1.8**	**9.0**	**9.1**
Total	**22.3**	**19.1**	**100**	**100**	**19.9**	**19.7**	**100**	**100**

5. Compensation for the administration and management bodies

5.1. Board compensation

The overall amount of directors' fees allocated to members of the Board of Directors was set at €1.1 million for each fiscal year by the Shareholders' Meeting on May 11, 2007.

In 2012, the overall amount of directors' fees allocated to the members of the Board of Directors was €1.1 million, noting that there were fifteen directors as of December 31, 2012, as at year-end 2011.

The allocation of the overall amount of fees for 2012 remains based on an allocation scheme comprised of fixed compensation and variable compensation based on fixed amounts per meeting, which makes it possible to take into account each director's actual attendance at the meetings of the Board of Directors and its Committees.

To take into account the creation of the Strategic Committee, the Board of Directors decided at its meeting of October 27, 2011, to set out the allocation of fees and the fixed and variable amounts per meeting as follows. These conditions were maintained by the Board of Directors at its meeting on February 9, 2012, which also decided on a prorated proportion of the total amounts paid to each director, if the allocation of €1.1 million authorized by the Shareholders' Meeting is exceeded:

- a fixed amount of €20,000 is to be paid to each director (calculated *prorata temporis* in case of a change during the period), apart from the Chairman of the Audit Committee, who is to be paid €30,000 and the other Audit Committee members, who are to be paid €25,000;
- an amount of €5,000 per director for each Board of Directors' meeting actually attended;
- an amount of €3,500 per director for each Compensation Committee, Nominating & Governance Committee or Strategic Committee meeting actually attended;
- an amount of €7,000 per director for each Audit Committee meeting actually attended;
- a premium of €2,000 for travel from a country outside France to attend a Board of Directors or Committee meeting;

- the Chairman and Chief Executive Officer does not receive directors' fees as director of TOTAL S.A. or any other company of the Group;
- after taking the actual presence at each Board of Directors or Committee meeting into consideration, the total amount paid to each director is determined, after prorating the amount set for each director, such that the overall amount paid remains below the maximum limit of €1.1 million.

A table summarizing the total compensation (including in-kind benefits) paid to each director during the last two fiscal years (Article L. 225-102-1 of the French Commercial Code, 1st and 2nd paragraphs) is provided in paragraph 5.7.3. of this Chapter.

5.2. Directors' attendance at Board and Committee meetings in 2012

Directors	Board of Directors		Audit Committee		Compensation Committee		Nominating & Governance Committee		Strategic Committee [j]	
	Attendance rate	Number of meetings	Attendance rate	Number of meetings	Attendance rate	Number of meetings	Attendance rate	Number of meetings	Attendance rate	Number of meetings
Christophe de Margerie	100%	9/9	-	-	-	-	-	-	100%	1/1
Thierry Desmarest	100%	9/9	-	-	100%	3/3	100%	2/2	100%	1/1
Patrick Artus	100%	9/9	-	-	100%	3/3	100%	1/1[a]	100%	1/1
Patricia Barbizet	100%	9/9	100%	8/8	-	-	-	-	100%	1/1
Daniel Bouton[b]	100%	5/5	-	-	-	-	-	-	-	-
Gunnar Brock	88.9%	8/9	-	-	50%	1/2[c]	100%	1/1[c]	100%	1/1
Claude Clément	100%	9/9	-	-	-	-	-	-	100%	1/1
Marie-Christine Coisne-Roquette	88.9%	8/9	87.5%	7/8	-	-	-	-	-	-
Bertrand Collomb	100%	9/9	-	-	100%	1/1[d]	100%	2/2	100%	1/1
Paul Desmarais, jr	88.9%	8/9	-	-	-	-	-	-	100%	1/1
Anne-Marie Idrac[e]	100%	4/4[e]	-	-	-	-	-	-	100%	1/1
Barbara Kux	100%	9/9	-	-	-	-	-	-	100%	1/1
Gérard Lamarche[f]	87.5%	7/8[f]	87.5%	7/8	-	-	-	-	100%	1/1
Anne Lauvergeon	100%	9/9	-	-	-	-	-	-	100%	1/1
Claude Mandil	100%	9/9	-	-	100%	2/2[g]	100%	1/1[g]	100%	1/1
Michel Pébereau	88.9%	8/9	-	-	100%	3/3	100%	1/1[h]	-	-
Thierry de Rudder[i]	100%	1/1	-	-	-	-	-	-	-	-
Attendance rate	**96.3%**		**91.7%**		**92.9%**		**100%**		**100%**	

(a) Member of the Nominating & Governance Committee since February 9, 2012.
(b) Director until May 11, 2012.
(c) Member of the Compensation Committee and the Nominating & Governance Committee since February 9, 2012.
(d) Member of the Compensation Committee until February 9, 2012.
(e) Director from May 11, 2012.
(f) Director and member of the Audit Committee and member of the Strategic Committee since January 12, 2012.
(g) Member of the Compensation Committee and the Nominating & Governance Committee since February 9, 2012.
(h) Member of the Nominating & Governance Committee until February 9, 2012.
(i) Director until January 12, 2012.
(j) The list of members of the Strategic Committee can be found in 1.5.4. in Chapter 5.

5.3. Compensation of the Chairman and Chief Executive Officer

(See also summary tables in paragraph 5.7. of this Chapter)

The compensation paid to Mr. de Margerie for his duties as Chairman and Chief Executive Officer for fiscal year 2012 was set by the Board of Directors of TOTAL S.A. at its meeting of February 9, 2012, based on a recommendation by the Compensation Committee in line with the guidance of the AFEP-MEDEF Corporate Governance Code.

The compensation of the Chairman and Chief Executive Officer includes an annual fixed base salary of €1,500,000, unchanged from the amount set by the Board of Directors meeting on May 21, 2010 and a variable portion not to exceed 165% of the fixed base salary. The fixed base salary was set by comparison with the compensation paid to the Chairman and the Chief Executive Officer of the main companies included in the CAC 40 index. The maximum percentage of the fixed base salary represented by the variable portion is based on equivalent practice at a reference sample of companies, including energy companies.

The variable portion is based on criteria determined by the Board of Directors. The equivalent of up to 100% of the fixed base salary is linked to economic criteria, which varies on a straight-line basis to avoid threshold effects. The criteria based on the Chairman and Chief Executive Officer's personal contribution account for an additional amount that cannot exceed 65% of the fixed base salary.

The economic criteria were selected so as to not only take into account the short-term performance in terms of return on investment for shareholders, but also the progress made by the Group toward medium-term objectives by comparison with data for the oil and gas industry. They include:

– return on equity for a maximum of 50% of the base salary;
– the Company's earnings performance compared with that of four major competing oil companies[1], assessed by reference to the average growth over three years of two indicators, earnings per share and consolidated net income. Each indicator represents a maximum of 25% of the base salary.

The Chairman and Chief Executive Officer's personal contribution is evaluated on the basis of objective, mainly operational criteria related to the Group's business segments and established in line with its strategy, including health, safety and environment (HSE) performance and oil and gas production and reserves growth.

With respect to the fiscal year 2012, based on a recommendation by the Compensation Committee, the Board of Directors at its meeting of February 12, 2013, after having assessed to what extent financial performance criteria had been met and examined the Chairman and Chief Executive Officer's personal contribution, set the variable portion payable to Chairman and Chief Executive Officer for fiscal year 2012 at 116.11% of his fixed base salary, *i.e.* €1,741,000 this variable portion being payable in 2013.

The total gross compensation paid to Mr. de Margerie in his role as Chairman and Chief Executive Officer for the 2012 fiscal year amounts to €3,241,000 and was made up of a fixed base salary of €1,500,000 and a variable portion of €1,741,000, to be paid in 2013.

Mr. de Margerie's total gross compensation as Chairman and Chief Executive Officer for 2011 was €3,030,000, composed of a fixed base salary of €1,500,000 and a variable portion of €1,530,000 paid in 2012.

Moreover, on February 12, 2013, the Board of Directors, acting on a recommendation of the Compensation Committee, decided that the compensation for Mr. de Margerie as Chairman and Chief Executive Officer for fiscal year 2013 will be composed of a fixed base salary of €1,500,000, unchanged from the amount set by the Board of Directors on May 21, 2010, and a variable portion, to be paid in 2014, not exceeding 180% of the base salary, based on practices at a reference sample of companies, including energy companies.

The Board of Directors also decided to maintain the nature and respective weights of the various criteria for the attribution of the Chairman and Chief Executive Officer's variable portion, which therefore remain identical to those that determined the variable portion due in 2012, apart from the introduction of an additional criterion based on Corporate Social Responsibility (CSR) performance for the determination of the personal contribution made by the Chairman and Chief Executive Officer.

Consequently, the various criteria for the attribution of the Chairman and Chief Executive Officer's variable portion are based, for a maximum amount of 100% of the base salary, on economic parameters that refer to quantitative targets reflecting the Group's performance (these economic parameters being assessed on a straight-line basis between two level of performance, so as to avoid thresholds effects), and for a maximum amount of 80% of the base salary, the personal contribution of the Chairman and Chief Executive Officer that provide for a qualitative assessment of management.

The economic criteria include:

– return on equity for a maximum of 50% of the base salary;
– the Company's results, in comparison with the results of four major competing oil companies[1], assessed by reference to the average growth over three years of two indicators, earnings per share and consolidated net income. Each indicator represents a maximum of 25% of the base salary.

The expected levels of achievement in terms of the quantitative economic parameter targets set for the Chairman and Chief Executive Officer by the Board of Directors on February 12, 2013 in order to determine his variable portion have been precisely established, but will not be made public for reasons of confidentiality.

The personal contribution of the Chairman and Chief Executive Officer will account for no more than 80% of the base salary and will be assessed according to six pre-established, precisely defined qualitative criteria, including in particular the Health, Safety and Environment performance, which is to be measured mainly according to the achievement of the annual Total Recordable Incident Rate (TRIR) target, the increase in the production of hydrocarbons, the increase in hydrocarbon reserves, the performance of the Refining & Chemicals and Marketing & Services segments assessed on the basis of the annual targets of these activities, the success of strategic negotiations and the CSR performance, which is to be measured in particular according to the achievement of the CO_2 emissions targets, energy efficiency and the Group's position in the rankings of non-financial rating agencies.

As Chairman and Chief Executive Officer, Mr. de Margerie will continue to benefit from the use of a company car, the health coverage provided for Group employees and the eligibility to the life insurance plan open to the Group's executive officers (see paragraph 5.5. of this Chapter).

(1) ExxonMobil, BP, Royal Dutch-Shell and Chevron.

5.4. Executive officers' compensation

In 2012, the aggregate amount paid directly or indirectly by the French and foreign Group companies as compensation to the executive officers of TOTAL in office at December 31, 2012 (members of the Management Committee and the Treasurer) as a Group was €21.1 million (thirty-three individuals), including €8.2 million paid to the six members of the Executive Committee. Variable compensation accounted for 40% of the aggregate amount of €21.1 million paid to executive officers.

The following individuals were executive officers of the Group at December 31, 2012 (thirty-three individuals at year-end 2012, compared with twenty-nine at year-end 2011):

Management Committee

Christophe de Margerie[(1)]
Philippe Boisseau[(2)]
Yves-Louis Darricarrère[(2)]
Jean-Jacques Guilbaud[(2)]
Patrick de La Chevardière[(2)]
Patrick Pouyanné[(2)]
Pierre Barbé
Marc Blaizot
Arnaud Breuillac
René Chappaz
Olivier Cleret de Langavant
Bertrand Deroubaix
Isabelle Gaildraud
Peter Herbel
Michel Hourcard
Jean-Marc Jaubert
Helle Kristoffersen
Manoelle Lepoutre
Françoise Leroy
Benoît Luc
Jacques Maigné
Jacques Marraud des Grottes
Jean-François Minster
Jean-Jacques Mosconi
Momar Nguer
Jérôme Paré
Bernard Pinatel
Jacques-Emmanuel Saulnier
Philippe Sauquet
Jérôme Schmitt
Bernadette Spinoy
François Viaud

Treasurer

Humbert de Wendel

5.5. Pensions and other commitments (Article L. 225-102-1, paragraph 3, of the French Commercial Code)

1) Pursuant to applicable law, the Chairman and Chief Executive Officer is eligible for the basic French social security pension and for pension benefits under the ARRCO (*Association pour le Régime de Retraite Complémentaire des Salariés*) and AGIRC (*Association Générale des Institutions de Retraite des Cadres*) government-sponsored supplementary pension schemes. He also participates in the internal defined contribution pension plan and the defined benefit supplementary pension plan, known as RECOSUP, created by the Company. This supplementary pension plan, which is not limited to the Chairman and Chief Executive Officer, is described in point 2) below.

The sum of the supplementary pension plan benefits and external pension plan benefits may not exceed 45% of the compensation used as the calculation basis. In the event this percentage is exceeded, the supplementary pension is reduced accordingly.

The compensation taken into account when calculating the supplementary pension is the retiree's final three-year average gross compensation (fixed and variable portions).

As of December 31, 2012, Mr. de Margerie's aggregate benefit entitlement under all of the above pension plans would amount to 23.31% of his gross annual compensation received in 2012 (2012 fixed base salary and variable portion for 2011, paid in 2012).

2) The Chairman and Chief Executive Officer participates in a defined benefit supplementary pension plan financed by TOTAL S.A. and open to all employees of the Group whose annual compensation is greater than eight times the ceiling for calculating French social security contributions (€37,032 in 2013). Compensation above this amount does not qualify as pensionable compensation under either government-sponsored or contractual pension schemes.

To be eligible for this supplementary pension plan, participants must meet specific age and length of service (5 years) criteria. They must also still be employed by the Company upon retirement, unless they retire due to disability or had taken early retirement at the Group's initiative after the age of 55.

The plan provides participants with a pension equal to the sum of 1.8% of the portion of the reference compensation between eight and forty times the annual ceiling for calculating French social security contributions, and 1% of the reference compensation between forty and sixty times the annual ceiling for calculating French social security contributions, which is multiplied by the number of years of service (up to twenty years). It is adjusted in line with changes in the value of the ARRCO pension point and strictly capped as described in point 1) above.

As of December 31, 2012, the Group's pension obligations to Mr. de Margerie under the defined benefit supplementary pension plan represented the equivalent of 18.85% of his gross annual compensation paid in 2012.

(1) Chairman and Chief Executive Officer and Chairman of the Executive Committee.
(2) Member of the Executive Committee.

3) The Chairman and Chief Executive Officer is also entitled to a lump-sum retirement benefit equal to that available to eligible members of the Group under the French National Collective Bargaining Agreement for the Petroleum Industry. This benefit amounts to 25% of the gross annual compensation (fixed and variable portions) received in the 12-month period preceding retirement. Pursuant to the provisions of Article L. 225-42-1 of the French Commercial Code, this benefit is subject to the performance conditions detailed in point 7) below.

This retirement benefit cannot be combined with the compensation for loss of office described in point 5) below.

4) The Chairman and Chief Executive Officer also participates in the same life insurance plan as the Group's employees, covering supplementary benefits or annuities in the event of temporary incapacity for work and disability, together with a life insurance plan funded by the Company and open to the executive officers of the Group. Upon death, the plan guarantees a payment equal to two years' gross compensation (fixed and variable portions), increased to three years upon accidental death, as well as, in the event of disability, a payment proportional to the degree of disability.

5) If the Chairman and Chief Executive Officer is removed from office or his term of office is not renewed by the Company, he is entitled to compensation for loss of office equal to two years' gross annual compensation. The calculation will be based on the gross compensation (including both fixed and variable portions) paid in the 12-month period preceding the termination or non-renewal of his term of office.

This compensation for loss of office will be paid in the event of a change of control or strategy. It will not be due in cases of gross negligence or willful misconduct or if the Chairman and 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.

Pursuant to the provisions of Article L. 225-42-1 of the French Commercial Code, this benefit is subject to the performance conditions detailed in point 7) below.

6) Commitments with regard to the pension and life insurance plans for the Chairman and Chief Executive Officer and the retirement benefit and compensation for loss of office arrangements set out in point 5) were approved on February 9, 2012, by the Board of Directors and by the Shareholders' Meeting on May 11, 2012.

7) In addition, in compliance with Article L. 225-42-1 of the French Commercial Code, the commitments described in points 3) and 5) are subject to performance conditions that are deemed to be met if at least two of the following three 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%;
- TOTAL'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 rate of the four other major international oil companies that are its competitors: ExxonMobil, Shell, BP and Chevron.

In compliance with the AFEP-MEDEF Corporate Governance Code, the Board of Directors decided that payment of the lump-sum retirement benefit or compensation for loss of office shall be subject to demanding performance conditions combining both internal and external performance criteria.

The three criteria were selected to take into account the Company's general interest, shareholder interests and standard market practices, especially in the oil and gas industry.

More specifically, ROE criteria enable the payment of the retirement benefit or compensation for loss of office to be tied to the Company's overall shareholder return. Shareholders can use ROE to gauge the Company's ability to generate profit from the capital they have invested and from prior years' earnings reinvested in the Company.

ROACE is used by most oil and gas companies to assess the operational performance of average capital employed, regardless of whether it is funded by equity or debt. ROACE is an indicator of the return on capital employed by the Company for operational activities and, as a result, makes it possible to tie the payment of the retirement benefit or compensation for loss of office to the value created for the Company.

The third and last criterion used by the Board of Directors is the Group's oil and gas production growth compared with that of its competitors. This indicator is widely used in the industry to measure operational performance and the ability to ensure the sustainable development of the Group, most of whose capital expenditure is allocated to upstream activities.

8) In addition, regarding the implementation of the pension commitments described in points 1) and 2) above made by the Company for directors for fiscal year 2012, the annual supplementary pension received by Mr. Desmarest in relation to his previous employment by the Group was approximately €575,290 (December 31, 2012 value), adjusted in line with changes in the value of the ARRCO pension point.

9) As of December 31, 2012, the total amount of the Group's commitments under pension plans and similar for company officers is equal to €40.6 million.

Chairman and Chief Executive Officer Summary table at February 28, 2013	Employment contract	Retirement benefit and supplementary pension plans	Benefits or advantages due or likely to be due upon termination or change of office	Benefits related to a non-compete agreement
Christophe de Margerie Chairman and Chief Executive Officer Start of the office: February 2007[(a)] Term of current office: The Shareholders' Meeting called in 2015 to approve the financial statements for the year ending December 31, 2014	NO	YES (retirement benefit)[(b)] (internal defined supplementary pension plan[(c)] and corporate RECOSUP defined contribution pension plan[(d)] also applicable to certain Group employees)	YES (compensation for loss of office)[(e)]	NO

(a) Chairman and Chief Executive Officer (since May 21, 2010).
(b) Payment subject to performance conditions in accordance with the decision of the Board of Directors on February 9, 2012. Details of these commitments are set out in points 3) and 7) above. This retirement benefit cannot be combined with the compensation for loss of office described below.
(c) Representing an annual pension that would be equivalent, as of December 31, 2012, to 18.85% of the annual compensation for 2012.
(d) Mr. de Margerie's pension benefit represented a booked expense of €2,182 for fiscal year 2012.
(e) Payment subject to performance conditions in accordance with the decision of the Board of Directors on February 9, 2012. Details of these commitments are set out in points 5) and 7) above.

5.6. Stock options and performance share grants policy

5.6.1. General policy

In addition to its policy to develop employee shareholding, TOTAL S.A. is also pursuing a policy to associate employees and executives with the Group's future results. This policy consists in awarding free performance shares and stock options.

Stock options and performance share grants put in place by TOTAL S.A. concern only TOTAL shares. No options for or grants of performance shares of any of the Group's listed subsidiaries are awarded by TOTAL S.A.

All grants are approved by the Board of Directors, based on recommendations by the Compensation Committee. For each plan, the Compensation Committee recommends a list of beneficiaries, the conditions and the number of options or free shares awarded to each beneficiary. The Board of Directors then gives final approval for this list and the grant conditions.

Stock options have a term of eight years, with an exercise price set at the average of the closing TOTAL share prices on Euronext Paris during the twenty trading days prior to the grant date, without any discount. The exercise of the options is subject to a presence condition and performance conditions based on the return on equity (ROE) of the Group, that vary depending on the plan and beneficiary category. As of 2011, all options granted are subject to performance conditions. Subject to the presence condition and applicable performance conditions being met, options may only be exercised after an initial two-year vesting period and the shares issued upon exercise are subject to a two-year mandatory holding period. However, for the 2007 to 2011 option plans, options awarded to beneficiaries employed by non-French subsidiaries at the grant date can be converted to bearer form or transferred after the 2-year vesting period at the end of which the options may be exercised.

Performance shares awarded under selective plans become final after a two-year vesting period, subject to a presence condition and a performance condition based on the return on equity (ROE) of the Group. At the end of this vesting period, and provided that the conditions set are satisfied, the performance share grants are finally awarded. However, these shares may not be transferred prior to the end of an additional two-year mandatory holding period. For beneficiaries employed by non-French subsidiaries on the grant date, the vesting period for performance shares may be increased to four years; in such cases, there would be no mandatory holding period. As of 2011, all performance shares granted to executive officers are subject to performance conditions.

Stock option and performance share grants to the Chairman and Chief Executive Officer are subject to his presence in the Group and specific performance conditions regarding the Group's return on equity (ROE) and return on average capital employed (ROACE), determined by the Board of Directors, on a recommendation by the Compensation Committee.

The award of free shares or stock options are used to extend, based upon individual performance assessments at the time of each plan, the Group-wide policy of developing employee shareholding.

5.6.2. Grants to the Chairman and Chief Executive Officer

No stock options have been awarded in 2012. The Chairman and Chief Executive Officer has been awarded share subscription options, the exercise of which has been subject, since 2007, to a presence condition and performance conditions based on the Group's ROE and ROACE.

Pursuant to Article L. 225-185 of the French Commercial Code, the Board of Directors decided that, for the 2007 to 2011 share subscription option plans, the corporate officers (the Chairman of the Board and the Chief Executive Officer, and as from May 21, 2010 the Chairman and Chief Executive Officer) are required to hold for as long as they remain in office, a number of TOTAL shares representing 50% of the capital gains, net of tax and other deductions, resulting from the exercise of stock options under these plans. Once the Chairman and Chief Executive Officer holds a number of shares (directly or through collective investment funds invested in Company stock) corresponding to more than five times his current gross annual fixed compensation, 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.

As of 2011, the Chairman and Chief Executive Officer receives performance share grants, the final awarding of which is subject to a presence condition and performance conditions.

For the 2011 and 2012 plans for the award of performance shares, the Board of Directors decided that the Chairman and Chief Executive Officer will have to hold for as long as he remains in office, 50% of the capital gains, net of tax and other deductions, from shares granted under performance share grant plans. Once the Chairman and Chief Executive Officer holds a number of shares (directly or through collective investment funds invested in Company stock) corresponding to more than five times his gross annual fixed compensation at that time, 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.

In light of this holding requirement, this acquisition of the performance shares is not subject to an additional purchase of the company's shares.

The Chairman and Chief Executive Officer has given a commitment not to hedge the price risk on the TOTAL stock options and shares he has been granted to date, and on the shares he holds. This measure is now included in the rules of procedure of the board of directors.

In 2012, the Board of Directors decided not to award any stock options subscription or share purchase.

2011 share subscription option plan: the Board of Directors decided that, provided the presence condition within the Group is satisfied, the number of options finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share subscription 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 by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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 performance condition states that the number of options finally granted is based on 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 2011 and 2012. 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%.

2010 share subscription option plan: the Board of Directors decided that, provided the presence condition within the Group is satisfied, the number of options finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share subscription 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 by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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 performance condition states that the number of options finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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%.

2012 performance share plan: the Board of Directors decided that, provided the presence condition within the Group is satisfied, the number of shares finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the shares granted, the performance condition states that the number of shares finally granted is based on the average ROE of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2012 and 2013. The acquisition rate is equal to zero if the average ROE is less than or equal to 8%, varies on a straight-line basis between 0% and 100% if the average ROE is more than 8% and less than 16%, and is equal to 100% if the average ROE is more than or equal to 16%.
- For 50% of the share granted, the performance condition states that the number of shares finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2012 and 2013. The acquisition rate is equal to zero if the average ROACE is less than or equal to 7%; varies on a straight-line basis between 0% and 100% if the average ROACE is more than 7% and less than 15%; and is equal to 100% if the average ROACE is more than or equal to 15%.

2011 performance share plan: the Board of Directors decided that, provided the presence condition within the Group is satisfied, the number of shares finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share granted, the performance condition states that the number of shares finally granted is based on the average ROE of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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 granted, the performance condition states that the number of shares finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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%.

The Chairman and Chief Executive Officer was not awarded any performance shares as part of the plans in the period 2006 to 2010.

5.6.3. Grants to employees

Share subscription option plan

In 2012, the Board of Directors decided not to award any stock options of share purchases.

2011 share subscription option plan: the Board of Directors decided that, provided the presence condition within the Group is satisfied, for each grantee other than the Chairman and Chief Executive Officer, the options will be finally granted to the beneficiary provided that the performance condition is fulfilled. The performance condition states that the number of options finally granted is based on the average of the ROE of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012.

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%.

2010 share subscription option plan: the Board of Directors decided that, provided the presence condition was satisfied:

– for each grantee of up to 3,000 options, other than the Chairman and Chief Executive Officer, the options will be finally granted to their beneficiary;
– for each grantee of more than 3,000 options and less or equal to 50,000 options (other than the Chairman and Chief Executive Officer):
  - the first 3,000 options and two-thirds of the options above the first 3,000 options will be finally granted to their beneficiary;
  - the outstanding options, that is one-third of the options above the first 3,000 options, will be finally granted provided that the performance condition described below is fulfilled.
– For each grantee of more than 50,000 options, other than the Chairman and Chief Executive Officer:
  - The first 3,000 options, two-thirds of the options above the first 3,000 options and below the first 50,000 options, and one-third of the options above the first 50,000 options, will be finally granted to their beneficiary;
  - The outstanding options, that is one-third of the options above the first 3,000 options and below the first 50,000 options, and two-thirds of the options above the first 50,000 options will be finally granted provided that the performance condition is fulfilled.

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 by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011.

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%.

The acquisition rate applicable to the subscription options that were subject to the performance condition of the 2010 Plan was 100%.

Performance share plan

2012 performance share plan: the Board of Directors decided that, for each senior executive[1] (other than the Chairman and Chief Executive Officer), conditional on their presence in the Group, the shares will be finally granted subject to a performance condition. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2012 and 2013.

The acquisition rate:

– is equal to zero if the average ROE is less than or equal to 8%;
– varies on a straight-line basis between 0% and 100% if the average ROE is more than 8% and less than 16%; and
– is equal to 100% if the average ROE is more than or equal to 16%.

The Board of Directors decided also that, conditional on their presence in the Group, for each beneficiary (other than the Chairman and Chief Executive Officer and the senior executives) of more than 100 shares, the shares in excess of this number will be finally granted subject to the performance condition mentioned before.

2011 performance share plan: the Board of Directors decided that, provided that the presence condition within the Group is satisfied, for executives officers[1] (other than the Chairman and Chief Executive Officer), the number of shares finally granted will be subject to the performance condition set out below. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2011 and 2012.

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 to 7% and less than 18%; and
– is equal to 100% if the average ROE is more than or equal to 18%.

Moreover, the Board of Directors decided also that, conditional on their presence in the Group, for each beneficiary (other than the Chairman and Chief Executive Officer and the senior executives) of more than 100 shares, the shares in excess of this number will be finally granted subject to the performance condition. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2011 and 2012.

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%.

2010 performance share plan: the Board of Directors decided that, provided that the presence condition is satisfied, 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 calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011.

(1) The senior executives are employees other than the Chairman and Chief Executive Officer and directors.

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%.

The acquisition rate applicable to the performance shares under the 2010 Plan was 100%.

5.7. Summary table for the corporate executive officers (AFEP-MEDEF Code for corporate governance of listed companies)

5.7.1. Summary of compensation, stock options and performance shares awarded to the Chairman and Chief Executive Officer

Fiscal year (€)	2012	2011
Christophe de Margerie		
Chairman and Chief Executive Officer (since May 21, 2010)		
Compensation due for fiscal year as Chairman and Chief Executive Officer	3,241,000	3,030,000
In-kind benefits[(a)]	7,409	6,991
Value of options awarded[(b)]	-	702,400
Value of performance shares awarded[(c)]	1,664,730	437,440
Total	**4,913,139**	**4,176,831**

(a) Mr. de Margerie has the use of a company car; he receives the health coverage provided for Group employees and is eligible for the life insurance plan open to the Group's executive officers (see paragraph 5.5. of this Chapter).
(b) The value of options awarded was calculated on the day when they were awarded using the Black-Scholes model based on the assumptions used for the consolidated accounts (see Note 25 to the Consolidated Financial Statements).
(c) The value of performance shares was calculated on the day when they were awarded.

5.7.2. Chairman and Chief Executive Officer's compensation

Fiscal year	2012		2011	
(€)	Amount due	Amount paid[(a)]	Amount due	Amount paid[(a)]
Christope de Margerie				
Chairman and Chief Executive Officer (since May 21, 2010)				
Fixed compensation	1,500,000	1,500,000	1,500,000	1,500,000
Variable compensation[(b)]	1,741,000	1,530,000	1,530,000	1,581,670
Extraordinary compensation	-	-	-	-
Directors' fees	-	-	-	-
In-kind benefits[(c)]	7,409	7,409	6,991	6,991
Total	**3,248,409**	**3,037,409**	**3,036,991**	**3,088,661**

(a) Variable portion paid for prior fiscal year. For more detailed information about these criteria, see paragraph 5.3. of this Chapter.
(b) The variable portion for the Chairman and 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 with those of the other major international oil companies that are its competitors as well as the Chairman and Chief Executive Officer's personal contribution based on operational target criteria. The variable portion to be allocated to the Chairman and Chief Executive Officer for fiscal year 2012 can reach a maximum amount of 165% of the fixed base salary. The variable portion due for 2012 was determined by the Board of directors held on February 12, 2013 according to the economic performance criteria and the assessment of the personal contribution of the Chairman and Chief Executive Officer. The Chairman and Chief Executive Officer's variable portion due for 2012 represents 116.11% of his fixed base salary (*i.e.,* 1,741,000 euros rounded down to the nearest thousand euro).
(c) Mr. de Margerie has the use of a company car; he receives the health coverage provided for Group employees and is eligible for the life insurance plan open to the Group's executive officers (see paragraph 5.5. of this Chapter).

5.7.3. 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, 1st and 2nd paragraphs)

Gross amount (€)	2012	2011
Christophe de Margerie	(a)	(a)
Thierry Desmarest	651,304(b)	639,854(b)
Patrick Artus(c)	72,921	65,500
Patricia Barbizet(d)	118,883	115,500
Daniel Bouton(e)	28,472	63,500
Gunnar Brock(f)	79,992	75,500
Claude Clément	163 429(g)	156,365(g)
Marie-Christine Coisne-Roquette(h)	100,763	48,460
Bertrand Collomb(i)	69,827	72,500
Paul Desmarais, jr	64,966	51,000
Anne-Marie Idrac(j)	32,075	-
Bertrand Jacquillat(k)	-	55,040
Barbara Kux(l)	71,153	26,770
Gérard Lamarche(m)	121,695	-
Anne Lauvergeon(n)	60,546	63,500
Lord Levene of Portsoken(o)	-	19,230
Claude Mandil(p)	69,827	63,500
Michel Pébereau(q)	65,408	77,500
Thierry de Rudder(r)	6,912	138,500

(a) For the Chairman and Chief Executive Officer, see the summary compensation tables given in paragraph 5.7.2. of this Chapter. The Chairman and Chief Executive Officer did not receive any directors' fees.
(b) Chairman of the Nominating & Governance Committee, member of the Compensation Committee and Strategic Committee. Including, for 2012, the director's fees received (€76,014) and the retirement benefit received (€575,290) and including, for 2011, the director's fees received (€77,500) and the retirement benefit received (€562,354).
(c) Member of the Compensation Committee. Member of the Nominating & Governance Committee as from February 9, 2012.
(d) Chairperson of the Audit Committee, Member of the Strategic Committee.
(e) Director until May 11, 2012.
(f) Member of the Strategic Committee. Member of the Compensation Committee. Member of the Nominating & Governance Committee as from February 9, 2012.
(g) Including for 2012, the directors' fees received, representing €60,546, as well as the compensation received from Total Raffinage Marketing (a subsidiary of TOTAL S.A.), representing €102,883 and including for 2011, directors' fees received, representing €58,500 as well as the compensation received from Total Raffinage Marketing, representing €97,865.
(h) Director and member of the Audit Committee since May 13, 2011.
(i) Member of the Nominating and Governance Committee. Member of the Compensation Committee until February 9, 2012.
(j) Director since May 11, 2012.
(k) Director and member of the Audit Committee until May 13, 2011.
(l) Director since May 13, 2011. Member of the Strategic Committee.
(m) Director and member of the Audit Committee and member of the Strategic Committee since January 12, 2012.
(n) Member of the Strategic Committee.
(o) Director until May 13, 2011.
(p) Member of the Strategic Committee. Member of the Compensation Committee and the Nominating & Governance Committee since February 9, 2012.
(q) Chairman of the Compensation Committee. Member of the Nominating & Governance Committee until February 9, 2012.
(r) Director, Member of the Audit Committee and Member of the Strategic Committee until January 12, 2012.

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. Clément, who is an employee of Total Raffinage Marketing. The compensation indicated in the table above (except for that of the Chairman and Chief Executive Officer, Mr. Clément and Mr. Desmarest) consists solely of Directors' fees (gross amount) paid during the relevant period. None of the Directors have service contracts linking them to TOTAL S.A. or any of its subsidiaries that provide for benefits upon termination of employment.

5.7.4. Stock options awarded in 2012 to the Chairman and Chief Executive Officer by the issuer and by any Group company

No subscription or share purchase options were awarded in 2012 (see paragraph 5.9.2. of this Chapter).

5.7.5. Stock options exercised in 2012 by the Chairman and Chief Executive Officer

No subscription or share purchase options were raised in 2012 (see paragraph 5.9.2. of this Chapter).

5.7.6. Performance shares awarded in 2012 to the Chairman and Chief Executive Officer or any Director

	Date	Number of shares awarded during fiscal year	Value of shares (€)[a]	Acquisition date	Availability date	Performance condition
Christophe de Margerie Chairman and Chief Executive Officer	2012 Plan 07/26/2012	53,000	1,664,730	07/27/2014	07/27/2016	For 50% of the shares, the condition is based on the Group's average ROE in 2012 and 2013. For 50% of the shares, the condition is based on the Group's average ROACE in 2012 and 2013.
Claude Clément Director representing employee shareholders	2012 Plan 07/26/2012	260	8,167	07/27/2014	07/27/2016	Shares in excess of the first 100 shares are subject to a condition based on the average ROE for the Group's 2012 and 2013 fiscal years.
Total		**53,260**	**1,672,897**			

(a) The value of performance shares was calculated on the day when they were awarded, according to the method used for the consolidated accounts.

5.7.7. Performance shares definitively awarded and available in 2012 to the Chairman and Chief Executive Officer or any Director

	Shares finally awarded during fiscal year		Shares that became available during fiscal year	
	Date	Number	Date	Number
Christophe de Margerie Chairman and Chief Executive Officer	-	-	-	-
Claude Clément Director representing employee shareholders	2010 Plan 09/14/2010	240	2008 Plan 10/09/2008	300
Total		**240**		**300**

5.8. TOTAL stock option grants

The following table gives a breakdown of stock options awarded by category of beneficiaries (main executive officers, other executive officers and other employees) for the plans in effect during 2012.

		Number of beneficiaries	Number of options awarded[a]	Percentage	Average number of options per beneficiary[a]
2004 Plan[c]: Subscription options					
Decision of the Board on July 20, 2004	Main executive officers[b]	30	423,500	12.6%	14,117
Exercise price: €159.40; discount: 0.0%	Other executive officers	319	902,400	26.8%	2,829
Exercise price as of May 24, 2006: €39.30[a]	Other employees	3,997	2,039,730	60.6%	510
	Total	**4,346**	**3,365,630**	**100%**	**774**
2005 Plan[c]: Subscription options					
Decision of the Board on July 19, 2005	Main executive officers[b]	30	370,040	24.3%	12,335
Exercise price: €198.90; discount: 0.0%	Other executive officers	330	574,140	37.6%	1,740
Exercise price as of May 24, 2006: €49.04[a]	Other employees	2,361	581,940	38.1%	246
	Total	**2,721**	**1,526,120**	**100%**	**561**
2006 Plan[c]: Subscription options					
Decision of the Board on July 18, 2006	Main executive officers[b]	28	1,447,000	25.3%	51,679
Exercise price: €50.60; discount: 0.0%	Other executive officers	304	2,120,640	37.0%	6,976
	Other employees	2,253	2,159,600	37.7%	959
	Total	**2,585**	**5,727,240**	**100%**	**2,216**
2007 plan[c][d]: Subscription options					
Decision of the Board on July 17, 2007	Main executive officers[b]	27	1,329,360	22.8%	49,236
Exercise price: €60.10; discount: 0.0%	Other executive officers	298	2,162,270	37.1%	7,256
	Other employees	2,401	2,335,600	40.1%	973
	Total	**2,726**	**5,827,230**	**100%**	**2,138**
2008 plan[c][d][e]: Subscription options					
Awarded on October 9, 2008, by decision	Main executive officers[b]	26	1,227,500	27.6%	47,212
of the Board of Directors on September 9, 2008	Other executive officers	298	1,988,420	44.7%	6,673
Exercise price: €42.90; discount: 0.0%	Other employees	1,690	1,233,890	27.7%	730
	Total	**2,014**	**4,449,810**	**100%**	**2,209**
2009 plan[c][d][f]: Subscription options					
Decision of the Board on September 15, 2009	Main executive officers[b]	26	1,201,500	27.4%	46,212
Exercise price: €39.90; discount: 0.0%	Other executive officers	284	1,825,540	41.6%	6,428
	Other employees	1,742	1,360,460	31.0%	781
	Total	**2,052**	**4,387,500**	**100%**	**2,138**
2010 plan[c][d][g]: Subscription options					
Decision of the Board on September 14, 2010	Main executive officers[b]	25	1,348,100	28.2%	53,924
Exercise price: €38.20; discount: 0.0%	Other executive officers	282	2,047,600	42.8%	7,261
	Other employees	1,790	1,392,720	29.0%	778
	Total	**2,097**	**4,788,420**	**100%**	**2,283**
2011 plan[c][d]: Subscription options					
Decision of the Board on September 14, 2011	Main executive officers[b]	29	846,600	55.7%	29,193
Exercise price: €33.00; discount: 0.0%	Other executive officers	177	672,240	44.3%	3,798
	Other employees	-	-	-	-
	Total	**206**	**1,518,840**	**100%**	**7,373**

(a) To take into account the spin-off of Arkema, pursuant to the provisions in effect on 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 TOTAL stock options holders. 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) Members of the Management Committee and the Treasurer as of the date of the Board meeting awarding the options. Mr. Desmarest has not been a member of the Management Committee since February 14, 2007. Mr. Desmarest was awarded 110,000 options under the 2007 Plan and no options since 2008.
(c) The options are exercisable, subject to a presence condition, after a 2-year vesting period from 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 (except for the 2008 Plan). The presence condition states that the termination of the employment contract will result in the employee losing the right to exercise the options.
(d) 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 from the date of the grant.
(e) For the 2008 Plan, the options acquisition rate, linked to the performance condition, was 60%.
(f) For the 2009 Plan, the options acquisition rate, linked to the performance condition, was 100%.
(g) For the 2010 Plan, the options acquisition rate, linked to the performance condition, was 100%.

For 2007, 2008 and 2009 share subscription option plans, the Board of Directors decided that for each beneficiary of more than 25,000 options, one-third of the options awarded in excess of this number be subject to a performance condition. For the 2010 share subscription option plan, the options granted to beneficiaries of more than 3,000 options are subject to a performance condition for part of the options (see paragraph 5.6.3. of this Chapter). For the 2011 share subscription option plan, all of the options are subject to a performance condition.

In 2012, the Board of Directors decided not to award any stock options.

In addition, Mr. Clément, the Director representing employee shareholders, has not exercised any option and has not been awarded any share subscription options under the 2012 Plan.

5.9. TOTAL stock options as of December 31, 2012

5.9.1. Outstanding TOTAL stock option plans

	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plan	2011 Plan	Total
Type of options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	
Date of the Shareholders' Meeting	05/14/2004	05/14/2004	05/14/2004	05/11/2007	05/11/2007	05/11/2007	05/21/2010	05/21/2010	
Grant date[a]	07/20/2004	07/19/2005	07/18/2006	07/17/2007	10/09/2008	09/15/2009	09/14/2010	09/14/2011	
Total number of options awarded, including[b]:	**13,462,520**	**6,104,480**	**5,727,240**	**5,937,230**	**4,449,810**	**4,387,500**	**4,788,420**	**1,518,840**	**46,376,040**
Directors[c]	240,000	240,000	400,000	310,000	200,000	200,000	240,000	160,000	1,990,000
- C. de Margerie	*n/a*	*n/a*	*160,000*	*200,000*	*200,000*	*200,000*	*240,000*	*160,000*	*1,160,000*
- C. Clément	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	-	-	-
- T. Desmarest	*240,000*	*240,000*	*240,000*	*110,000*	-	-	-	-	*830,000*
Additional grant	**24,000**	**134,400**	-	-	-	-	-	-	**158,400**
Adjustments related to the spin-off of Arkema[d]	**196,448**	**90,280**	-	-	-	-	-	-	**286,728**
Date as of which the options may be exercised	07/21/2006	07/20/2007	07/19/2008	07/18/2009	10/10/2010	09/16/2011	09/15/2012	09/15/2013	
Expiry date	07/20/2012	07/19/2013	07/18/2014	07/17/2015	10/09/2016	09/15/2017	09/14/2018	09/14/2019	
Exercise price (€)[e]	39.30	49.04	50.60	60.10	42.90	39.90	38.20	33.00	
Cumulative number of options exercised as of December 31, 2012	**2,008,886**	**38,497**	**8,620**	-	**1,830**	**21,280**	**36,500**	**9,400**	**2,125,013**
Cumulative number of options canceled as of December 31, 2012	**11,674,082**	**130,643**	**97,094**	**88,245**	**117,512**	**31,440**	**90,477**	**4,400**	**12,233,893**
Number of options:									
- outstanding as of January 1, 2012	12,094,524	6,162,536	5,623,506	5,850,365	4,335,698	4,357,800	4,700,043	1,508,440	44,632,912
- awarded in 2012	-	-	-	-	-	-	-	-	-
- canceled in 2012[f][g]	(11,351,931)	(2,516)	(1,980)	(1,380)	(3,600)	(2,700)	(4,140)	(3,400)	(11,371,647)
- exercised in 2012	(742,593)	-	-	-	(1,630)	(20,200)	(34,460)	-	(798,883)
- Outstanding as of December 31, 2012	-	**6,160,020**	**5,621,526**	**5,848,985**	**4,330,468**	**4,334,900**	**4,661,443**	**1,505,040**	**32,462,382**

(a) The grant date is the date of the Board meeting awarding the options, except for the share subscription option plan of October 9, 2008, approved 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 grant.
(d) Adjustments approved by the Board at its meeting on March 14, 2006, pursuant to the provisions 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 were made on May 22, 2006 effective as of May 24, 2006.
(e) Exercise price as of May 24, 2006. The exercise prices of TOTAL stock options under 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 stock options under these plans were multiplied by an adjustment factor equal to 0.986147 effective as of May 24, 2006. The exercise prices effective before May 24, 2006 are given in Note 25, points A, B and C to the Consolidated Financial Statements (Chapter 9).
(f) Out of the 11,371,647 options canceled in 2012, 11,351,931 options that were not exercised expired due to the expiry of the 2004 subscription option Plan on July 20, 2012.
(g) The acquisition rate applicable to the subscription options that were subject to the performance condition of the 2010 Plan was 100%.

If all the outstanding stock options as of December 31, 2012 were exercised, the corresponding shares would represent 1.35% of the Company's potential share capital[1] as of such date.

(1) Out of a total potential share capital of 2,398,395,528 shares (see point 1.4., "Potential share capital" of Chapter 8).

5.9.2. TOTAL stock options awarded to Mr. de Margerie, Chairman and Chief Executive Officer of TOTAL S.A.

	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plan	2011 Plan	Total
Type of options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	Subscription options	
Expiry date	07/20/2012	07/19/2013	07/18/2014	07/17/2015	10/09/2016	09/15/2017	09/14/2018	09/14/2019	
Exercise price (€)[(a)]	**39.30**	**49.04**	**50.60**	**60.10**	**42.90**	**39.90**	**38.20**	**33.00**	**-**
Options awarded by the Board[(b)]	**128,000**	**130,000**	**160,000**	**200,000**	**200,000**	**200,000**	**240,000**	**160,000**	**1,418,000**
Adjustments related to the spin-off of Arkema[(c)]	**1,800**	**1,828**	**-**	**-**	**-**	**-**	**-**	**-**	**3,628**
Outstanding options as of January 1, 2012	129,800	131,828	160,000	200,000	176,667	200,000	240,000	160,000	1,398,295
Options awarded in 2012	-	-	-	-	-	-	-	-	-
Options exercised in 2012	-	-	-	-	-	-	-	-	-
Options canceled in 2012	(129,800)	-	-	-	-	-	-	-	(129,800)
Options outstanding as of December 31, 2012	**-**	**131,828**	**160,000**	**200,000**	**176,667**	**200,000**	**240,000**	**160,000**	**1,268,495**

(a) Exercise price as of May 24, 2006. The exercise prices of TOTAL stock options under 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 stock options under these plans were multiplied by an adjustment factor equal to 0.986147 effective as of May 24, 2006. The exercise prices effective before May 24, 2006 are given in Note 25, points A, B and C to the Consolidated Financial Statements (Chapter 9).
(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 at its meeting on March 14, 2006, pursuant to the provisions in effect at the time of the Board meeting and of the Shareholders' Meeting on May 12, 2006, related to the spin-off of Arkema. These adjustments were made on May 22, 2006 effective as of May 24, 2006.

For 2007 to 2011 Plans, the Board has subjected the options granted to the Chairman and Chief Executive Officer to performance conditions (see paragraph 5.6.2. of this Chapter). For the 2009 and 2010 Plans, the acquisition rate, linked to the performance conditions, was 100%.

As of December 31, 2012, the outstanding options of the Chairman and Chief Executive Officer represented 0.053%[(1)] of the Company's potential share capital as of such date.

Mr. Desmarest, Chairman of the Board of Directors until May 21, 2010, was not awarded any share subscription options under the 2008 to 2010 Plans.

In 2012, the Board of Directors decided not to award any subscription or share purchase options.

(1) Out of a total potential share capital of 2,398,395,528 shares (see point 1.4., "Potential share capital" of Chapter 8).

5.9.3. Stock options awarded to the ten employees (other than corporate executive officers) receiving the largest awards/stock options exercised by the ten employees (other than corporate executive officers) exercising the largest number of options

	Total number of options awarded/ exercised	Exercise price (€)	Grant date[(a)]	Expiry date
Options awarded in 2012 to the ten employees of TOTAL S.A., or any company in the Group, receiving the largest number of options	-	-	-	-
Options exercised in 2012 by the ten employees of TOTAL S.A., or any company in the Group, exercising the largest number of options[(b)]	122,556	39.30	07/20/2004	07/20/2012
	122,556	**39.30**[(c)]		

(a) The grant date is the date of the Board meeting awarding the options.
(b) Exercise price as of May 24, 2006. The exercise prices of TOTAL stock options under 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 stock options under these plans were multiplied by an adjustment factor equal to 0.986147 effective as of May 24, 2006. The exercise prices effective before May 24, 2006 are given in Note 25, points A, B and C to the Consolidated Financial Statements (Chapter 9).
(c) Weighted-average price.

5.10. TOTAL global free and performance shares as of December 31, 2012

5.10.1. History of the distribution of TOTAL performance share grants

The following table gives a breakdown of TOTAL performance share grants by category of beneficiary (main executive officers, other executive officers and other employees).

		Number of beneficiaries	Number of shares awarded[a]	Percentage	Average number of shares per beneficiary
2008 Plan[b]					
Awarded on October 9, 2008,	Main executive officers[c]	25	49,100	1.8%	1,964
by decision of the Board of Directors	Other executive officers	300	348,156	12.5%	1,161
on September 9, 2008	Other employees[d]	9,028	2,394,712	85.8%	265
	Total	**9,353**	**2,791,968**	**100%**	**299**
2009 Plan[b]					
Decision of the Board	Main executive officers[c]	25	48,700	1.6%	1,948
on September 15, 2009	Other executive officers	284	329,912	11.1%	1,162
	Other employees[d]	9,693	2,593,406	87.3%	268
	Total	**10,002**	**2,972,018**	**100%**	**297**
2010 Plan[e][b]	Main executive officers[c]	24	46,780	1.6%	1,949
Decision of the Board	Other executive officers	283	343,080	11.4%	1,212
on September 14, 2010	Other employees[d]	10,074	2,620,151	87.0%	260
	Total	**10,381**	**3,010,011**	**100%**	**290**
2011 Plan	Main executive officers[c]	29	184,900	5.1%	6,376
Decision of the Board	Other executive officers	274	624,000	17.1%	2,277
on September 14, 2011	Other employees[d]	9,658	2,840,870	77.8%	294
	Total	**9,961**	**3,649,770**	**100%**	**366**
2012 Plan	Main executive officers[c]	33	416,100	9.7%	12,609
Decision of the Board	Other executive officers	274	873,000	20.3%	3,186
on July 26, 2012	Other employees[d]	9,698	3,006,830	70.0%	310
	Total	**10,005**	**4,295,930**	**100%**	**429**

(a) The number of performance shares awarded shown in this table has not been adjusted to take into account the four-for-one stock split approved by the Shareholders' Meeting on May 12, 2006.
(b) For the 2009 and 2010 Plans, the acquisition rates of the shares awarded, linked to the performance conditions, were 100%. For the 2008 Plan, the acquisition rate, linked to the performance condition, was 60%.
(c) Members of the Management Committee and the Treasurer as of the date of the Board meeting granting the performance shares. The Chairman of the Board and the Chief Executive Officer were not awarded any performance shares, with the exception of the 2011 and 2012 Plans. On July 26, 2012, the Board of Directors of TOTAL S.A. decided to grant 53,000 performance shares to Mr. de Margerie. On September 14, 2011, the Board of Directors of TOTAL S.A. decided to grant 16,000 performance shares to Christophe de Margerie.
(d) Mr. Clément, employee of Total Raffinage Marketing, a subsidiary of TOTAL S.A. and the director of TOTAL S.A. representing employee shareholders, was awarded 320 performance shares under the 2005 Plan, 200 performance shares under the 2007 Plan, 500 performance shares under the 2008 Plan, 240 performance shares under the 2010 Plan, 240 performance shares under the 2011 Plan and 260 shares under the 2012 Plan.
(e) Excluding free shares granted as part of the 2010 global free share plan.

The grant of these performance shares, which were bought back by the Company on the market, will become final after a 2-year acquisition period. This final grant is subject to a presence condition and a performance condition (see paragraph 5.6.1. of this Chapter). Moreover, the transfer of the performance shares will not be permitted until the end of a 2-year mandatory holding period.

5.10.2. Performance share plans

	2008 Plan	2009 Plan	2010 Plan	2011 Plan	2012 Plan
Date of the Shareholders' Meeting	05/16/2008	05/16/2008	05/16/2008	05/13/2011	05/13/2011
Grant date[(a)]	10/09/2008	09/15/2009	09/14/2010	09/14/2011	07/26/2012
Closing price on grant date	€35.945	€41.615	€39.425	€32.69	€36.12
Average repurchase price per share paid by the Company	€41.63	€38.54	€39.11	€39.58	€38.81
Total number of performance shares awarded, including to	2,791,968	2,972,018	3,010,011	3,649,770	4,295,930
- Directors[(b)]	588	-	240	16,240	53,260
- Ten employees with largest grants[(c)]	20,000	20,000	20,000	91,400	191,100
Start of the vesting period	10/09/2008	09/15/2009	09/14/2010	09/14/2011	07/26/2012
Date of final grant, subject to specific condition (end of the acquisition period)	10/10/2010	09/16/2011	09/15/2012	09/15/2013	07/27/2014
Transfer possible from (end of the mandatory holding period)	10/10/2012	09/16/2013	09/15/2014	09/15/2015	07/27/2016
Number of performance shares:					
- Outstanding as of January 1, 2012	-	-	2,988,051	3,630,191	-
- Awarded in 2012	-	-	-	-	4,295,930
- Canceled in 2012	96	832	(32,650)	(18,855)	-
- Finally granted in 2012[(d)(e)(f)]	(96)	(832)	(2,955,401)	(5,530)	-
- Outstanding as of December 31, 2012[(d)(e)]	-	-	-	3,605,806	4,295,930

(a) The grant date is the date of the Board meeting awarding the performance share grant, except for the performance shares awarded on October 9, 2008, approved by the Board on September 9, 2008.
(b) Thierry Desmarest, Chairman of the Board of Directors of TOTAL S.A. until May 21, 2010, and Christophe de Margerie, Chief Executive Officer since February 13, 2007 and Chairman and Chief Executive Officer since May 21, 2010, were not awarded performance shares under the plans approved by the Board of Directors of TOTAL S.A. on September 9, 2008, September 15, 2009 and September 14, 2010.
On September 14, 2011, the Board of directors of TOTAL S.A. decided to grant 16,000 performance shares to Christophe de Margerie. On July 26, 2012, the Board of Directors of TOTAL S.A. decided to grant 53,000 performance shares to Christophe de Margerie.
In addition, Daniel Boeuf, Director of TOTAL S.A. representing employee shareholders until December 31, 2009, was awarded performance shares further to a decision by the Board of Directors of TOTAL S.A. on September 9, 2008. Daniel Boeuf did not receive any free shares further to the decision of the Board of Directors of TOTAL S.A. on September 15, 2009. Finally, Claude Clément, Director of TOTAL S.A., representing employee shareholders since May 21, 2010, was awarded 240 performance shares further to the decision of the Board of Directors of TOTAL S.A. on September 14, 2011, and 260 shares further to the decision of the Board of Directors of TOTAL S.A. on July 26, 2012. Moreover, Claude Clément was awarded 240 performance shares further to the decision of the Board of Directors of TOTAL S.A. on September 14, 2010.
(c) Employees of TOTAL S.A., or of any Group company, who were not directors of TOTAL S.A. as of the date of grant.
(d) Shares finally granted following the death of their beneficiaries (2011 Plan for fiscal year 2012).
(e) Including performance shares finally granted for which the entitlement right had been canceled erroneously.
(f) The acquisition rate linked to the performance condition of the 2010 Plan is 100%.

In case of a final grant of the outstanding performance shares as of December 31, 2012, the corresponding shares would represent 0.33%[(1)] of the Company's potential share capital as of such date.

(1) Out of a total potential share capital of 2,398,395,528 shares (see point 1.4., "Potential share capital" of Chapter 8).

5.10.3. Follow-up on the global free share plan

In addition to the restricted shares granted, the Board of Directors decided at its meeting on May 21, 2010, to implement a global free share plan intended for all the Group employees, that is more than 100,000 employees. On June 30, 2010, rights to 25 free shares were granted to every employee.

The final grant is subject to a continued employment condition during the plan's vesting period. Depending on the countries in which the Group companies are located, the acquisition period is either 2 years, followed by a holding period of 2 years in countries with a 2+2 structure, or 4 years, without a holding period in countries with a 4+0 structure. Moreover, the granted shares are not subject to any performance condition.

After the acquisition period, the granted shares will become new shares derived from an increase in the capital of TOTAL S.A., further to the incorporation of reserves or issue premiums.

On July 2, 2012, the Chairman and Chief Executive Officer acknowledged the creation and definitive grant of 1,366,950 shares to the beneficiaries designated after the two-year vesting period.

	2010 Plan (2+2)[b]	2010 Plan (4+0)[c]	Total
Date of the Shareholders' Meeting	**05/16/2008**	**05/16/2008**	
Grant date[a]	**06/30/2010**	**06/30/2010**	
Final grant date (end of the acquisition period)	**07/01/2012**	**07/01/2014**	
Transfer authorized as from	**07/01/2014**	**07/01/2014**	
Number of restricted shares			
Outstanding as of January 1, 2010			
Notified	1,508,850	1,070,650	2,579,500
Cancelled	(125)	(75)	(200)
Finally granted[d]	(75)		(75)
Outstanding as of January 1, 2011	**1,508,650**	**1,070,575**	**2,579,225**
Notified	-	-	-
Cancelled	(29,175)	(54,625)	(83,800)
Finally granted[d]	(475)	(425)	(900)
Outstanding as of January 1, 2012	**1,479,000**	**1,015,525**	**2,494,525**
Notified	-	-	-
Cancelled	(111,725)	(40,275)	(152,000)
Finally granted[d][e]	(1,367,275)	(350)	(1,367,625)
Outstanding as of December 31, 2012	**-**	**974,900**	**974,900**

(a) The June 30, 2010 grant was decided by the Board of Directors on May 21, 2010.
(b) Vesting period of two years followed by a holding period of two years.
(c) Vesting period of four years without a holding period.
(d) Final grant following the death or disability of the beneficiary of the shares.
(e) 1,366,950 shares awarded to the beneficiaries designated after the 2-year vesting period for countries with a 2+2 structure.

In case of a final grant of the outstanding restricted shares as of December 31, 2012, the corresponding shares would represent 0.041%[1] of the Company's potential share capital as of such date.

(1) Out of a total potential share capital of 2,398,395,528 shares (see point 1.4., "Potential share capital" of Chapter 8).

5.10.4. Free TOTAL performance shares granted to Mr. de Margerie, Chairman and Chief Executive Officer of TOTAL S.A.

	2011 Plan	2012 Plan	Total
Date of the Shareholders' Meeting	**05/13/2011**	**05/13/2011**	
Grant date	**09/14/2011**	**07/26/2012**	
Closing price on grant date	€32.690	€36.120	
Average repurchase price per share paid by the Company	€39.58	€38.81	
Shares awarded by the Board	16,000	53,000	69,000
Start of the acquisition period	09/14/2011	07/26/2012	
Date of final grant, subject to specific condition (end of the acquisition period)	09/15/2013	07/27/2014	
Transfer possible from (end of the mandatory holding period)	09/15/2015	07/27/2016	
Finally granted in 2012	-	-	-

For the 2011 and 2012 Plans, the Board has subjected the performance shares granted to the Chairman and Chief Executive Officer to performance and presence conditions (see paragraph 5.6.2. of this Chapter).

In case of a final grant of the outstanding shares of the Chairman and Chief Executive Officer, as of December 31, 2012, the corresponding shares would represent 0.0029%(1) of the Company's potential share capital as of such date.

Mr. Desmarest, Chairman of the Board of Directors until May 21, 2010, was not awarded any performance shares under the 2005 to 2010 Plans.

5.10.5. Performance share grants to the ten employees (other than corporate executive officers) receiving the largest number of performance shares

	Number of performance shares granted/finally awarded	Grant date	Final grant date (end of the acquisition period)	Availability date (end of mandatory holding period)
Performance share grants approved by the Board meeting on July 26, 2012 to the ten TOTAL S.A. employees (other than directors) receiving the largest number of performance shares(a)	191,100	07/26/2012	07/27/2014	07/27/2016
Performance shares finally awarded in 2012 following the performance share plan approved by the Board meeting on September 14, 2010, to the ten employees (other than corporate executive officers) at the time of such approval receiving the largest number of performance shares(b)	20,000	09/14/2010	09/15/2012	09/15/2014

(a) Grant approved by the Board on July, 26 2012. Grants of these performance shares will become final, subject to a performance condition, after a 2-year acquisition period (*i.e.*, on July 27, 2014) (see paragraph 5.6.1. of this Chapter). Moreover, the transfer of the performance shares will not be permitted until the end of a 2-year mandatory holding period (*i.e.*, on July 27, 2016).
(b) This final grant is subject to a performance condition (see point 5.6.1. of this Chapter). The acquisition rate of the shares awarded, linked to the performance condition, was 100%. Moreover, the transfer of the performance shares finally awarded will only be permitted after the end of a 2-year mandatory holding period (*i.e.*, from September 15, 2014).

(1) Out of a total potential share capital of 2,398,395,528 shares (see point 1.4., "Potential share capital" of Chapter 8).

6. Employees, share ownership

6.1. 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	Refining & Chemicals	Marketing & Services	Corporate	Total
2012	**18,045**	**51,545**	**26,071**	**1,465**	**97,126**
2011	17,605	50,363	26,683	1,453	96,104
2010	16,967	50,458	24,056	1,374	92,855

	France	Rest of Europe	Rest of the Word	Total
2012	**35,003**	**22,823**	**39,300**	**97,126**
2011	35,037	22,437	38,630	96,104
2010	35,169	24,931	32,755	92,855

6.2. 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) and a "Complementary Company Savings Plan" (PEC) for employees of the Group's French companies having adhered to these plans. 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.

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 American Depositary Shares (ADS), and Italian employees (as well as German employees starting in 2011) may participate by directly subscribing to new shares at the Group Caisse Autonome in Belgium.

6.2.1. Company savings plans

The various Company savings plans (PEGT, PEC) give the employees of French Group 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").

6.2.2. Profit-sharing agreements

Under the June 29, 2012 profit-sharing agreements concerning twelve Group companies, the amount available for employees profit-sharing is determined, based on the return on equity (ROE) performance of the Group, as well as on the trend of the total recordable incident rate (TRIR) in view of the objectives and thresholds set out for each business unit.

6.2.3. Employee shareholding

The total number of TOTAL shares held by employees as of December 31, 2012, is as follows:

"TOTAL ACTIONNARIAT FRANCE"	80,038,262
"TOTAL ACTIONNARIAT INTERNATIONAL CAPITALISATION"	19,995,266
"ELF PRIVATISATION N°1"	885,095
Shares held by U.S. employees	410,535
Group Caisse Autonome (Belgium)	389,024
TOTAL shares from the exercise of the Company's stock options and held as registered shares within a Company Savings Plan (PEE)[a]	3,115,397
Total shares held by employees	**104,833,579**

(a) Company savings plans.

As of December 31, 2012, the employees of the Group held, on the basis of the definition of employee shareholding contained in Article L. 225-102 of the French Commercial Code, 104,833,579 TOTAL shares, representing 4.43% of the Company's share capital and 8.05% of the voting rights that could be exercised at a Shareholders' Meeting on that date.

The management of each of the three FCPEs (Collective investment funds) 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 liquidations, 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 disposal.

For employees holding shares outside of the employee collective investment funds mentioned in the table above, voting rights are exercised individually.

6.2.4. Capital increase reserved for Group employees

At the Combined Shareholders' Meeting held on May 11, 2012, 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, reserving subscriptions for such issuance to the Group employees participating in a company savings plan.

At the same Shareholders' Meeting, the shareholders also delegated to the Board of Directors powers to increase the share capital of the Company in one or more transactions and within a maximum period of eighteen months from the date of the meeting, in view of giving the employees of foreign subsidiaries similar advantages as those granted to employees covered by the seventeenth resolution.

Pursuant to these delegations, the Board of Directors at its meeting on September 18, 2012 decided to proceed with a capital increase reserved for employees of the Group, including a standard subscription offer and a leveraged offer at the discretion of the employees, within the limit of 18 million shares with dividend rights as of January 1, 2012. It also delegated to the Chairman and Chief Executive Officer all powers to determine the opening and closing dates of the subscription period and the subscription price. This capital increase, opened in 2013, should be closed prior to the 2013 Shareholders' Meeting.

The previous capital increase reserved for employees of the Group had been decided by the Board of Directors at its meeting on October 28, 2010 pursuant to the authorization of the Combined Shareholders' Meeting on May 21, 2010 and had resulted in the subscription of 8,902,717 shares, each with a par value of €2.5 at the unit price of €34.80, the issuance of which had been recognized on April 28, 2011.

6.2.5. Capital increase from the global free share plan for employees of the Group

The Shareholders' Meeting on May 16, 2008 authorized the Board of Directors to proceed with the free grant of Company shares to employees of the Group as well as to corporate executive officers of the Company or Group companies, for a period of 38 months, within the limit of 0.8% of the outstanding share capital at the date of the decision of the Board of Directors to grant such shares.

Pursuant to this authorization, the Board of Directors at its meeting on May 21, 2010 decided on the terms and conditions of the global free plan for TOTAL shares in favor of the employees of the Group and delegated to the Chairman and Chief Executive Officer of the Company all powers necessary for implementing this plan.

In this respect, on July 2, 2012, the Chairman and Chief Executive Officer of the Group acknowledged the issue and definitive grant of 1,366,950 common shares each with a par value of €2.50 to the designated beneficiaries, in application of the grant conditions approved by the Board of Directors at its meeting on May 21, 2010.

6.3. Shares held by the administration and management bodies

As of December 31, 2012, based on 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 Chief Executive Officer): 314,385 shares;
- Chairman and Chief Executive Officer: 105,556 shares and 59,419 shares of the "TOTAL ACTIONNARIAT FRANCE" collective investment plan;
- Management Committee (including the Chairman and Chief Executive Officer) and Treasurer: 525,320 shares.

By decision of the Board of Directors:

- the Chairman and the 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 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 invested in TOTAL shares.

6.3.1. Summary of transactions in the Company's securities (Article L. 621-18-2 of the French Monetary and Financial Code)

The following table presents transactions, of which the Company has been informed, in the Company's shares or related financial instruments carried out in 2012 by the individuals concerned under paragraphs a) through c) of Article L. 621-18-2 of the French Monetary and Financial Code.

Year 2012		Acquisition	Subscription	Transfer	Exchange	Exercise of stock options
Christophe de Margerie[a]	TOTAL shares	-	-	-	-	-
	Shares in collective investment plans (FCPE), and other related financial instruments[b]	5,549.57	-	-	-	-
Philippe Boisseau[a]	TOTAL shares	-	-	-	-	-
	Shares in collective investment plans (FCPE), and other related financial instruments[b]	241.88	296.08	-	-	-
Yves-Louis Darricarrère[a]	TOTAL shares	-	-	-	-	-
	Shares in collective investment plans (FCPE), and other related financial instruments[b]	648.67	-	-	-	-
Patrick de La Chevardière[a]	TOTAL shares	-	-	-	-	-
	Shares in collective investment plans (FCPE), and other related financial instruments[b]	536.77	280.88	1,149.63	-	-
Jean-Jacques Guilbaud[a]	TOTAL shares	-	-	14,720	-	-
	Shares in collective investment plans (FCPE), and other related financial instruments[b]	944.21	343.95	-	-	-
Patrick Pouyanné[a]	TOTAL shares	-	-	-	-	-
	Shares in collective investment plans (FCPE), and other related financial instruments[b]	500.51	275.97	-	-	-

(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 invested in Company shares.

TOTAL and its shareholders

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1. Listing details

1.1. Listing

1.1.1. Exchanges

Paris, New York, London and Brussels

1.1.2. Codes

ISIN	FR0000120271
Reuters	TOTF.PA
Bloomberg	FP FP
Datastream	F: TAL
Mnémo	FP

1.1.3. Included in the following stock indexes

CAC 40, Euro Stoxx 50, Stoxx Europe 50, DJ Global Titans

1.1.4. Included in the following ESG indexes (Environment, Social, Governance)

DJSI World, DJSI Europe, FTSE4Good, ASPI

1.1.5. Weight in the main indexes as of December 31, 2012

CAC 40	11.9%	2nd largest weight in the index
EURO STOXX 50	5.5%	Largest weight in the index
STOXX EUROPE 50	3.2%	8th largest weight in the index
DJ GLOBAL TITANS	1.6%	42nd largest weight in the index

1.1.6. Market capitalization on Euronext Paris and in the euro zone as of December 31, 2012

TOTAL has the second largest capitalization on the Euronext Paris regulated market. Based on the market capitalization of the companies that make up the Euro Stoxx 50, the largest market capitalizations in the euro zone are as follows[a]:

As of December 31, 2012 (B€)	
AB InBev	105.6
Sanofi	94.5
TOTAL	**92.3**
Unilever	86.8
Volkswagen	77.3
SAP	74.6

(a) Source: Bloomberg for companies other than TOTAL.

1.1.7. Market capitalization as of December 31, 2012 [1]

€92.3 billion [2]
$123.1 billion [3]

1.1.8. Percentage of free float

As of December 31, 2012, the free float factor determined by Euronext for calculating TOTAL's weight in the *CAC 40* was 90%. The free float factor determined by Euro Stoxx for calculating TOTAL's weight in the euro Stoxx 50 was 95%.

1.1.9. Par value

€2.50

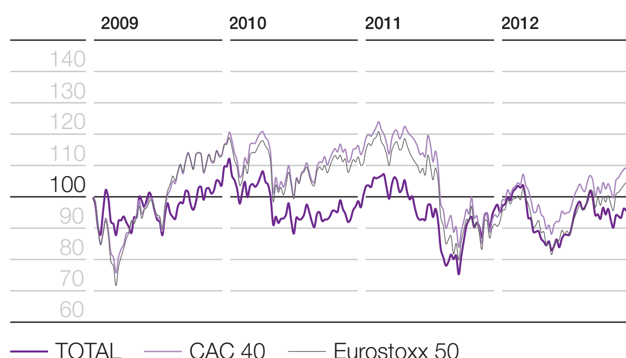
1.1.10. Credit ratings of the long-term and short-term debt (long term/outlook/short term)

As of December 31	2012	2011
Standard & Poor's	AA-/Stable/A-1+	AA-/Stable/A-1+
Moody's	Aa1/Neg/P-1	Aa1/Stable/P-1
DBRS	AA/Stable/R-1 (middle)	AA/Stable/R-1 (middle)

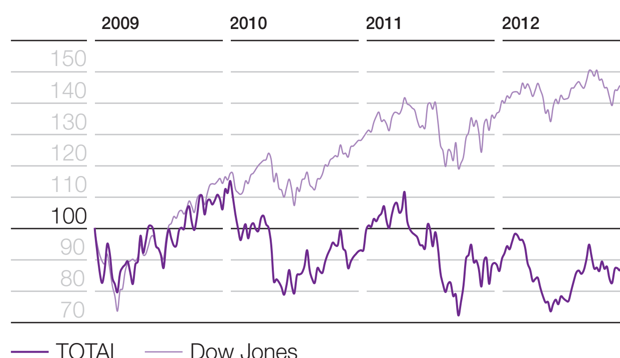
(1) Shares outstanding as of December 31, 2012: 2,365,933,146.
(2) TOTAL closing share price in Paris as of December 31, 2012: €39.01.
(3) TOTAL ADR price in New York as of December 31, 2012: $52.01.

1.2. Share performance

TOTAL share price (in euros)
in Paris (2009-2012)



TOTAL ADR price (in dollars)
in New York (2009-2012)



1.2.1. Arkema spin-off

Within the framework of the spin-off of Arkema's chemical activities from the Group's other chemical activities, the Shareholders' Meeting of May 12, 2006 approved TOTAL S.A.'s contribution to Arkema, under the regulation governing spin-offs, of all its interests in the businesses included under Arkema's scope, as well as the allocation for each TOTAL share of an allotment right for Arkema shares, with 10 allotment rights entitling the holder to one Arkema share. Since May 18, 2006, Arkema's shares have been traded on Euronext Paris.

Pursuant to the provisions of the notice prior to the sale of unclaimed shares (*Avis préalable à la mise en vente de titres non réclamés*) published on August 3, 2006 in the French newspaper Les Echos, Arkema shares corresponding to allotment rights for fractional shares which were unclaimed as of August 3, 2008 were sold on Euronext Paris at an average price of €32.5721 per share. As a result, from August 3, 2008, the indemnity price per share of allotment rights for Arkema shares is €3.25721 (NYSE Euronext notice No. PAR_20080812_02958_EUR). BNP Paribas Securities Services paid an indemnity to the financial intermediaries on remittance of corresponding allotment rights for Arkema shares.

As from August 4, 2018, the unclaimed amounts will be handed over to the French *Caisse des dépôts et consignations* where the holders will still be able to claim them for a period of 20 years. After this time limit, the amounts will permanently become the property of the French State.

1.2.2. Change in share prices in Europe of the major European oil companies between January 1, 2012 and December 31, 2012 (closing price in local currency)

TOTAL (euro)	**-1.2%**
Royal Dutch Shell A (euro)	-7.7%
Royal Dutch Shell B (pound sterling)	-11.4%
BP (pound sterling)	-7.8%
ENI (euro)	+14.6%

Source: Bloomberg.

1.2.3. Change in share prices in the United States (ADR quotes for European companies) of the major international oil companies between January 1, 2012 and December 31, 2012 (closing price in dollars)

TOTAL	**+1.8%**
ExxonMobil	+2.1%
Royal Dutch Shell A	-5.7%
Royal Dutch Shell B	-6.7%
Chevron	+1.6%
BP	-2.6%
ENI	+19.1%
ConocoPhillips	+4.4%

Source: Bloomberg.

1.2.4. Appreciation of a portfolio invested in TOTAL shares

Net yield of 6.8% per year over 10 years (excluding tax credit).

1.2.5. Multiplication of the initial investment by 1.9 over 10 years

As of December 31, 2012, for every €1,000 invested in TOTAL shares by an individual residing in France, assuming that the net dividends (excluding the tax credit) are reinvested in TOTAL shares, and excluding tax and social withholding.

	Average annual total return		Value as of December 31, 2012 of €1,000 invested	
	TOTAL[a]	CAC 40[b]	TOTAL	CAC 40
1 year	4.68%	18.83%	1,047	1,188
5 years	-2.65%	-5.04%	874	772
10 years	6.83%	4.86%	1,936	1,608
15 years	7.61%	3.84%	3,005	1,759

(a) TOTAL's share prices, used for the calculation of the total return (including dividends and appreciation), take into account the adjustment made by Euronext Paris in 2006 ex Arkema's share allocation rights.
(b) CAC 40 quotes taken into account to calculate the total return (including dividends and appreciation) include all dividends distributed by the companies that are in the index.

1.2.6. Information summary

Share price (€)	2012	2011	2010	2009	2008
Highest (during regular trading session)	42.97	44.55	46.74	45.79	59.50
Lowest (during regular trading session)	33.42	29.40	35.66	34.25	31.52
End of the year (closing)	39.01	39.50	39.65	45.01	38.91
Average of the last 30 trading sessions (closing)	38.73	37.65	39.16	43.19	39.58
Trading volume (average per session)[a]					
Euronext Paris	5,622,504	6,565,732	6,808,245	7,014,959	11,005,751
New York Stock Exchange (number of ADRs)	3,291,705	4,245,743	3,329,778	2,396,192	2,911,002
Dividend[b]	2.34	2.28	2.28	2.28	2.28

(a) Number of shares traded. Source: Euronext Paris, NYSE, composite price.
(b) The 2012 dividend is subject to approval by the Shareholders' Meeting of May 17, 2013. This amount includes the three quarterly interim dividends paid for fiscal year 2012. The first interim dividend was €0.57 per share and the next two were €0.59 per share. They were paid on September 27, 2012, December 20, 2012 and March 21, 2013, and are eligible for the 40% rebate applicable to individuals residing in France for tax purposes, as stipulated in Article 158 of the French General Tax Code.

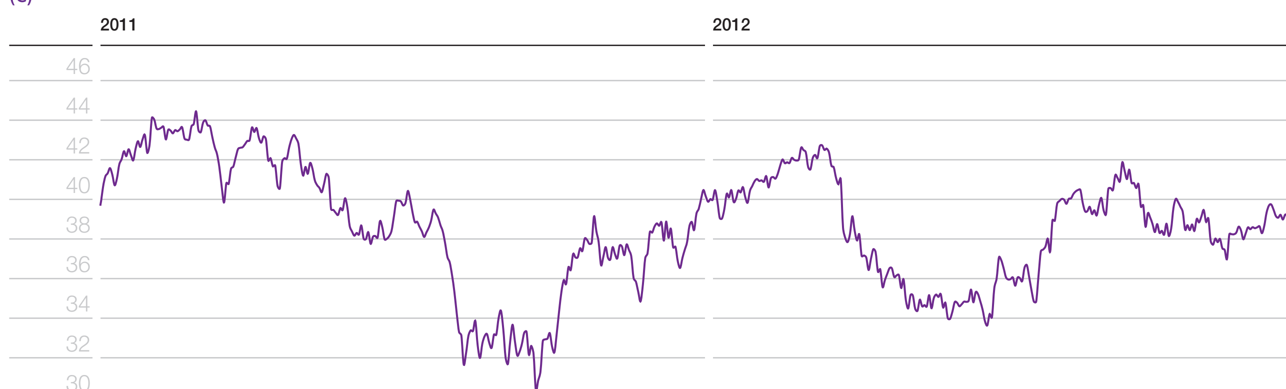
1.2.7. TOTAL share price over the past 18 months (Euronext Paris)[a]

	Average daily volume[b]	Highest price quoted (€)	Lowest price quoted (€)
September 2011	8,892,990	34.820	29.400
October 2011	7,406,110	39.810	31.730
November 2011	6,225,062	38.705	34.570
December 2011	5,586,121	39.605	35.940
January 2012	5,926,545	40.890	38.570
February 2012	4,675,941	42.400	40.225
March 2012	7,698,539	42.970	37.020
April 2012	6,852,234	39.400	35.400
May 2012	6,320,325	36.925	33.900
June 2012	7,184,689	35.625	33.420
July 2012	6,023,646	38.080	34.505
August 2012	4,233,984	40.675	37.340
September 2012	5,905,512	41.995	38.600
October 2012	4,360,378	40.110	37.970
November 2012	4,221,212	39.695	36.925
December 2012	4,217,316	39.940	38.060
January 2013	3,645,252	40.820	39.030
February 2013	5,430,672	40.480	37.040
Maximum for the period		**42.970**	
Minimum for the period			**29.40**

(a) Source: Euronext Paris.
(b) Number of shares traded.

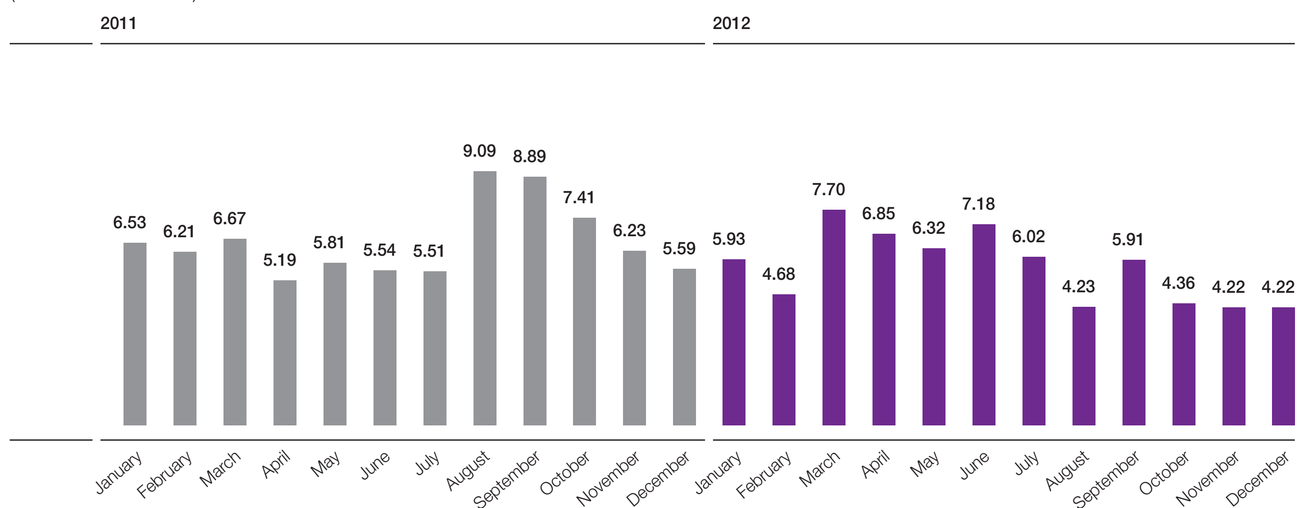
TOTAL share price at closing on Euronext Paris

(€)



TOTAL average daily volume traded on Euronext Paris

(in millions of shares)



2. Dividend

2.1. Dividend policy

2.1.1. Dividend payment policy

Until the payment of the 2010 dividend, the Company paid an interim dividend in November and the remainder after the annual Shareholders' Meeting. Consequently, for fiscal year 2010, an interim dividend of €1.14 per share and the remainder of €1.14 per share were paid respectively on November 17, 2010 and May 26, 2011.

On October 28, 2010, the Board of Directors decided to change its interim dividend policy and to adopt a new policy based on quarterly dividend payments starting in 2011.

2.1.2. 2012 and 2013 dividends

TOTAL paid three quarterly interim dividends for 2012:

- the first quarterly interim dividend of €0.57 per share for fiscal year 2012, approved by the Board of Directors on April 26, 2012, was paid in cash on September 27, 2012 (the ex-dividend date was September 24, 2012);
- the second quarterly interim dividend of €0.59 per share for fiscal year 2012, approved by the Board of Directors on July 26, 2012, was paid in cash on December 20, 2012 (the ex-dividend date was December 17, 2012);
- the third quarterly interim dividend of €0.59 per share for fiscal year 2012, approved by the Board of Directors on October 30, 2012, was paid in cash on March 21, 2013 (the ex-dividend date was March 18, 2013).

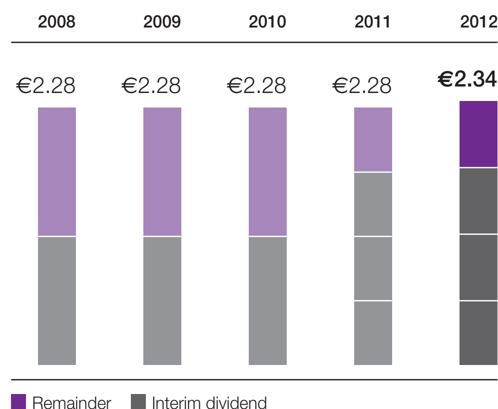
For fiscal year 2012, TOTAL plans to continue its dividend policy by proposing a dividend of €2.34 per share at the Shareholders' Meeting on May 17, 2013, including a remainder of €0.59 per share, with an ex-dividend date on June 24, 2013 and a payment on June 27, 2013. This dividend is 2.6% higher than the previous year.

Subject to the applicable legislative and regulatory provisions, and pending the approval by the Board of Directors for the interim dividends and by the shareholders at the Shareholders' Meeting for the accounts and the final dividend, the ex-date calendar for the interim quarterly dividends and the final dividend for fiscal year 2013 is expected to be as follows:

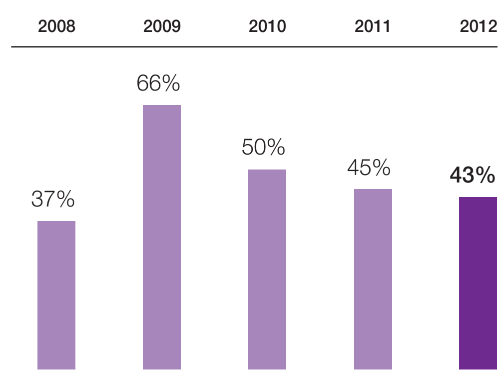
- 1st interim dividend: September 24, 2013;
- 2nd interim dividend: December 16, 2013;
- 3rd interim dividend: March 24, 2014;
- Remainder: June 2, 2014.

The provisional ex-dividend dates above relate to the TOTAL shares traded on the NYSE Euronext Paris.

Dividends in euros for the last five fiscal years



In 2012, TOTAL's pay-out ratio was 43% (1). Changes in the pay-out ratio (2) over the past five years are as follows:



(1) Based on adjusted fully-diluted earnings per share of €5.45.
(2) Based on adjusted fully-diluted earnings for the relevant year.

2.2. Dividend payment

BNP Paribas Securities Services manages the payment of the dividend, which is made through financial intermediaries using the Euroclear France direct payment system.

The Bank of New York Mellon (101 Barclay Street 22 W, New York, NY 10286, USA) manages the payment of dividends to holders of American Depositary Receipts (ADRs).

2.2.1. Dividend payment on stock certificates

TOTAL issued stock certificates (*certificats représentatifs d'actions*, "CRs") as part of the public exchange offer for PetroFina shares.

The CR is a stock certificate provided for by French Law, issued by Euroclear France, intended to circulate exclusively outside of France, and which may not be held by French residents. The CR is issued as a physical certificate, or registered in a custody account. It has the characteristics of a bearer security. The CR is freely convertible from a physical certificate into a security registered on a custody account and conversely. However, in compliance with the Belgian law of December 14, 2005 on the dematerialization of securities in Belgium, CRs may only be delivered in the form of a dematerialized certificate as from January 1, 2008, the effective date of the law. In addition, new CRs were issued following TOTAL's four-for-one stock split in 2006. ING Belgique is the bank handling the payment of all coupons detached from outstanding CRs.

No fees are applicable to the payment of coupons detached from CRs, except for any income or withholding taxes; the payment may be received at the teller windows of the following institutions:

ING Belgique Avenue Marnix 24, 1000 Brussels, Belgium
BNP Paribas Fortis Montagne du Parc 3, 1000 Brussels, Belgium
KBC BANK N.V. Avenue du Port 2, 1080 Brussels, Belgium

2.2.2. TOTAL Strips-VVPR

Strips-VVPR were securities that allowed shareholders residing in Belgium to reduce the Belgian withholding tax applicable to securities income on the dividend paid by TOTAL.

Under the 2013 budget, the Belgian government standardized the withholding tax applicable to securities income on dividends and interest at 25%. The Belgian law of December 27, 2012 provides for a single withholding tax of 25%, which has marked the end of Strips-VVPR.

Strips-VVPR granted rights only if accompanied by TOTAL shares. There were 227,734,056 TOTAL strips-VVPR outstanding as of December 31, 2012.

2.3. Coupons

For the year ended	Ex-dividend date	Payment date	Expiration date	Nature and amount of the coupon	Net amount (€)
2006	11/17/2006	11/17/2006	11/17/2011	Interim dividend (no. 19)	0.87
	05/18/2007	05/18/2007	05/18/2012	Remainder (no. 20)	1
2007	11/16/2007	11/16/2007	11/16/2012	Interim dividend (no. 21)	1
	05/20/2008	05/20/2008	05/20/2013	Remainder (no. 22)	1.07
2008	11/14/2008	11/19/2008	11/19/2013	Interim dividend (no. 23)	1.14
	05/19/2009	05/22/2009	05/22/2014	Remainder (no. 24)	1.14
2009	11/13/2009	11/18/2009	11/18/2014	Interim dividend (no. 25)	1.14
	05/27/2010	06/01/2010	06/01/2015	Remainder (no. 26)	1.14
2010	11/12/2010	11/17/2010	11/17/2015	Interim dividend (no. 27)	1.14
	05/23/2011	05/26/2011	05/26/2016	Remainder (no. 28)	1.14
2011	09/19/2011	09/22/2011	09/22/2016	Interim dividend (no. 29)	0.57
	12/19/2011	12/22/2011	12/22/2016	Interim dividend (no. 30)	0.57
	03/19/2012	03/22/2012	03/22/2017	Interim dividend (no. 31)	0.57
	06/18/2012	06/21/2012	06/21/2017	Remainder (no. 32)	0.57
2012(a)	**09/24/2012**	**09/27/2012**	**09/27/2017**	**Interim dividend (no. 33)**	**0.57**
	12/17/2012	**12/20/2012**	**12/20/2017**	**Interim dividend (no. 34)**	**0.59**
	03/18/2013	**03/21/2013**	**03/21/2018**	**Interim dividend (no. 35)**	**0.59**
	06/24/2013	**06/27/2013**	**06/27/2018**	**Remainder (no. 36)**	**0.59**

(a) A resolution will be submitted to the Shareholders' Meeting on May 17, 2013 to pay a cash dividend of €2.34 per share for fiscal year 2012, including a remainder of €0.59 per share, with an ex-dividend date on June 24, 2013 and a payment date on June 27, 2013.

3. Share buybacks

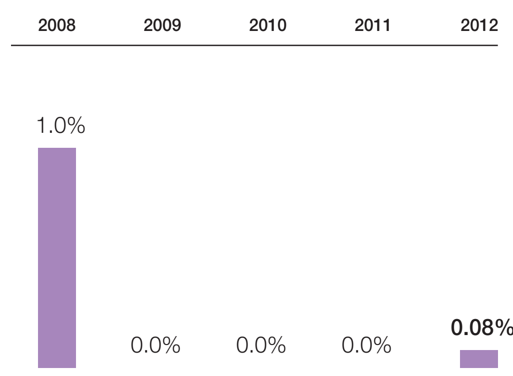
The Shareholders' Meeting of May 11, 2012, after acknowledging the report of the Board of Directors, authorized the Board of Directors, in accordance with the provisions of Article L. 225-209 of the French Commercial Code and of European Regulation 2273/2003 of December 22, 2003, to buy and sell the Company's shares as part of a share buyback program. The maximum purchase price was set at €70 per share. The number of shares acquired may not exceed 10% of the share capital. This authorization was granted for a period of 18 months and replaced the previous authorization granted by the Shareholders' Meeting of May 13, 2011.

A resolution will be submitted to the Shareholders' Meeting on May 17, 2013 to authorize trading in TOTAL shares through a share buyback program carried out in accordance with Article L. 225-209 of the French Commercial Code and European Regulation 2273/2003 of December 22, 2003. This program is described in paragraph 3.3. of this Chapter.

3.1. Share buybacks and cancellations in 2012

In 2012, TOTAL bought back 1,800,000 of its own shares in connection with restricted share grant plans, *i.e.* approximately 0.08% of the share capital [(1)].

Percentage of share capital bought back



3.2. Board's report on share buybacks and sales

3.2.1. Share buybacks during 2012

Under the authorization granted by the Shareholders' Meeting of May 11, 2012, 1,800,000 TOTAL shares, each with a par value of €2.5, were bought back by the Group in 2012, *i.e.* 0.08% of the share capital as of December 31, 2012. This buyback was completed at an average price of €37.80 per share, for a total cost of approximately €68.03 million, excluding transaction fees. This buyback is intended to cover the restricted share grant plan approved by the Board of Directors on July 26, 2012.

3.2.2. Shares registered in the name of the Company and its subsidiaries as of December 31, 2012

As of December 31, 2012, the Company held 8,060,371 treasury shares, representing 0.34% of TOTAL's share capital. By law, the voting rights and dividend rights of these shares are suspended.

After taking into account the shares held by Group subsidiaries, which are entitled to a dividend but deprived of voting rights, the total number of TOTAL shares held by the Group as of December 31, 2012 was 108,391,639, representing 4.58% of TOTAL's share capital, comprised of, on the one hand, 8,060,371 treasury shares, including 7,994,470 shares held to cover the restricted share grant plans and 65,901 shares to be allocated to new share purchase option plans or new restricted share grant plans and, on the other hand, 100,331,268 shares held by subsidiaries.

For shares bought back to be allocated to Company or Group Employees pursuant to the objectives referred to in Article 3 of EC Regulation 2273/2003 of December 22, 2003, note that, when such shares are held to cover share purchase option plans that have expired or restricted share grants that have not been awarded at the end of the vesting period, they will be allocated to new TOTAL share purchase option plans or restricted share grant plans that may be approved by the Board of Directors.

3.2.3. Transfer of shares during fiscal year 2012

2,962,534 TOTAL shares were transferred in 2012 following the final award of shares under the restricted share grant plans.

(1) Average share capital of year N = (share capital at December 31 N-1 + share capital at December 31 N)/2.

3.2.4. Cancellation of Company shares during fiscal year 2010, 2011 and 2012

TOTAL did not cancel any shares in 2010, 2011 and 2012.

The Shareholders' Meeting of May 11, 2012 authorized the Board of Directors to reduce the share capital on one or more occasions by canceling shares held by the Company up to a maximum of 10% of the share capital over a 24-month period. As a result, based on 2,365,933,146 shares outstanding on December 31, 2012, the Company may cancel a maximum of 236,593,314 shares before reaching the cancellation threshold of 10% of share capital canceled over a 24-month period.

3.2.5. Reallocation for other approved purposes during fiscal year 2012

Shares purchased by the Company under the authorization granted by the Shareholders' Meeting of May 11, 2012, or under previous authorizations, were not reallocated in 2012 to purposes other than those initially specified at the time of purchase.

3.2.6. Conditions for the buyback and use of derivative products

Between January 1, 2012 and February 28, 2013, the Company did not use any derivative products on the financial markets as part of the share buyback programs successively authorized by the Shareholders' Meetings of May 13, 2011 and May 11, 2012.

3.2.7. Shares held in the name of the Company and its subsidiaries as of February 28, 2013

As of February 28, 2013, the Company held 8,060,271 treasury shares, representing 0.34% of TOTAL's share capital. By law, the voting rights and dividend rights of these shares are suspended.

After taking into account the shares held by Group subsidiaries, which are entitled to a dividend but deprived of voting rights, the total number of TOTAL shares held by the Group as of February 28, 2013 was 108,391,539, representing 4.58% of TOTAL's share capital, comprised of, on the one hand, 8,060,271 treasury shares, including 7,994,470 shares held to cover the restricted share grant plans and 65,801 shares to be allocated to new share purchase option plans or new restricted share grant plans and, on the other hand, 100,331,268 shares held by subsidiaries.

Summary table of transactions completed by the Company involving its own shares from March 1, 2012 to February 28, 2013[a]:

	Cumulative gross movements		Open positions as of February 28, 2013			
	Purchases	Sales	Open purchase positions		Open sales positions	
Number of shares	1,800,000	-	Bought calls	Forward purchases	Sold calls	Forward sales
Maximum average maturity	-	-	-	-	-	-
Average transaction price (€)	37.8	-	-	-	-	-
Average exercise price	-	-	-	-	-	-
Amounts (€)	68,032,460	-	-	-	-	-

(a) In compliance with the applicable regulations as of February 28, 2013, the period indicated begins on the day after the date used as a reference for the publication of information regarding the previous program published in the 2011 Registration Document.

Moreover, 2,951,242 TOTAL shares were transferred between March 1, 2012 and February 28, 2013 following the final award of shares under the restricted share grant plans.

As of February 28, 2013

Percentage of share capital held by TOTAL S.A.	**0.34%**
Number of shares held in portfolio[a]	8,060,271
Book value of portfolio (at purchase price) (M€)	316
Market value of the portfolio (M€)[b]	309
Percentage of capital held by the entire Group[c]	**4.58%**
Number of shares held in portfolio	108,391,539
Book value of portfolio (at purchase price) (M€)	3,342
Market value of the portfolio (M€)[b]	4,151

(a) TOTAL S.A. did not buy back any shares during the three trading days preceding February 28, 2013. As a result, TOTAL S.A. owns all the shares held in portfolio as of that date.
(b) Based on a closing price of €38.295 per share as of February 28, 2013.
(c) TOTAL S.A., Total Nucléaire, Financière Valorgest, Sogapar and Fingestval.

3.3. 2013-2014 share buyback program

3.3.1. Description of the share buyback program under Article 241-1 et seq. of the General Regulation of the French Financial Markets Authority (*Autorité des marchés financiers* - AMF)

Objectives of the share buyback program:

- reduce the Company's capital through the cancellation of shares;
- honor the Company's obligations related to securities convertible or exchangeable into Company shares;
- honor the Company's obligations related to stock option programs or other share grants to the Company's management or to employees of the Company or a Group subsidiary;
- deliver shares (by exchange, payment or otherwise) in connection with external growth operations; and
- stimulate the secondary market or the liquidity of the TOTAL share under a liquidity agreement.

3.3.2. Legal framework

Implementation of this share buyback program, which is in line with the legislative framework created by French Law 98-546 of July 2, 1998 laying down various economic and financial provisions and with the provisions of European Regulation 2273/2003 of December 22, 2003, is subject to approval by the TOTAL S.A. Shareholders' Meeting of May 17, 2013 through the fourth resolution which reads as follows:

"Upon presentation of the report of the Board of Directors and certain information contained in the program description prepared in accordance with Article 241-1 et seq. of the General Regulation (*règlement général*) of the French Financial Markets Authority (*Autorité des marchés financiers*) and pursuant to the provisions of Article L. 225-209 of the French Commercial Code, European Regulation 2273/2003 of December 22, 2003, and the General Regulation of the French Financial Markets Authority, the Shareholders' Meeting, voting under conditions for quorum and majority required for ordinary general meetings, hereby authorizes the Board of Directors, with the option to sub-delegate such powers under the conditions provided by law, to buy or sell shares of the Company as part of a share buyback program.

The purchase, sale or transfer of these shares can be completed by any means on regulated markets, multilateral trading facilities or over the counter, including through the purchase or sale of blocks of shares, under the conditions authorized by the relevant market authorities. These means include the use of any financial derivative instrument traded on regulated markets, multilateral trading facilities or over the counter and the implementation of option strategies.

These transactions may be carried out at any time, except during public offerings for the Company's shares, in accordance with applicable rules and regulations.

The maximum purchase price is set at €70 per share.

In case of a capital increase by capitalization of reserves and restricted share grants, and in case of a stock-split or a reverse-stock-split, this maximum price shall be adjusted by applying the ratio of the number of shares outstanding before the transaction to the number of shares outstanding after the transaction.

Pursuant to Article L. 225-209 of the French Commercial Code, the maximum number of shares that may be bought under this authorization may not exceed 10% of the total number of shares outstanding as of the date on which this authorization is used. Purchases made by the Company may under no circumstances result in the Company holding more than 10% of the share capital, either directly or indirectly through indirect subsidiaries.

Of the 2,365,933,146 shares outstanding as of December 31, 2012, the Company held 8,060,371 shares directly and 100,331,268 shares indirectly through its subsidiaries, for a total of 108,391,639 shares. Under these circumstances, the maximum number of shares that the Company could buy back is 128,201,675 shares, and the maximum amount that the Company may spend to acquire such shares is €8,974,117,250.

The purpose of this share buyback program will be to reduce the Company's share capital or to allow the Company to fulfill its obligations related to:

- securities convertible or exchangeable into Company shares;
- share purchase option programs, restricted share grant plans, employee shareholding plans or company savings plans, or other share grants to management or employees of the Company or a Group company.

Share buybacks may also be motivated by any of the market practices allowed by the French Financial Markets Authority, namely, as of December 31, 2012:

- the delivery of shares (by exchange, payment or otherwise) in connection with external growth, merger, spin-off or contribution operations, without exceeding the limit stipulated in Article L. 225-209, paragraph 6., of the French Commercial Code, for merger, spin-off or contribution operations; or
- stimulation of the secondary market or the liquidity of the TOTAL share by an investment service provider under a liquidity agreement that complies with the ethics rules recognized by the French Financial Markets Authority.

This program may also be used by the Company to trade in its own shares, either on or off the market, for any other authorized purpose or permitted market practice, or any practice which may be authorized by applicable laws or regulations or permitted by the French Financial Markets Authority. In case of transactions for purposes other than those mentioned above, the Company will inform its shareholders in a press release.

Based on these purposes, the shares of the Company acquired through this program may be:

- canceled up to the maximum legal limit of 10% of the total number of shares outstanding on the date of the operation, over a 24-month period;
- granted free of charge to the Group's employees and to management of the Company or Group companies;
- delivered to recipients of the Company's share purchase options having exercised such options;
- sold to employees, either directly or through Company savings plans;

- delivered to the holders of securities that grant such rights to receive such shares, either through redemption, conversion, exchange, presentation of a warrant or in any other manner; or
- used in any other manner that is consistent with the purposes stated in this resolution.

While they are held by the Company, such shares will be deprived of voting rights and dividend rights.

This authorization is granted for an 18-month period from the date of this Meeting.

The Board of Directors is hereby granted full powers, with the right to delegate such authority, to undertake all actions necessary or desirable to carry out the program or programs authorized by this resolution. This resolution renders ineffective, up to the unused portion, the fourth resolution of the Combined Shareholders' Meeting held on May 11, 2012."

The Shareholders' Meeting of May 11, 2012 also authorized the Board of Directors to reduce the capital by canceling shares up to a maximum of 10% of the share capital over a 24-month period. This authorization was granted for five years and will expire after the Shareholders' Meeting held to approve the financial statements for the year ending December 31, 2016. This approval was drafted as follows: "Upon presentation of the report of the Board of Directors and the auditors' special report, the Shareholders' Meeting, voting under conditions for quorum and majority required for extraordinary general meetings, hereby authorizes the Board of Directors, in accordance with Article L. 225-209 et seq. of the French Commercial Code and Article L. 225-213 of the same Code, to reduce the share capital on one or more occasions by canceling shares within the legal limits.

The maximum number of shares that may be cancelled under this authorization may not exceed 10% of the total number of shares outstanding, over a 24-month period, with this limit applying to a number of shares that will be adjusted, if necessary, to include transactions affecting the share capital subsequent to this Meeting.

The Shareholders' Meeting hereby grants full powers to the Board of Directors, with the option to sub-delegate such powers under the conditions provided by law, to carry out such capital reductions based on its decisions alone, to decide on the number of shares to cancel within the limit of 10% of the total number of shares outstanding as of the transaction date, over a 24-month period, to decide on the conditions of the capital reduction operations and confirm their execution, to apply, where applicable, the difference between the buyback value of the shares and their par value to any reserves or premiums, to amend the by-laws accordingly, and to complete all necessary formalities related thereto.

This authorization is granted for five years and will expire after the Shareholders' Meeting held to approve the financial statements for the year ending December 31, 2016."

3.3.3. Conditions

Maximum share capital to be purchased and maximum funds allocated to the transaction

The maximum number of shares that may be purchased under the authorization proposed to the Shareholders' Meeting of May 17, 2013 may not exceed 10% of the total number of shares outstanding, with this limit applying to an amount of the Company's share capital that will be adjusted, if necessary, to include transactions affecting the share capital subsequent to this Meeting; purchases made by the Company may under no circumstances result in the Company holding more than 10% of the share capital, either directly or indirectly through subsidiaries.

Before any share cancellation under the authorization given by the Shareholders' Meeting of May 11, 2012, based on the number of shares outstanding as of December 31, 2012 (2,365,933,146 shares), and given the 108,391,539 shares held by the Group as of February 28, 2013, *i.e.* 4.58% of the share capital, the maximum number of shares that may be purchased would be 128,201,775, representing a theoretical maximum investment of €8,974,124,250 based on the maximum purchase price of €70.

Conditions for buybacks

Such shares may be bought back by any means on regulated markets, multilateral trading facilities or over the counter, including through the purchase or sale of blocks of shares, under the conditions authorized by the relevant market authorities. These means include the use of any financial derivative instrument traded on a regulated market or over the counter and the implementation of option strategies, with the Company taking measures, however, to avoid increasing the volatility of its stock. The portion of the program carried out through the purchase of blocks of shares will not be subject to quota allocation, up to the limit set by this resolution. These shares may be bought back at any time in accordance with current regulations, except during public offerings for the Company's shares.

Duration and schedule of the share buyback program

In accordance with the fourth resolution, which will be subject to approval by the Shareholders' Meeting of May 17, 2013, the share buyback program may be implemented over an 18-month period following the date of this Meeting, and therefore expires on November 17, 2014.

Transactions carried out under the previous program

Transactions carried out under the previous program are listed in the special report of the Board of Directors on share buybacks (see paragraph 3.2. of this Chapter).

4. Shareholders

4.1. Relationship between TOTAL and the French State

Since the repeal on October 3, 2002 of the decree of December 13, 1993 establishing a golden share of Elf Aquitaine held by the French government, there are no longer any agreements or regulatory provisions governing shareholding relationships between TOTAL (or its subsidiary Elf Aquitaine) and the French government.

4.2. Merger of TOTAL with PetroFina in 1999

In December, 1998, TOTAL [1] signed an in-kind contribution agreement with Electrafina, Investor, Tractebel, Electrabel and AG 1824 (the Contributors), under which the Contributors contributed their PetroFina shares to TOTAL. TOTAL then launched a public exchange offer in 1999 for the remaining PetroFina shares not yet in its possession, at the same exchange ratio as the previous one. Following this public offering, TOTAL held 98.8% of PetroFina's share capital.

In October 2000, TotalFinaElf launched an additional public exchange offer, at the same exchange ratio, for the PetroFina shares not yet in its possession. As of December 31, 2000, TotalFinaElf held 99.6% of PetroFina's share capital. Then in April 2001, the Extraordinary Shareholders' Meeting of Total Chimie approved TotalFinaElf's contribution to Total Chimie (a wholly-owned subsidiary of TOTAL S.A.) of the entire equity stake held by the Company in PetroFina. Finally, in September 2001, the Board of Directors of Total Chimie decided to launch a squeeze-out for the 90,129 PetroFina shares not yet held. Total Chimie currently holds all PetroFina shares.

In May 2003, minority shareholders of PetroFina holding 4,938 shares brought action against Total Chimie S.A. and PetroFina S.A. before the Commercial Court of Brussels, contesting, in particular, the price offered by Total Chimie atin the squeeze-out procedure. In June 2006, TOTAL S.A became party to this lawsuit. At the end of 2011, these minority shareholders decided to withdraw their lawsuit. This withdrawal of action and proceedings put a permanent end to the legal proceedings brought by them.

4.3. Merger of TotalFina with Elf Aquitaine

In 1999, the Boards of Directors of TotalFina and Elf Aquitaine recommended to their shareholders that the two companies merge through a public exchange offer. Following the offer, TotalFina acquired the 254,345,078 shares of Elf Aquitaine in exchange for 371,735,114 new TotalFina shares. In 2000, the Board of Directors launched a public buyback offer for all the Elf Aquitaine shares not yet held by the Company. Upon completion of this offer, TotalFinaElf acquired 10,828,326 shares of Elf Aquitaine in exchange for 14,437,768 new TotalFinaElf shares.

As a result of the public buyout offer followed by a squeeze-out announced on March 24, 2010, TOTAL S.A. now holds 100% of the shares issued by Elf Aquitaine.

The public buyout offer took place from April 16 to April 29, 2010 at a price of €305 per share (including the remaining 2009 dividend). It targeted all of the Elf Aquitaine shares not held directly or indirectly by TOTAL S.A., *i.e.* 1,468,725 Elf Aquitaine shares representing 0.52% of the share capital and 0.27% of the Company's voting rights.

The squeeze-out was completed on April 30, 2010 in order to acquire all the Elf Aquitaine shares targeted by the offer and which had not been tendered to the offer by the minority shareholders, in return for payment of compensation per share identical to the price of the offer, *i.e.*, €305 per Elf Aquitaine share (including the remaining 2009 dividend).

Elf Aquitaine shares were delisted from Euronext Paris on April 30, 2010 (AMF notice No. 210C0376).

(1) The name "Total" became "TotalFina S.A." on June 14, 1999. "TotalFina S.A." was then changed to "TotalFinaElf S.A." at the Shareholders' Meeting held on March 22, 2000 and, finally, to "TOTAL S.A." at the Shareholders' Meeting held on May 6, 2003.

4.4. Major shareholders

4.4.1. Changes in major shareholders' holdings

For the purpose of this paragraph, major shareholders are defined as shareholders whose interest (in the share capital or voting rights) exceeds 5%.

TOTAL's major shareholders as of December 31, 2012, 2011 and 2010 were as follows:

	2012			2011		2010	
As of December 31	% of share capital	% of voting rights	% of theoretical voting rights[a]	% of share capital	% of voting rights	% of share capital	% of voting rights
Groupe Bruxelles Lambert[b][c]	4.0	4.0	3.7	4.0	4.0	4.0	4.0
Compagnie Nationale à Portefeuille[b][c]	1.4	1.4	1.3	1.5	1.6	1.6	1.6
Group Employees[b][d][e]	4.4	8.1	7.4	4.4	8.0	4	7.7
Other registered shareholders (non-Group)	2.0	3.1	2.9	1.7	2.8	1.4	2.5
Treasury shares	4.6	-	8.1	4.6	-	4.8	-
Of which TOTAL S.A.	*0.3*	-	*0.3*	*0.4*	-	*0.5*	-
Of which Total Nucléaire	*0.1*	-	*0.2*	*0.1*	-	*0.1*	-
Of which subsidiaries of Elf Aquitaine	*4.2*	-	*7.6*	*4.2*	-	*4.2*	-
Other bearer shareholders	83.7	83.5	76.7	83.6	83.5	84.0	84.0
of which holders of ADS[f]	*9.3*	*9.3*	*8.5*	*8.7*	*8.7*	*8.0*	*8.0*

(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 whose corporate executive officers (or representatives, for employees) serve on TOTAL S.A.'s Board of Directors.
(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. In addition, Groupe Bruxelles Lambert and Compagnie Nationale à Portefeuille have declared that they act in concert.
(d) Based on the definition of employee shareholding pursuant to Article L. 225-102 of the French Commercial Code.
(e) The Amundi Group, the holding company for Amundi Asset Management, which is the manager of the employee collective investment fund "TOTAL ACTIONNARIAT FRANCE" (see below), filed a Schedule 13G with the United States Securities and Exchange Commission on February 13, 2013, declaring beneficial ownership of 180,919,481 Company shares as of December 31, 2012 (*i.e.*, 7.6% of the Company's share capital). The Amundi Group specified that it did not have sole voting or dispositive power over any of these shares, and that it had shared voting power over 77,009,153 of these shares (*i.e.*, 3.3% of the Company's share capital) and shared dispositive power over all of these shares.
(f) American Depositary Shares listed on the New York Stock Exchange.

As of December 31, 2012, the holdings of the major shareholders were calculated based on 2,365,933,146 shares, representing 2,371,131,871 voting rights exercisable at Shareholders' Meetings, or 2,579,854,778 theoretical voting rights [1] including:

– 8,060,371 voting rights attached to the 8,060,371 TOTAL shares held by TOTAL S.A. that are deprived of voting rights; and

– 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.

For prior years, the holdings of the major shareholders were calculated on the basis of 2,363,767,313 shares to which 2,368,716,634 voting rights exercisable at Shareholders' Meetings were attached as of December 31, 2011, and 2,349,640,931 shares to which 2,350,274,592 voting rights exercisable at Shareholders' Meetings were attached as of December 31, 2010.

4.4.2. Identification of the holders of bearer shares

In accordance with Article 9 of its by-laws, the Company is authorized, to the extent permitted under applicable law, to identify the holders of securities that grant immediate or future voting rights at the Company's Shareholders' Meetings.

4.4.3. Temporary transfer of securities

Pursuant to legal obligations, any legal entity or individual (with the exception of those described in paragraph IV-3 of Article L. 233-7 of the French Commercial Code) holding alone or in concert a number of shares representing more than 0.5% of the Company's voting rights pursuant to one or more temporary transfers or similar operations as described in Article L. 225-126 of the aforementioned code is required to notify the Company and the French Financial Markets Authority of the number of shares temporarily owned no later than the third business day preceding the Shareholders' Meeting at midnight.

Notifications must be e-mailed to the Company at:
holding.df-shareholdingnotification@total.com

If no notification is sent, any shares acquired under any of the above temporary transfer operations will be deprived of voting rights at the relevant Shareholders' Meeting and at any Shareholders' Meeting that may be held until such shares are transferred again or returned.

(1) 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.

4.4.4. Threshold notifications

In addition to the legal obligation to inform the Company and the French Financial Markets Authority within four trading days of the date on which the number of shares (or securities similar to shares or voting rights pursuant to Article L. 233-9 of the French Commercial Code) held represents more than 5%, 10%, 15%, 20%, 25%, 30%, one-third, 50%, two-thirds, 90% or 95% of the share capital or voting rights [1] (Article L. 233-7 of the French Commercial Code), any individual or legal entity who directly or indirectly comes to hold a percentage of the share capital, voting rights or rights giving future access to the Company's share capital which is equal to or greater than 1%, or a multiple of this percentage, is required to notify the Company, within fifteen days of the date on which each of the above thresholds is exceeded, by registered mail with return receipt requested, and indicate the number of shares held.

If notification is not given, the shares held in excess of the threshold for which notification should have been given are deprived of voting rights at Shareholders' Meetings if, at a Meeting, the failure to give notification 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.

Any individual ot legal entity is 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.

Notifications must be sent to the Vice President of Investor Relations in Paris (contact details in paragraph 6.8. of this Chapter).

4.4.5. Legal threshold notifications in 2012

Axa Investment Managers Paris and Amundi Asset Management informed the AMF of the transfer, on January 6, 2012, by Axa Investment Managers Paris of management of the "TOTAL ACTIONNARIAT FRANCE" collective investment fund to Amundi Asset Management. The holdings of the collective investment fund represented 3.32% of the share capital and 5.61% of the voting rights as of the date of notification. Following this transfer, Axa Investment Managers Paris stated that it no longer managed any TOTAL shares on behalf of said collective investment fund (for more information about the holdings of the fund, see paragraph 4.4.6. below).

4.4.6. Holdings above the legal thresholds

In accordance with Article L. 233-13 of the French Commercial Code, only Compagnie Nationale à Portefeuille (CNP) acting in concert with Groupe Bruxelles Lambert (GBL) held 5% or more of TOTAL's share capital at year-end 2012 [2].

In addition, two known shareholders held 5% or more of the voting rights exercisable at TOTAL Shareholders' Meetings at year-end 2012:

- **CNP acting in concert with GBL**

  In AMF notice No. 209C1156 dated September 2, 2009, CNP and GBL acting in concert stated that they had exceeded, as of August 25, 2009, the threshold of 5% of the voting rights of TOTAL and that they 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 [3] (based on share capital of 2,347,601,812 shares representing 2,554,431,468 voting rights). To the Company's knowledge, as of December 31, 2012, CNP, acting in concert with GBL, held 5.36% of the share capital representing 5.37% of the voting rights exercisable at Shareholders' Meetings and 4.94% of the theoretical voting rights [3].

- **the "TOTAL ACTIONNARIAT FRANCE" collective investment fund**

  To the Company's knowledge, as of December 31, 2012, the "TOTAL ACTIONNARIAT FRANCE" collective investment fund held 3.38% of the share capital representing 6.18% of the voting rights exercisable at Shareholders' Meetings and 5.68% of the theoretical voting rights [3].

4.4.7. Shareholders' agreements

TOTAL is not aware of any agreements among its shareholders.

4.5. Treasury shares

As of December 31, 2012, the Company held 108,391,639 TOTAL shares either directly or through its indirect subsidiaries, which represented 4.58% of the share capital on that date. By law, these shares are deprived of voting rights.

Refer to Chapter 8, paragraph 1.5. of this Registration Document for more information.

4.5.1. TOTAL shares held directly by the Company (treasury shares)

The Company held 8,060,371 treasury shares as of December 31, 2012, representing 0.34% of the share capital on that date.

(1) Pursuant to Article 223-11 of the AMF General Regulation, the number of 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.
(2) AMF notice No. 209C1156 dated September 2, 2009.
(3) 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.

4.5.2. TOTAL shares held by Group companies

As of December 31, 2012, Total Nucléaire, a Group company wholly-owned indirectly by TOTAL, held 2,023,672 TOTAL shares. As of December 31, 2012, Financière Valorgest, Sogapar and Fingestval, indirect subsidiaries of Elf Aquitaine, held 22,203,704, 4,104,000 and 71,999,892 TOTAL shares, respectively, representing a total of 98,307,596 shares. As of December 31, 2012, the Company held 4.24% of the share capital through its indirect subsidiaries.

4.6. Shares held by members of the administrative and management bodies

This information appears in points 1. and 6. of Chapter 5.

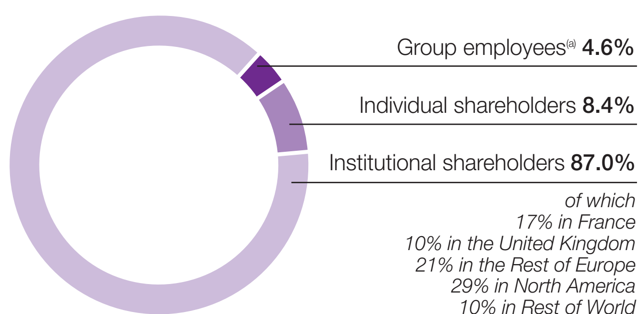
4.7. Employee shareholding

This information appears in paragraph 6.2. of Chapter 5 and paragraph 3.1. of Chapter 8.

4.8. Shareholding structure

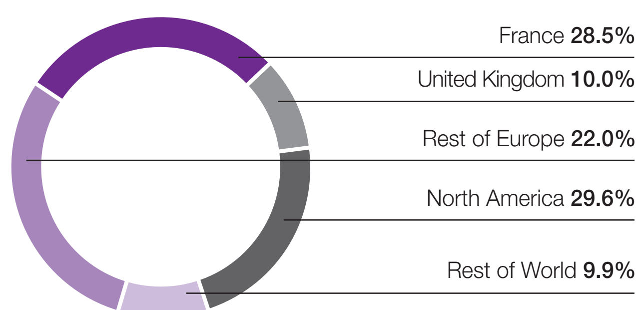
Estimates as of December 31, 2012, excluding treasury shares.

4.8.1. By shareholder type



(a) Based on the definition of employee shareholding pursuant to Article L. 225-102 of the French Commercial Code.

4.8.2. By region



The number of French individual TOTAL shareholders is estimated at 520,000.

4.9. Regulated agreements and undertakings and related party transactions

4.9.1. Regulated agreements and undertakings

The special report of the statutory auditors of TOTAL S.A. on regulated agreements and undertakings referred to in Article L. 225-38 et seq. of the French Commercial Code for fiscal year 2012 appears in point 1. of Chapter 11.

4.9.2. Related party transactions

Details of transactions with related parties as specified by the regulations adopted under EC regulation 1606/2002, entered into by the Group companies during fiscal years 2010, 2011 or 2012, appear in Note 24 to the Consolidated Financial Statements (see point 7., Chapter 9).

These transactions primarily concern equity affiliates and non-consolidated companies in which TOTAL exercises significant influence.

5. Information for foreign shareholders

5.1. American holders of ADRs

Information for holders of TOTAL American Depositary Shares (ADS), represented by American Depositary Receipts (ADRs), is provided on Form 20-F filed by TOTAL S.A. with the SEC (United States Securities and Exchange Commission) for the fiscal year ended December 31, 2012.

5.2. Non-resident shareholders (other than American shareholders)

In addition to Euronext Paris, TOTAL shares have been listed on the London Stock Exchange since 1973 and on the Brussels Stock Exchange since 1999.

Dividends

Dividends distributed by TOTAL to shareholders not residing in France are generally subject to French withholding tax at a rate of 30%.

As from January 1st, 2013, this rate is increased to 75% for income paid outside France in a non-cooperative country or territory ("NCCT"), as defined by the French General Tax Code (Article 238-0 A). A list of these NCCT is drawn up and updated annually by an order of the French authorities.

This withholding tax is reduced to 21% for dividends received by individuals residing in a Member State of the European Union or in Iceland, Norway or Liechtenstein.

Dividends paid to non-profit organizations headquartered in a Member State of the European Union or in Iceland, Norway or Liechtenstein are generally subject to withholding tax at a rate of 15%, subject to compliance with certain conditions stipulated in the administrative policy (BOI-IS-CHAMP-10-60-20120912).

However, French lawmakers eliminated the withholding tax on income distributed by French companies to foreign collective investment funds formed under foreign law and located in a Member State of the European Union or in another State that has entered into an administrative assistance agreement with France for the purpose of combating fraud and tax evasion.

To this end, these funds must fulfill two conditions:

– raise capital among a number of investors with a view to investing it, based on a defined investment policy;

– have characteristics similar to those of collective investment funds formed under French law (open-end mutual fund (OPCVM), open-end property fund (OPCI) and closed-end investment fund (SICAF)).

Under numerous bilateral international Tax Treaties signed between France and other countries for the purpose of avoiding double taxation ("Tax Treaties"), the withholding tax rate is reduced in cases where dividends are paid to a shareholder residing in one of the countries that signed such Tax Treaties, provided that certain conditions are met ("holder").

The countries with which France has signed a tax treaty providing for a reduced withholding tax rate of 15% on French dividends are: Austria, Belgium, Canada, Germany, Ireland, Italy, Luxembourg, Norway, the Netherlands, Singapore, South Africa, Spain, Switzerland and the United Kingdom.

French administrative policy sets out the conditions under which the reduced 15% French withholding tax rate is applicable. Holders who are residents of one of the countries with which France has entered into a tax treaty providing for a reduced withholding tax rate may be eligible for immediate application of the reduced 15% withholding tax rate by electing the simplified procedure.

Under the simplified procedure, a non-resident shareholder may request a reduction in the withholding tax rate by presenting a certificate of residence which is consistent with the example available from the French tax office for non-residents at the following address: impots.gouv.fr (heading Search forms/Form no. 5000) and certified by the tax authorities of the country of residence. The shareholder must then send this certificate of residence as early as possible, and in all cases prior to payment of the dividends, to the institution that manages his or her accounts, whether in or outside France.

If the shareholder's accounts are managed outside France, the account manager outside France must inform the payer institution in France, as soon as it receives the certificate of residence and prior to payment of the dividends, of the total amount of the dividends to which the shareholder is entitled and for which the payer institution may apply the reduced withholding tax rate stipulated in the treaty.

However, the payer institution in France may waive the requirement to present the certificate of residence provided for in the treaty if the shareholder's identity and tax residence are known to it. In this case, the payer institution personally assumes responsibility for the immediate application of the reduced 15% withholding tax rate provided for in the treaty.

However, this simplified procedure does not apply to dividends paid to shareholders that are legal entities and residents of Switzerland or to residents of Singapore, given the specific procedures stipulated by agreement between France and these two countries.

If the non-resident holder is unable to present a certificate of residence from the tax authorities of his or her country of residence prior to the dividend payment date, or if the simplified procedure cannot be applied to the holder, the French payer institution will pay the dividends after deducting the ordinary withholding tax at a rate of 30%. However, the holder may request the 15% rate provided for in the treaty by being reimbursed for the amount overpaid (30% -15%). This reimbursement may be requested from the tax authorities by the shareholder, or by

the payer institution if it has agreed to do so with the shareholder, by sending a specific form (forms 5000 and 5001 or any other appropriate form issued by the French tax authorities) prior to December 31 of the second year following the date on which the withholding tax was paid to the French Treasury. Generally speaking, any reimbursement of withholding tax should be paid within 12 months of the date on which the aforementioned form is filed. However, it may not be paid before January 15 of the year following the year in which the dividends were paid. Copies of the French forms referred to above are available from the French tax office for non-residents, at the following address: impots.gouv.fr (heading “Search forms”).

Taxation of dividends outside France varies according to each country’s respective tax legislation.

In most countries, the gross amount of dividends is generally included in the shareholder’s taxable income. Based on certain conditions and limitations, the French withholding tax on dividends may result in a tax credit being applied to the foreign tax payable by the shareholder.

However, there are some exceptions. For example, in Belgium a 25% withholding tax applies to net dividends received by an individual shareholder.

In addition, the amending finance law of August 16, 2012 created a 3% tax applicable to dividend distributions made on or after August 17, 2012. This tax, called “Additional corporation tax contribution”, applies to distributed income and is payable by the company that distributes the dividends.

Taxation on sales of shares

Capital gains on sales of shares realized by taxpayers residing outside France are, in principle, exempt from income tax in France. However, there are two exceptions to this rule: one for sales of holdings where the seller owns a permanent establishment or a fixed place of business in France to which his or her shares are attached, and the other for sales carried out by individuals or organizations residing or established in a non-cooperative country or territory.

However, the shareholder may be taxed on the capital gain or loss on the sale of shares in his or her country of tax residence.

Through the law of March 14, 2012, French lawmakers instituted a financial transaction tax that applies to all purchases of shares of companies listed on a French, European or foreign regulated market. This purchase must result in a transfer of ownership and the securities must be issued by a French company whose market capitalization exceeds €1 billion as of December 1 of the year preceding the year of taxation.

The tax also applies to securities representing shares of stock issued by a company, regardless of the place of establishment of its head office. This includes transactions carried out on certificates representing shares, such as American Depositary Receipts and European depositary receipts.

This financial transaction tax is equal to 0.2% of the share purchase price.

The party subject to the tax is the investment services provider (ISP), regardless of its place of establishment, when it executes buy orders for third parties or buys on its own account.

In France, ISPs are investment companies and credit institutions that have been approved to provide all or some investment services. Operators that provide equivalent services outside France are subject to the tax under the same conditions.

For purchases not involving an ISP, the tax is payable by the establishment acting as account administrator, regardless of its place of establishment.

For sales of shares between persons who are not residents of France, the financial transaction tax is applicable. However, the French tax authorities have not yet specified the procedures for applying the tax.

In principle, sales of shares of French companies are also subject to a French tax called “droit d’enregistrement” (transfer duty). However, French lawmakers have stipulated that transfer duties are not applicable to transactions that are subject to the financial transaction tax.

The above explanation is a general overview and shareholders are advised to consult their own tax advisor to determine the effect of Tax Treaties and applicable procedures as well as their income tax and, more generally, the tax consequences applicable to their particular situation.

6. Investor Relations

6.1. Communication policy

In addition to the French version of its Registration Document filed each year with the French Financial Markets Authority (*Autorité des marchés financiers*), the Group regularly provides information on its operations through reports and newsletters, on its website total.com and through press releases for significant news. The Group's presentations of its results and outlook are also available on its website total.com. This English version of the *Document de référence* (Registration Document) is provided for information purposes only.

The Company also files an annual report on Form 20-F, in English, with the United States Securities and Exchange Commission (SEC) (see paragraph 3.4. in Chapter 8).

The Group holds regular information sessions and participates in conferences for shareholders, investors and financial analysts, both in France and abroad.

6.2. Relationships with institutional investors and financial analysts

Members of the Group's General Management regularly meet with portfolio managers and financial analysts in the leading financial centers throughout the world (Europe, North America, Asia and the Middle East).

The first series of meetings is held annually in the first quarter, after publication of the results for the previous fiscal year. The second set of meetings is held in the third quarter of the year. Material from those meetings is available on the Group's website (total.com, heading Investors/Presentations).

As in previous years, three phone conferences were led by the Group's Chief Financial Officer to discuss results for the first, second and third quarters of the year. These conferences are available on the Group's website (total.com, heading Investors/Results).

In 2012, the Group held some 600 meetings with institutional investors and financial analysts.

The Group maintains an active dialogue with shareholders on issues related to Corporate Social Responsibility (CSR).

With a team dedicated to CSR, the Investor Relations Department is available to investors and non-financial analysts and provides responses to their questions about the Group's activities in this area (ethics and human rights, governance, safety, health and environmental protection, contribution to the development of local communities, future energies, measures to combat climate change, etc.). Meetings focused on these issues are organized in France and worldwide. Nearly 60 meetings were held in 2012. To meet investors' expectations, the Group also organized a fact-finding trip to Canada in June 2012, which enabled it to identify the environmental and societal measures taken in the area of oil sands development. Topics such as limiting environmental impacts, research and development and dialogue with stakeholders were discussed. This trip was an opportunity to talk with members of management of TOTAL S.A. and Total E&P Canada, the teams in the field and representatives of the local communities.

A Chapter of the Registration Document is dedicated to social and environmental information (see Chapter 12). TOTAL also publishes a CSR (Corporate Social Responsability) report each year at the time of the Shareholders' Meeting.

6.3. A quality relationship serving individual shareholders

TOTAL's Individual Shareholder Relations Department is the only shareholder service in France which has received ISO 9001 version 2008 certification for its communication policy with individual shareholders. This certification was issued by AFNOR following a thorough audit of the various processes implemented in terms of communication with individual shareholders.

Follow-up audits are conducted on a yearly basis. This certification of TOTAL's Individual Shareholder Relations Department reflects the Group's commitment to providing individual shareholders with valuable financial information over the long term.

As part of this quality assurance certification, satisfaction surveys are made available on the Group's website (total.com, heading Individual Shareholders/Individual Shareholder Relations).

After winning the Investor Relations award in 2010 and the Shareholders award in 2011, presented at the Boursoscan awards ceremony, TOTAL was honored for its Web-based communication in the listed companies category at the first Investor Awards 2012.

In 2012, TOTAL also continued to organize meetings and information sessions with individual shareholders, in particular as part of various events:

- The Shareholders' Meeting held on May 11, 2012 at the *Palais des Congrès* in Paris was attended by more than 3,500 people. This meeting was broadcast live and was later available on the Group's website. Notice of the meeting is sent directly to all holders of 250 or more bearer shares and to all registered shareholders. Registered shareholders were able to vote online.
- At the Actionaria Trade Show, held at the *Palais des Congrès* in Paris in November 2012, nearly 3,500 people visited TOTAL's stand, which presented the Group's activity in the field of Liquefied Natural Gas. The trade show gave shareholders an opportunity to meet the Group's representatives present at the stand and attend conferences.
- On November 23, Chairman and Chief Executive Officer Christophe de Margerie reviewed the highlights of the Group's activity in 2012 before 1,400 shareholders. A few days later on December 14, he answered questions from Boursorama during an interview broadcast on that Company's website.

– Seven other meetings with individual shareholders were held in 2012: in Antwerp, Belgium, Geneva, Switzerland and in Reims, Caen, Nice, Nancy and Bordeaux in France. These meetings were attended by nearly 3,000 people. In 2013, meetings are planned in France in Marseille, Toulouse, Avignon, Rennes and Lille.

The format of the Consultative Shareholders Committee (CCA) was changed after 20 years. Taking advantage of the renewal of its members, the Committee's membership was increased to 20, compared with 12 previously. From now on, one-fourth of the Consultative Committee members will be renewed each year.

To facilitate exchange and promote efficient, regular interaction, the members of the CCA and the team of the Individual Shareholder Relations Department discuss various topics via an online dialogue forum (Group news, improvement in communication materials, feedback on an event organized by the Group, etc.).

The CCA met three times in 2012:

– in March, during a meeting with Mr. Christophe de Margerie, Chairman and Chief Executive Officer of TOTAL;
– in May, following the Shareholders' Meeting;
– in October, during a visit to the Provence refinery and a tour of Valat, of which the TOTAL Foundation is a sponsor.

During these meetings, the CCA expresses its opinion on various aspects of the individual shareholder communication policy, including the Shareholders' Newsletter, the Shareholders' Circle program, the webzine and the electronic version of the Shareholders' Guide.

In 2012, the CCA contributed to the creation of the "Investors" app for smartphones and digital tablets.

The Shareholders' Circle organized 27 events in 2012, to which some 3,000 individual shareholders who are Circle members were invited. Shareholders visited industrial facilities and cultural and natural sites supported by the TOTAL Foundation and attended conferences dedicated to better understanding the Group's businesses. They also attended cultural events within the framework of the TOTAL Foundation sponsorship policy.

In this context, nearly 15,000 individual shareholders met with Group representatives in 2012, 1,000 more than in 2011.

6.4. Registered shareholding

TOTAL shares, which are generally bearer instruments, can be registered shares. In this case, shareholders are identified by TOTAL S.A., in its capacity as the issuer, or by its agent, BNP Paribas Securities Services, which is responsible for keeping the register of shareholders' registered shares.

6.4.1. Registration

There are two forms of registration:

– **administered registered shares:** shares are registered with TOTAL through BNP Paribas Securities Services, but the holder's financial intermediary continues to administer them with regard to sales, purchases, coupons, shareholders' meeting notices, etc.;

– **pure registered shares:** TOTAL holds and directly administers shares on behalf of the holder through BNP Paribas Securities Services, which administers sales, purchases, coupons, shareholders' meeting notices, etc., so that the shareholder does not need to appoint a financial intermediary. This form of registration is not easily compatible with the registration of shares in a French share savings plan (PEA), given the administrative procedures that apply in such cases.

6.4.2. Main advantages of registered shares

The advantages of registered shares include:

– double voting rights if the shares are held continuously for two successive years (see paragraph 2.4.1. of Chapter 8);

– a toll-free number for all contacts with BNP Paribas Securities Services (a toll-free call within France from a landline): 0 800 117 000 or +33 1 40 14 80 61 (from outside France); from Monday to Friday (business days), 8: 45 a.m. -6: 00 p.m., GMT+1 (fax: +33 1 55 77 34 17);

– the ability to receive directly all information published by the Group for its shareholders;

– the possibility of being notified of Shareholders' Meetings and voting online before the Meeting takes place;

– the ability to join the TOTAL Shareholders' Circle by holding at least 50 shares.

The advantages of pure registered shares, in addition to those of administered registered shares, include:

– no custodial fees;

– easier placement of market orders[1] (phone, mail, fax, Internet);

– brokerage fees equal to 0.20% of the gross amount of the trade, with no minimum charge and trades of up to €1,000 each;

– the ability to view shareholdings online.

To convert TOTAL shares into pure registered shares, shareholders must fill out a form, which can be obtained upon request from the Individual Shareholder Relations Department, and send it to their financial intermediary. Once BNP Paribas Securities Services receives the shares on a registered account, a certificate of account registration is sent to the shareholder, who is asked to send the following to it:

– a bank account number (or a postal account or savings account number) for payment of dividends; and

– a market service agreement to facilitate trading TOTAL shares on the stock exchange.

(1) Provided the subscriber has signed the market service agreement. Signing this agreement is free of charge.

6.5. Individual Shareholders Department Contacts

For information regarding the conversion of bearer shares to registered shares, membership in the Shareholders' Circle or any other general information, individual shareholders may contact:

TOTAL S.A.
Individual Shareholder Relations Department
Tour Coupole
2, place Jean Millier
Arche Nord Coupole/Regnault
92078 Paris La Défense Cedex, France

Phone	From France: 0 800 039 039 (toll-free number from a landline in France) outside France: +33 1 47 44 24 02 From Monday to Friday, 9: 00 a.m. to 12: 30 p.m. and 1: 30 p.m. to 5: 30 p.m. (GMT+1)
Fax	From France: 01 47 44 20 14 outside France: +33 1 47 44 20 14
Email	Using the contact form available at total.com, heading Shareholders
Contact	Jean-Marie Rossini (Head of Individual Shareholder Relations Department)

6.6. 2013 Schedule

February 13	Results for the fourth quarter and full year 2012 and outlook
March 18	Ex-dividend date for the 2012 third interim dividend
April 26	Results for the first quarter 2013
May 17	2013 Shareholders' Meeting in Paris (*Palais des Congrès*)
May 22	Meeting with individual shareholders in Marseille (France)
June 4	Meeting with individual shareholders in Toulouse (France)
June 17	Meeting with individual shareholders in Avignon (France)
June 24	Ex-dividend date for the 2012 remainder dividend(1)
July 26	Results for the second quarter and the first half 2013
September 23	Investor Day - London
September 24	Ex-dividend date for the 2013 first interim dividend(2)
October 31	Results for the third quarter 2013
November 14	Meeting with individual shareholders in Rennes (France)
November 18	Meeting with individual shareholders in Lille (France)
November 22-23	Actionaria Trade Show in Paris (*Palais des Congrès*)
December 16	Ex-dividend date for the 2013 second interim dividend(2)

6.7. 2014 Schedule

March 24	Ex-dividend date for the 2013 third interim dividend(2)
May 16	Shareholders' Meeting in Paris (*Palais des Congrès*)
June 2	Ex-dividend date for the 2013 remainder dividend(3)

(1) Subject to approval by the Shareholders' Meeting of May 17, 2013.
(2) Subject to approval by the Board of Directors.
(3) Subject to approval by the Shareholders' Meeting of May 16, 2014.

6.8. Investor Relations Department contacts

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1. Historical financial information

1.1. 2012, 2011 and 2010 Consolidated Financial Statements

The Consolidated Financial Statements of TOTAL S.A. and its consolidated subsidiaries (the Group) for the years ended December 31, 2012, 2011 and 2010 were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and as adopted by the European Union as of December 31, 2012.

1.2. Statutory Financial Statements of TOTAL S.A.

The Statutory Financial Statements of TOTAL S.A., the parent company of the Group, for the years ended December 31, 2012, 2011 and 2010 were prepared in accordance with French accounting standards as applicable on December 31, 2012.

2. Audit of the historical financial information

The Consolidated Financial Statements for the fiscal year 2012 which appear in Chapter 9 of this Registration Document were certified by the Company's auditors. A translation of the auditors' report on the Consolidated Financial Statements is provided in point 1. of Chapter 9, for information purposes only.

TOTAL's Statutory Financial Statements for the fiscal year 2012 (under French accounting standards) which appear in Chapter 11 to this Registration Document were also certified by the Company's auditors. A translation of the auditors' report on the 2012 Statutory Financial Statements is provided in point 2. of Chapter 11, for information purposes only.

Pursuant to Article 28 of EC Regulation No 809/2004, are incorporated by reference in this Registration Document:

- the Consolidated and Statutory Financial Statements for fiscal year 2011, together with the statutory auditors' reports on the Consolidated Financial Statements and the Statutory Financial Statements which appear on pages 184 and 302 of the French version of the Registration Document for fiscal year 2011 which was filed with the French Financial Markets Authority on March 26, 2012 (and a translation is reproduced on pages 174 and 272 of the English version of such Registration Document for information purposes only);
- the Consolidated and Statutory Financial Statements for fiscal year 2010, together with the statutory auditors' reports on the Consolidated Financial Statements and the Statutory Financial Statements which appear on pages 172 and 280 of the French version of the Registration Document for fiscal year 2010 which was filed with the French Financial Markets Authority on March 28, 2011 (and a translation is reproduced on pages 174 and 272 of the English version of such Registration Document for information purposes only).

3. Other information

Financial information other than that contained in Chapter 9 or 11 of this Registration Document, in particular ratios, statistical data or other calculated data, which are used to describe the Group or its business performances, is not extracted from the audited financial statements of the issuer. Except where otherwise stated, these data are based on internal Company data.

In particular, the supplemental oil and gas information provided in section 10 of this Registration Document is not extracted from the audited financial statements of the issuer and was not audited by the Company's statutory auditors. This supplemental information was prepared by the Company based on information available to it, using its own calculations or estimates and taking into account the U.S. standards to which the Company is subject for this kind of information as a result of the listing of its shares (in the form of ADRs) on the New York Stock Exchange.

This Registration Document does not include profit forecasts or estimates, under the meaning given to such terms by EC Regulation No. 809/2004 dated April 29, 2004, for the period after December 31, 2012.

4. Dividend policy

The Company's dividend policy is described in point 2., Chapter 6 of this Registration Document.

5. Legal and arbitration proceedings

There are no governmental, legal or arbitration proceedings, including any proceeding that the Company is aware of, threatened with or even pending (including the main legal proceedings described hereafter) that could have or could have had during the last twelve months, a material impact on the Group's financial situation or profitability.

The main legal proceedings in which the Group's companies are involved are described below.

5.1. Antitrust investigations

The principal antitrust proceedings in which the Group's companies are involved are described thereafter.

5.1.1. Refining & Chemicals segment

As part of the spin-off of Arkema[(1)] in 2006, TOTAL S.A. or certain other Group companies agreed to grant Arkema a guarantee for potential monetary consequences related to antitrust proceedings arising from events prior to the spin-off.

This guarantee covers, for a period of ten years from the date of the spin-off, 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 related to anti-competition violations in Europe applies to amounts above a €176.5 million threshold. 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 this guarantee, in Europe.

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, this guarantee will become void.

- In the United States, civil liability lawsuits, for which TOTAL S.A. has been named as the parent company, are closed without significant impact on the Group's financial position.
- In Europe, since 2006, the European Commission has fined companies of the Group in its configuration prior to the spin-off following five investigations launched by the European Commission between 2000 and 2004, four of which are closed, the fifth is on hold pending a decision following the appeal of Arkema and the concerned companies of the Group.

  In financial terms, the fines imposed by the European Commission following the five investigations reach an overall amount of €385.47 million, entirely settled as of today. As a result, once the threshold provided for by the guarantee is deducted, the overall amount assumed and paid by the Group since the spin-off in accordance with the guarantee amounted to €188.07 million[(2)], to which an amount of €31.31 million of interest has been added. These amounts were not modified during the 2012 financial year.
- In addition, civil proceedings against Arkema and other groups of companies were initiated in 2009 and 2011, respectively, before German and Dutch courts by third parties for alleged damages pursuant to two of the above mentioned legal proceedings. TOTAL S.A. was summoned to serve notice of the dispute before the German court. At this point, the probability to have a favorable verdict and the financial impacts of these proceedings remain uncertain due to the number of legal difficulties they give rise to, the lack of documented claims and evaluations of the alleged damages.

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 regarding events prior to the spin-off, as well as Elf Aquitaine and/or TOTAL S.A. based on their status as parent company.

Within the framework of all of the legal proceedings described above, a €17 million reserve remains booked in the Group's Consolidated Financial Statements as of December 31, 2012.

5.1.2. Marketing & Services segment

- Pursuant to a statement of objections received by Total Nederland N.V. and TOTAL S.A. (based on its status as parent company) from the European Commission, Total Nederland N.V. was fined €20.25 million in 2006, for which TOTAL S.A. was held

(1) 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 spin-off from TOTAL S.A. in May 2006.
(2) This amount does not take into account a case that led to Arkema, prior to Arkema's spin-off from TOTAL, and Elf Aquitaine being fined jointly €45 million and Arkema being fined €13.5 million.

jointly liable for €13.5 million. TOTAL S.A. lodged an appeal against this decision that was dismissed at the end of September 2012.

- In addition, pursuant to a statement of objections received by Total Raffinage Marketing (formerly Total France) and TOTAL S.A. from the European Commission regarding a product line of the Marketing & Services segment, Total Raffinage Marketing was fined €128.2 million in 2008, which has been paid, and for which TOTAL S.A. was held jointly liable based on its status as parent company. The appeal against this decision lodged by the Group is still pending before the relevant European court.
- In addition, the civil proceedings against TOTAL S.A., Total Raffinage Marketing and other companies initiated before UK and Dutch courts by third parties for alleged damages in connection with the prosecutions brought by the European Commission are ongoing. At this point, the probability to have a favorable verdict and the financial impacts of these procedures remain uncertain due to the number of legal difficulties they gave rise to, the lack of documented claims and evaluations of the alleged damages.

Within the framework of the legal proceedings described above, a €30 million reserve is booked in the Group's Consolidated Financial Statements as of December 31, 2012.

In early 2013, a civil proceeding was initiated against TOTAL S.A. and its subsidiary Total Aviazione Italia Srl before the competent Italian civil courts. The plaintiff claims against TOTAL S.A., its subsidiary and other third parties, damages that it estimates to be nearly €908 million. This procedure initiated by the plaintiff follows practices that had been sanctioned by the Italian competition authority in 2006. Given the multiple defendants engaged in these proceedings and the disproportionate nature of the alleged damages in view of the justifications provided, this proceeding is not expected to have a material effect on the Group's financial situation, even if it is not possible at this stage to precisely determine the financial impact of the demand on the Group.

Whatever the evolution of the proceedings described above, the Group believes that their outcome should not have a material adverse effect on the Group's financial situation or consolidated results.

5.2. 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 twenty-one 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 remediation 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.

After having articulated several hypotheses, the Court-appointed experts did not maintain in their final report filed on May 11, 2006, 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.

On July 9, 2007, the investigating magistrate 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.

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 Mr. 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.

By its decision of September 24, 2012, the Court of Appeal of Toulouse (Cour d'appel de Toulouse) upheld the lower court verdict pursuant to which the summonses against TOTAL S.A. and Mr. Thierry Desmarest were determined to be inadmissible. This element of the decision has been appealed by certain third parties before the French Supreme Court (*Cour de cassation*).

The Court of Appeal considered, however, that the explosion was the result of the chemical accident described by the court-appointed experts. Accordingly, it convicted the former Plant Manager and Grande Paroisse. This element of the decision has been appealed by the former Plant Manager and Grande Paroisse before the French Supreme Court (*Cour de cassation*), which has the effect of suspending their criminal sentences.

A compensation mechanism for victims was set up immediately following the explosion. €2.3 billion was paid for the compensation of claims and related expenses amounts. As of December 31, 2012, a €17 million reserve was recorded in the Group's consolidated balance sheet.

5.3. 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 was 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 injuries, most of which were 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 TOTAL's UK subsidiary liable for the accident and solely liable for indemnifying the victims. The subsidiary appealed the decision. The appeal trial took place in January 2010. The Court of Appeal, by a decision handed down on March 4, 2010, confirmed the prior judgment. The Supreme Court of the United Kingdom partially authorized TOTAL's UK subsidiary to contest the decision. TOTAL's UK subsidiary finally decided to withdraw from this recourse due to settlement agreements reached in mid-February 2011.

The Group carries insurance for damage to its interests in these facilities, business interruption and civil liability claims from third parties. The provision for the civil liability that appears in the Group's Consolidated Financial Statements as of December 31, 2012, stands at €1 million after taking into account the payments previously made.

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.

In addition, 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. By a judgment on July 16, 2010, the subsidiary was fined £3.6 million, which it paid. The decision takes into account a number of elements that have mitigated the impact of the charges brought against it.

5.4. 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, and ordering TOTAL S.A. to pay a fine of €375,000. The Court also ordered compensation to be paid to those affected by the 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 S.A. has appealed the verdict of January 16, 2008. In the meantime, it nevertheless proposed to pay third parties who so requested definitive compensation as determined by the Court. Forty-two third parties have been compensated for an aggregate amount of €171.5 million.

By a decision dated March 30, 2010, the *Cour d'appel de Paris* upheld the lower Court verdict pursuant to which TOTAL S.A. was convicted of marine pollution and fined €375,000. TOTAL appealed this decision to the French Supreme Court (*Cour de cassation*).

However, the Court of Appeal ruled that TOTAL S.A. bears no civil liability according to the applicable international conventions and consequently ruled that TOTAL S.A. be not convicted.

TOTAL challenged the criminal law-related aspects of this decision before the French Supreme Court (*Cour de cassation*).

By a decision dated September 25, 2012, the *Cour de cassation* has dismissed the appeal lodged by TOTAL S.A. and upheld the conviction of marine pollution. The *Cour de cassation* also quashed the appeal judgment and ruled that TOTAL S.A. bears civil liability. Consequently, TOTAL S.A. has been declared severally liable together with the Erika's inspection and classification firm, owner and manager to compensate the damages allocated to third parties by the *Cour d'appel de Paris* in 2010.

Nearly all the damages allocated to third parties have already been paid. Consequently, the decision of the *Cour de cassation* did not give rise to a significant financial impact for the Group.

5.5. Blue Rapid and the Russian Olympic Committee – Russian regions and Interneft

Blue Rapid, a Panamanian company, and the Russian Olympic Committee filed a claim for damages with the Paris Commercial Court against Elf Aquitaine, alleging a so-called non-completion by a former subsidiary of Elf Aquitaine of a contract related to an exploration and production project in Russia negotiated in the early 1990s. Elf Aquitaine believed this claim to be unfounded and opposed it. On January 12, 2009, the Commercial Court of Paris rejected Blue Rapid's claim against Elf Aquitaine and found that the Russian Olympic Committee did not have standing in the matter. Blue Rapid and the Russian Olympic Committee appealed this decision. On June 30, 2011, the Court of Appeal of Paris dismissed as inadmissible the claim of Blue Rapid and the Russian Olympic Committee against Elf Aquitaine, notably on the grounds of the contract having lapsed. Blue Rapid and the Russian Olympic Committee appealed this decision to the French Supreme Court.

In connection with the same facts, and fifteen years after the termination of the exploration and production contract, a Russian company, which was held not to be the contracting party to the contract, and two regions of the Russian Federation that were not even parties to the contract, launched an arbitration procedure against the aforementioned former subsidiary of Elf Aquitaine that

was liquidated in 2005, claiming alleged damages of U.S.$22.4 billion. For the same reasons as those successfully adjudicated by Elf Aquitaine against Blue Rapid and the Russian Olympic Committee, the Group considers this claim to be unfounded as a matter of law and fact. The Group has lodged a criminal complaint to denounce the fraudulent claim of which the Group believes it is a victim and, has taken and reserved its rights to take other actions and measures to defend its interests.

5.6. Iran

In 2003, the United States Securities and Exchange Commission (SEC) followed by the Department of Justice (DoJ) issued a formal order directing an investigation in connection with the pursuit of business in Iran by certain oil companies including, among others, TOTAL.

The inquiry concerns an agreement concluded by the Company with consultants concerning gas fields in Iran and aims to verify whether certain payments made under this agreement would have benefited Iranian officials in violation of the Foreign Corrupt Practices Act (FCPA) and the Company's accounting obligations. The Company has fully cooperated with these investigations.

Since 2010, the Company has been in discussions with U.S. authorities (DoJ and SEC) to consider, as it is often the case in these kinds of proceedings, an out-of-court settlement, which would terminate the investigation in exchange for TOTAL respecting a number of obligations, including the payment of a fine and civil compensation, without admission of guilt.

U.S. authorities have proposed draft agreements that could be accepted by TOTAL. Consequently, and although discussions have not yet been finalized, a provision of $398 million, unchanged since its booking as of June 30, 2012 and reflecting the best estimate of potential costs associated with the resolution of these proceedings, remains booked in the Group's Consolidated Financial Statements as of December 31, 2012.

In this same affair, TOTAL and its Chief Executive Officer, President of the Middle East at the time of the facts, have been placed under formal investigation, following a judicial inquiry initiated in France in 2006.

At this point, the Company considers that the resolution of these cases is not expected to have a significant impact on the Group's financial situation or consequences on its future planned operations.

5.7. Libya

In June 2011, the United States Securities and Exchange Commission (SEC) issued to certain oil companies - including, among others, TOTAL - a formal request for information related to their operations in Libya. TOTAL cooperated with this non public investigation.

5.8. Oil-for-Food Program

Several countries have launched 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 Chairman and 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 to the investigating magistrate that the case against the Group's current and former employees and TOTAL's Chairman and Chief Executive Officer not be pursued.

In early 2010, despite the recommendation of the Prosecutor's office, a new investigating magistrate, having taken over the case, decided to indict TOTAL S.A. on bribery charges as well as complicity and influence peddling. The indictment was brought eight years after the beginning of the investigation without any new evidence being introduced.

In October 2010, the Prosecutor's office recommended to the investigating magistrate that the case against TOTAL S.A., the Group's current and former employees and TOTAL's Chairman and Chief Executive Officer not be pursued. However, by ordinance notified in early August 2011, the investigating magistrate on the matter decided to send the case to trial. The hearings started on January 21, 2013 and ended on February 20, 2013. The judgment of the Criminal Court is expected to be rendered on July 8, 2013.

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 Volcker report released by the independent investigating Committee set up by the UN discarded any grounds for bribery within the framework of the Oil-for-Food Program with respect to TOTAL.

5.9. Italy

As part of an investigation led by the Prosecutor of the Republic of the Potenza Court, Total Italia and certain Group employees were the subject of an investigation related to certain calls for tenders that Total Italia made for the preparation and development of an oil field. On February 16, 2009, as a preliminary measure before the proceedings went before the Court, the preliminary investigation judge of Potenza served notice to Total Italia of a decision that would have suspended the concession for this field for one

year. Total Italia appealed the decision by the preliminary investigation judge before the Court of Appeal of Potenza. In a decision dated 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.

The criminal investigation was closed in the first half of 2010.

In May 2012, the Judge of the preliminary hearing decided to dismiss the charges for some of the Group's employees and refer the case for trial on a reduced number of charges. The trial started on September 26, 2012.

In 2010, Total Italia's exploration and production operations were transferred to Total E&P Italia and refining and marketing operations were merged with those of Erg Petroli.

5.10. Rivunion

On July 9, 2012, the Swiss Tribunal Fédéral (Switzerland's Supreme Court) rendered its decision against Rivunion, a wholly-owned subsidiary of Elf Aquitaine, confirming a tax reassessment in the amount of CHF 171 million (excluding interest for late payment, yet to be calculated by the competent authorities). According to the Tribunal, Rivunion was held liable as tax collector of withholding taxes owed by the beneficiaries of taxable services. Rivunion, in liquidation since March 12, 2002 and unable to recover the amounts corresponding to the withholding taxes in restitution from said beneficiaries in order to meet its fiscal obligations, has been subject to insolvency proceedings since November 1, 2012.

6. Significant changes

On March 27, 2013, TOTAL entered into an agreement for the sale to Suncor Energy Inc. of its 49% interest in the Voyageur upgrader project, which is located in the Canadian province of Alberta and intended to upgrade bitumen from the Fort Hills and Joslyn mines. The transaction amounted to US$0.5 billion (€0.4 billion). The mining developments of Fort Hills and Joslyn are not affected by this transaction and continue according to the production evacuation logistics studies jointly conducted with Suncor.

The sale entails a net loss of approximately US$1.65 billion (approximately €1.25 billion). The future investments budgeted for this upgrader in the Group's strategic plan amounted to US$5.7 billion (approximately €4.3 billion).

The accounting effects of this sale, which occurred after the close of the 2012 financial statements by TOTAL's Board of Directors, will be reflected in TOTAL S.A.'s intermediate Consolidated Financial Statements for the first quarter of 2013.

The information herein supplements the information provided in Chapter 2 concerning the Group's activities in Canada (paragraph 2.1.7.2.) and in paragraph E) of Note 4 to the Consolidated Financial Statements for the 2012 fiscal year (Chapter 9, point 7).

Except for the recent events mentioned above, in the Management Report of the Board of Directors (Chapter 3) or in the Business overview (Chapter 2), no significant changes in the Group's financial or commercial position have occurred since December 31, 2012, the end of the last fiscal year for which audited financial statements have been published by the Company.

General information

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1. Share capital

1.1. Share capital as of December 31, 2012

€5,914,832,865, consisting of 2,365,933,146 fully paid ordinary shares.

1.2. Features of the shares

There is only one class of shares, par value €2.50. A double voting right is granted to every shareholder, under certain conditions (see paragraph 2.4.1. of this Chapter). The shares are in bearer or registered form at the shareholder's discretion. The shares are in book-entry form and registered in an account.

1.3. Authorized share capital not issued as of December 31, 2012

A table summarizing the currently valid delegations and authorizations to increase share capital that have been granted by the Shareholders' Meeting to the Board of Directors, and the uses made of those delegations and authorizations in fiscal year 2012, appears in paragraph 1.3.9. of this Chapter.

1.3.1. Thirteenth resolution of the Shareholders' Meeting held on May 11, 2012

Delegation of authority granted by the Shareholders' Meeting to the Board of Directors to increase the share capital by issuing common shares or other securities granting immediate or future rights to the Company's share capital, maintaining shareholders' pre-emptive subscription rights up to a maximum nominal amount of €2.5 billion, *i.e.*, 1 billion shares (delegation of authority valid for twenty-six months).

Furthermore, the maximum nominal amount of the debt securities granting rights to the Company's share capital that may be issued pursuant to the thirteenth resolution and the fourteenth and sixteenth resolutions (mentioned below) may not exceed €10 billion, or their exchange value, on the date of issuance.

1.3.2. Fourteenth resolution of the Shareholders' Meeting held on May 11, 2012

Delegation of authority granted by the Shareholders' Meeting to the Board of Directors to increase the share capital by issuing common shares or other securities granting immediate or future rights to the Company's share capital, canceling shareholders' pre-emptive subscription rights, including the compensation comprised of securities as part of a public exchange offer, provided that they meet the requirements of Article L. 225-148 of the French Commercial Code. This resolution grants the Board of Directors the authority to grant a priority period for shareholders to subscribe to these securities pursuant to the provisions of Article L. 225-135 of the French Commercial Code. The total amount of the capital increases without pre-emptive subscription rights that may occur immediately or in the future cannot exceed the nominal amount of €850 million, *i.e.*, 340 million shares, par value €2.50 (delegation of authority valid for twenty-six months). Furthermore, under the fifteenth resolution of the Shareholders' Meeting held on May 11, 2012, the Board is authorized, for each of the issuances made in connection with the fourteenth resolution, to increase the number of securities to be issued within the limit of the ceiling of 15% of the initial issuance (at the same price as the price fixed for the initial issuance) within the limit of the ceiling fixed under the fourteenth resolution. The nominal amount of the capital increases is counted against the maximum aggregate nominal amount of €2.5 billion authorized by the thirteenth resolution of the Shareholders' Meeting held on May 11, 2012.

Furthermore, the maximum nominal amount of the debt securities granting rights to the Company's share capital that may be issued pursuant to the above mentioned thirteenth and fourteenth resolutions and the sixteenth resolution (mentioned below) may not exceed €10 billion, or their exchange value, on the date of issuance.

1.3.3. Sixteenth resolution of the Shareholders' Meeting held on May 11, 2012

Delegation of power granted by the Shareholders' Meeting to the Board of Directors to increase the share capital by issuing new ordinary shares or other securities granting immediate or future rights to the Company's share capital as compensation of in-kind contribution granted to the Company, by an amount not exceeding 10% of the share capital outstanding at the date of the Shareholders' Meeting on May 11, 2012 (delegation of authority valid for twenty-six months). The nominal amount of the capital increases is counted against the maximum aggregate nominal amount of €850 million authorized by the fourteenth resolution of the Shareholders' Meeting held on May 11, 2012.

Furthermore, the maximum nominal amount of the debt securities granting rights to the Company's share capital that may be issued pursuant to the above mentioned thirteenth, fourteenth and sixteenth resolutions may not exceed €10 billion, or their exchange value, on the date of issuance.

1.3.4. Seventeenth resolution of the Shareholders' Meeting held on May 11, 2012

Delegation of authority to the Board of Directors to complete capital increases reserved for employees participating in a company savings Plan (*Plan d'épargne d'entreprise*), up to a maximum of 1.5% of the outstanding share capital on the date of the decision of the Board of Directors to proceed with the issue (delegation of authority valid for twenty-six months), it being specified that

the amount of the capital increase is counted against the maximum aggregate nominal amount of €2.5 billion authorized by the thirteenth resolution of the Shareholders' Meeting of May, 11, 2012.

1.3.5. Eighteenth resolution of the Shareholders' Meeting held on May 11, 2012

Delegation of powers to the Board of Directors to complete reserved capital increases aiming to give employees of foreign subsidiaries benefits comparable with those received by employees under the seventeenth resolution of the Shareholders' Meeting held on May 11, 2012, up to a maximum (under a common ceiling with the seventeenth resolution) of 1.5% of the outstanding share capital on the date of the decision of the Board of Directors to proceed with the issue (delegation of authority valid for eighteen months), it being specified that the amount of the capital increase is counted against the maximum aggregate nominal amount of €2.5 billion authorized by the thirteenth resolution of the Shareholders' Meeting of May 11, 2012.

As part of the delegations granted under the seventeenth and eighteenth resolutions, the Board of Directors' meeting, held on September 18, 2012, decided to increase the capital by issuing up to 18 million shares. This capital increase was opened up to employees and financial institutions involved at the Company's request or companies or entities set up specifically and exclusively to implement an employee savings scheme with the objective of providing employees of foreign subsidiaries with benefits comparable with those received by employees who are able to subscribe directly, or indirectly through the intermediary of a company collective investment fund, and will be completed prior to the Shareholders' Meeting held on May 17, 2013.

As a result of the use of the delegations granted under the seventeenth and eighteenth resolutions of the Shareholders' Meeting held on May 11, 2012, by the Board of Directors on September 18, 2012, and given that the Board of Directors did not make use of the delegations of authority granted by the thirteenth, fourteenth and sixteenth resolutions, the authorized capital not issued was €2.46 billion as of December 31, 2012, representing 982 million shares.

1.3.6. Eleventh resolution of the Shareholders' Meeting held on May 13, 2011

Authority to grant restricted outstanding or new TOTAL shares to employees of the Group and to corporate executive officers up to a maximum of 0.8% of the share capital outstanding on the date of the meeting of the Board of Directors that approves the restricted share grants. In addition, the shares granted to the Company's corporate executive officers cannot exceed 0.01% of the outstanding share capital on the date of the meeting of the Board of Directors that approves the grants (authorization valid for thirty-eight months).

Pursuant to this authorization:

- 3,700,000 outstanding shares were awarded by the Board of Directors at its meeting on September 14, 2011, including 16,000 outstanding shares awarded to the Chairman and Chief Executive Officer;
- 4,300,000 outstanding shares were awarded by the Board of Directors on July 26, 2012, including 53,000 outstanding shares awarded to the Chairman and Chief Executive.

As of December 31, 2012, 10,927,465 shares, including 167,593 to the Company's corporate executive officers could, therefore, still be awarded pursuant to this authorization.

1.3.7. Twenty-first resolution of the Shareholders' Meeting held on May 21, 2010

Authority to grant stock options to TOTAL employees and to corporate executive officers up to a maximum of 1.5% of the share capital outstanding on the date of the meeting of the Board of Directors that approves the stock option grant. In addition, the options granted to the Company's corporate executive officers cannot exceed 0.1% of the outstanding share capital on the date of the meeting of the Board of Directors that approves the grants (authorization valid for thirty-eight months).

Pursuant to this authorization:

- 4,925,000 stock options were awarded by the Board of Directors at its meeting on September 14, 2010, including 240,000 stock options to the Chairman and Chief Executive Officer;
- 1,600,000 stock options were awarded by the Board of Directors at its meeting on September 14, 2011, including 160,000 stock options to the Chairman and Chief Executive Officer.

As of December 31, 2012, 28,963,997 stock options, including 1,965,933 to the Company's corporate executive officers, could still be awarded pursuant to this authorization.

1.3.8. Nineteenth resolution of the Shareholders' Meeting held on May 11, 2012

Authority to cancel shares up to a maximum of 10% of the share capital of the Company existing as of the date of the operation within a twenty-four-month period. This authorization is effective until the Shareholders' Meeting held to approve the financial statements for the year ending December 31, 2016. The Board did not make use of this delegation of authority during fiscal year 2012.

Based on 2,365,933,146 shares outstanding on December 31, 2012, the Company may, up until the conclusion of the Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2016, cancel a maximum of 236,593,314 shares before reaching the cancellation threshold of 10% of share capital canceled during a twenty-four-month period.

1.3.9. Table compiled in accordance with Article L 225-100 of the French Commercial Code summarizing the use of delegations of authority and powers granted to the Board of Directors with respect to capital increases as of December 31, 2012

Type		Par value limit, or maximum number of shares expressed as % of share capital (par value, number of shares or % of share capital)	Use in 2012, par value, or number of shares	Available balance as of 12/31/2012 par value, or number of shares	Date of delegation of authority or authorization by the Extraordinary Shareholders' Meeting	Term of authorization granted to the Board of Directors
Maximum cap for the issuance of securities granting immediate or future rights to share capital	Debt securities representing rights to capital	€ 10 billion in securities	-	€ 10 billion	May 11, 2012 (13th, 14th and 16th resolutions)	26 months
	Nominal share capital	€ 2.5 billion, *i.e.* a maximum of 1 billion shares issued with a pre-emptive subscription right, of which:	18 million shares (within the specific cap 2/below)	€ 2,46 billion[a] (*i.e.* 982 million shares)	May 11, 2012 (13th resolution)	26 months
		1/ a specific cap of €850 million, *i.e.* a maximum of 340 million shares for issuances without pre-emptive subscription rights (with potential use of a greenshoe), including the compensation comprised of securities as part of a public exchange offer, provided that they meet the requirements of Article L. 225-148 of the French Commercial Code, of which:	-	€ 850 million	May 11, 2012 (14th resolution)	26 months
		1/a sub-cap of 10% of the share capital on the date of the Shareholders' Meeting on May 11, 2012[b] through in-kind contributions when provisions of Article L. 225-148 of the French Commercial Code are not applicable	-	€ 591.1 million	May 11, 2012 (16th resolution)	26 months
		2/ a specific cap of 1.5% of the share capital on the date of Board[c] decision for: (i) capital increases reserved for employees participating in Company Savings Plan (17th resolution) and (ii) reserved capital increases to introduce an employee savings scheme for employees of foreign subsidiaries (18th resolution)	18 million shares[d]	17.5 million shares[d]	May 11, 2012 (17th and 18th resolutions)	26 months (17th resolution) and 18 months (18th resolution)
Stock option grants		1.5% of share capital[c] on the date of Board decision to grant options	-	29.0 million shares[e]	May 21, 2010 (21st resolution)	38 months
Restricted shares awarded to Group employees and to corporate executives officers		0.8% of share capital[c] on the date of Board decision to grant the restricted shares	4.3 million shares[f]	10.9 million shares[f]	May 13, 2011 (11th resolution)	38 months

(a) The number of new shares authorized under the 13th resolution of the ESM held on May 11, 2012 cannot exceed 1 billion shares. The Board of Directors decided on September 18, 2012 to proceed with a capital increase in 2013 of up to a maximum of 18 million shares (see Note (d) below). As a result, the available balance under this authorization was 982,000,000 new shares as at December 31, 2012.

(b) Share capital as of May 11, 2012: 2,364,546,966 shares.

(c) Share capital as of December 31, 2012: 2,365,933,146 shares.

(d) The number of shares authorized under the 17th and 18th resolutions of the May 11, 2012 ESM may not exceed 1.5% of the share capital on the date when the Board of Directors decides to use the delegation of authority. The Board of Directors decided on September 18, 2012 to proceed with a capital increase in 2013 of up to a maximum of 18 million shares. This capital increase was reserved for employees and financial institutions involved at TOTAL's request or companies or entities set up specifically and exclusively to implement an employee savings scheme with the objective of providing employees of foreign subsidiaries with benefits comparable with those received by employees who are able to subscribe directly, or indirectly through the intermediary of a company collective investment fund. As a result, the available balance under these authorizations was 17,488,997 new shares as at December 31, 2012.

(e) The number of stock options authorized under the 21st resolution of the May 21, 2010 ESM may not exceed 1.5% of the share capital on the date the options are awarded by the Board of Directors. Since 4,925,000 TOTAL share subscription options were awarded by the Board of Directors on September 14, 2010 and 1,600,000 TOTAL share subscription options were awarded by the Board of Directors on September 14, 2011, the number of options that may still be awarded as of December 31, 2012, was 28,963,997. In addition, the options that may be awarded to the Company's corporate executive officers under the 21st resolution of the ESM held on May 21, 2010, cannot exceed 0.1% of the outstanding share capital on the date of the decision of the Board of Directors to proceed with the grant. Given the 240,000 subscription options awarded to the Chairman and Chief Executive Officer by the Board of Directors at its meeting on September 14, 2010, and the 160,000 stock options awarded to the Chairman and Chief Executive Officer on September 14, 2011, the number of options that may still be awarded to the Company's corporate executive officers was 1,965,933.

(f) The number of shares that may be awarded as restricted share grants under the 11th resolution of the May 13, 2011 ESM may not exceed 0.8% of the share capital on the date when the restricted shares are awarded by the Board of Directors. As the Board of Directors awarded 3,700,000 outstanding shares on September 14, 2011, and 4,300,000 outstanding shares on July 26, 2012, the number of shares that may still be awarded as of December 31, 2012 is 10,927,465 shares. In addition, the shares awarded under presence and performance conditions to the Company's corporate executive officers under the 11th resolution of the ESM held on May 13, 2011, cannot exceed 0.01% of the outstanding share capital on the date of the decision of the Board of Directors to proceed with the grant. Given the 16,000 outstanding shares awarded under presence and performance conditions to the Chairman and Chief Executive Officer by the Board of Directors at its meeting on September 14, 2011 and the 53,000 outstanding shares awarded under presence and performance conditions to the Chairman and Chief Executive Officer by the Board of Directors at its meeting on July 26, 2012, the number of outstanding shares that may still be awarded to the Company's corporate executive officers was 167,593.

1.4. Potential share capital as of December 31, 2012

Securities granting rights to TOTAL shares, through exercise or redemption, are TOTAL share subscription options amounting to 32,462,382 share subscription options as of December 31, 2012, divided into:

- 6,160,020 options[1] for the plan awarded by the Board of Directors on July 19, 2005;
- 5,621,526 options for the plan awarded by the Board of Directors on July 18, 2006;
- 5,848,985 options for the plan awarded by the Board of Directors on July 17, 2007;
- 4,330,468 options for the plan awarded on October 9, 2008 by decision of the Board of Directors on September 9, 2008;
- 4,334,900 options for the plan awarded by the Board of Directors on September 15, 2009;
- 4,661,443 options for the plan awarded by the Board of Directors on September 14, 2010; and
- 1,505,040 options for the plan awarded by the Board of Directors on September 14, 2011.

The potential share capital (existing share capital plus securities granting rights to TOTAL shares, through exercise or redemption) of 2,398,395,528 shares, represents 101.37% of the share capital as of December 31, 2012, on the basis of 2,365,933,146 TOTAL shares constituting the share capital as of December 31, 2012, and of 32,462,382 TOTAL shares that could be issued upon the exercise of TOTAL options.

In addition, the global free TOTAL share plan intended for all Group Employees awarded by the Board of Directors at its meeting on May 21, 2010, is likely to result in the issuance of a maximum of 974,900 shares as of December 31, 2012.

1.5. TOTAL shares held by the Companies or its subsidiaries

As of December 31, 2012

Percentage of share capital held by TOTAL S.A.	0.34%
Number of shares held in portfolio	8,060,371
Book value of portfolio (at purchase price) (M€)	316
Market value of portfolio (M€)[a]	314
Percentage of capital held by the entire Group[b]	**4.58%**
Number of shares held in portfolio	108,391,639
Book value of portfolio (at purchase price) (M€)	3,342
Market value of portfolio (M€)[a]	4,228

(a) Based on a market price of €39.01 per share as of December 31, 2012.
(b) TOTAL S.A., Total Nucléaire, Financière Valorgest, Sogapar and Fingestval.

1.6. Share capital history

(Since January 1, 2010)

1.6.1. For fiscal year 2010

January 12, 2011 — Acknowledgement of the issuance of 1,218,047 new shares, par value €2.50 per share, through the exercise of stock options between January 1 and December 31, 2010, raising the share capital by €3,045,117.50 from €5,871,057,210 to €5,874,102,327.50.

1.6.2. For fiscal year 2011

April 28, 2011 — Acknowledgement of the subscription to 8,902,717 new shares, par value €2.50 per share, as part of the capital increase reserved for Group Employees approved by the Board of Directors on October 28, 2010, raising the share capital by €22,256,792.50, from €5,874,102,327.50 to €5,896,359,120.

January 12, 2012 — Acknowledgement of the issuance of 5,223,665 new shares, par value €2.50 per share, through the exercise of stock options between January 1 and December 31, 2011, raising the share capital by €13,059,162.50 from €5,896,359,120 to €5,909,418,282.50.

(1) After considering the May 22, 2006 adjustments of the price and the number of share options, in accordance with the legal provisions in force at that date and following decisions of the Shareholders' Meeting held on May 12, 2006 pertaining to the four-for-one stock split of TOTAL and the spin-off of Arkema.

1.6.3. For fiscal year 2012

July 2, 2012	Acknowledgement of the issuance of 1,366,950 new shares, par value €2.50 per share, as part of the global free TOTAL share plan to Group Employees decided by the Board of Directors on May 21, 2010, raising the share capital by €3,417,375 from €5,909,418,282.50 to €5,912,835,657.50.
January 8, 2013	Acknowledgement of the issuance of 798,883 new shares, par value €2.50 per share, through the exercise of stock options between January 1 and December 31, 2012, raising the share capital by €1,997,207.50 from €5,912,835,657.50 to €5,914,832,865.

2. Articles of incorporation and by-laws; other information

2.1. General information concerning the Company

2.1.1. Name

TOTAL S.A.

2.1.2. Headquarters

2, place Jean Millier, La Défense 6, 92400 Courbevoie (France)

2.1.3. Legal form and nationality

A French "*société anonyme*" (limited liability company)

2.1.4. Trade Registry

542 051 180 RCS Nanterre

2.1.5. EC Registration Number

FR 59 542 051 180

2.1.6. By-laws

On file with K.L. Associés, Notaries in Paris

2.1.7. APE Code (NAF)

111Z until January 7, 2008

7010Z since January 8, 2008

2.1.8. Term

99 years from March 22, 2000, to expire on March 22, 2099, unless dissolved prior to this date or extended

2.1.9. Fiscal year

From January 1 to December 31 of each year

2.2. Summary of the Company's purpose

The direct and indirect purpose of the Company is to search for and extract mining deposits in all countries, particularly hydrocarbons in all forms, and to perform industrial refining, processing and trading in said materials as well as their derivatives and by-products, as well as all activities relating to production and distribution of all forms of energy, as well as the chemicals sector in all of its forms and to the rubber and health sectors. The complete details of the Company's corporate purpose are set forth in Article 3 of the by-laws.

2.3. Provisions of the by-laws governing the administration and management bodies

2.3.1. Election of directors and term of office

Directors are elected by the Shareholders' Meeting for a 3-year term up to a maximum number of directors authorized by law (currently 18), subject to the legal provisions that allow the term to be extended until the next Shareholders' Meeting called to approve the financial statements for the previous fiscal year.

In addition, one director representing the employee shareholders is also elected by the Shareholders' Meeting for a 3-year term from a list of at least two candidates pre-selected by the employee shareholders under the conditions provided for by the laws, regulations and by-laws in force. However, his term shall expire automatically once this Director is no longer an employee or a shareholder. The Board of Directors may meet and conduct valid deliberations until the date his replacement is named.

2.3.2. Age limit of directors

On the closing date of each fiscal year, the number of individual directors over the age of 70 may not be greater than one-third of the directors in office.

If this percentage is exceeded, the oldest Board member is automatically considered to have resigned.

The director permanent representative of a legal entity must be under 70 years old.

2.3.3. Age limit of the Chairman and the Chief Executive Officer

The duties of the Chairman of the Board and the Chief Executive Officer automatically cease on their 65th birthday at the latest.

The Shareholders' Meeting of May 15, 2009, approved an amendment of the by-laws pertaining to the rules relating to the nomination of the Chairman. The amendment allows the Board, as an exception to the applicable 65-year age limit, to appoint as Chairman of the Board for a period of up to two years a director who is more than 65 years old but less than 70 years old.

2.3.4. Minimum interest in the Company held by directors

Each director (other than the director representing the employee shareholders) must own at least 1,000 shares of stock during his term of office. If he ceases to own the required number of shares, he may, however, adjust his position subject to the conditions set by law. The director representing employee shareholders must hold, during his term of office, either individually or through a Company Savings Plan ("*Fonds Commun de Placement d'Entreprise*" - FCPE) governed by Article L. 214-40 of the French Monetary and Finance Code, at least one share or a number of units in said fund equivalent to at least one share.

2.3.5. Majority rules for Board meetings

Decisions are adopted by a majority vote of the Directors present or represented. In the event of a tie vote, the Chairman shall cast the deciding vote.

2.3.6. Rules of procedure of the Board and Committees of the Board of Directors

See Chapter 5, point 1. (Corporate Governance – Report of the Chairman of the Board of Directors) of this Registration Document.

2.3.7. Form of Management

The Management of the Company is assumed either by the Chairman of the Board of Directors (who then holds the title of the Chairman and Chief Executive Officer), or by another person appointed by the Board of Directors with the title of Chief Executive Officer. It is the responsibility of the Board of Directors to choose between these two forms of management under the majority rules described above.

On May 21, 2010, the Board of Directors decided to reunify the positions of Chairman and Chief Executive Officer and appointed the Chief Executive Officer in the position of Chairman and Chief Executive Officer (refer to Chapter 5, paragraph 1.7.1. for more details).

The management form selected remains in effect until a decision to the contrary is made by the Board of Directors.

2.4. Rights, privileges and restrictions attached to the shares

In addition to the right to vote, each share entitles the holder to a portion of the corporate assets, distributions of profits and liquidation dividend which is proportional to the number of shares issued, subject to the laws and regulations in force and the by-laws.

With the exception of the double voting right, no privilege is attached to a specific class of shares or to a specific class of shareholders.

2.4.1. Double voting rights

Double voting rights, in relation to the portion of share capital they represent, are granted to all fully paid-up registered shares held continuously in the name of the same shareholder for at least two years[(1)], and to additional registered shares allotted to a shareholder in connection with a capital increase by capitalization of reserves, profits or premiums on the basis of the existing shares which entitle the shareholder to a double voting right.

2.4.2. Limitation of voting rights

Article 18 of the Company's by-laws provides that at Shareholders' Meetings, no shareholder may cast, by himself or through his agent, on the basis of the single voting rights attached to the shares he holds directly or indirectly and the shares for which he holds powers, more than 10% of the total number of voting rights attached to the Company's shares. In the case of double voting rights, by himself or through his agent, this limit may be exceeded, taking only the resulting additional voting rights into account, provided that the total voting rights that he exercises do not exceed 20% of the total voting rights associated with the shares in the Company.

Moreover, Article 18 of the by-laws also provides that the limitation on voting rights no longer applies, absent any decision of the Shareholders' Meeting, if an individual or a legal entity acting solely or together with one or more individuals or entities acquires at least two-thirds of the Company's shares following a public tender offer for all the Company's shares. In that case, the Board of Directors acknowledges that the limitation no longer applies and carries out the necessary procedure to modify the Company's by-laws accordingly.

Once acknowledged, the fact that the limitation no longer applies is final and applies to all Shareholders' Meetings following the public tender offer under which the acquisition of at least two-third of the overall number of shares of the Company was made possible, and not solely to the first meeting following that public tender offer.

Because of the fact that in such circumstances the limitation no longer applies, such limitation on voting rights cannot prevent or delay any takeover of the Company, except in case of a public tender offer where the bidder does not acquire at least two-thirds of the Company's shares.

2.4.3. Fractional rights

Whenever it is necessary to own several shares in order to exercise a right, a number of shares less than the number required does not give the owners any right with respect to the Company; in such case, the shareholders are responsible for aggregating the required number of shares.

2.4.4. Statutory allocation of profits

The net profit for the period is equal to the net income minus general expenses and other personnel expenses, all amortization and depreciation of the assets, and all provisions for commercial and industrial contingencies.

From this profit, minus prior losses, if any, the following items are deducted in the order indicated:

1) 5% to constitute the legal reserve fund, until said fund reaches 10% of the share capital;

2) the amounts set by the Shareholders' Meeting to fund reserves for which it determines the allocation or use; and

3) the amounts that the Shareholders' Meeting decides to retain.

The remainder is paid to the shareholders as dividends.

The Board of Directors may pay interim dividends.

The Shareholders' Meeting held to approve the financial statements for the fiscal year may decide to grant shareholders an option, for all or part of the dividend or interim dividends, between payment of the dividend in cash or in shares.

The Shareholders' Meeting may decide at any time, but only based on a proposal by the Board of Directors, to make a full or partial distribution of the amounts in the reserve accounts, either in cash or in Company shares.

Dividends which have not been claimed at the end of a 5-year period are forfeited to the French government.

2.5. Amending shareholders' rights

Any amendment to the by-laws must be approved or authorized by the Shareholders' Meeting voting with the quorum and majority required by the laws and regulations governing Extraordinary Shareholders' Meetings.

(1) This term is not interrupted and the right acquired is retained in case of a conversion of bearer to bearer pursuant to intestate or testamentary succession, share of community property between spouses or donation to the spouse or relatives entitled to inherit (Article 18 § 6 of by-laws).

2.6. Shareholders' Meetings

2.6.1. Notice of meetings

Shareholders' Meetings are convened and conducted under the conditions provided for by law.

2.6.2. Admission to meetings

Participation in any form in Shareholders' Meetings is subject to registration or record of participating shares. Shares must either be held in the registered account maintained by the Company (or its securities agent) or recorded in bearer form in a securities account maintained by a financial intermediary. Proof of this registration or record is obtained under a certificate of participation ("*attestation de participation*") delivered to the shareholder. This registration or recording of the shares must be effective no later than a "record date" at 0: 00 a.m. (Paris time) the third business days preceding the date of the Shareholders' Meeting. If, after having received such a certificate, shares are sold or transferred prior to this record date, the certificate of participation will be canceled and the votes sent by mail or proxies granted to the Company for such shares will be canceled accordingly. If shares are sold or transferred after this record date, the certificate of participation will remain valid and votes cast or proxies granted will be taken into account.

2.7. Thresholds to be declared according to the by-laws

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, as specified in the preceding paragraph, any shares held in excess of the threshold that should have been declared will be deprived of voting rights at Shareholders' Meetings if, at a 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 thresholds mentioned in the first paragraph.

2.8. Changes in the share capital

The Company's share capital may be changed only under the conditions stipulated by the legal and regulatory provisions in force. No provision of the by-laws, charter, or internal regulations provide for more stringent conditions than the law governing changes in the Company's share capital.

3. Other matters

3.1. Employee incentives and profit-sharing

On June 29, 2012, a new incentive and profit-sharing agreement was signed for 2012, 2013 and 2014, concerning TOTAL S.A., Elf Exploration Production, Total Exploration Production France, CDF Énergie, Total Raffinage Marketing, Total Additifs et Carburants Spéciaux, Total Lubrifiants, Total Fluides, Totalgaz, Total Raffinage-Chimie, Total Petrochemicals France and Total Raffinage France. The amount of the special profit-sharing and incentive reserve to be distributed by all of the companies that signed the Group agreements for fiscal year 2012 would total approximately €150 million.

Company savings plans give employees of the French Group's companies covered by these plans the ability to make discretionary contributions (which the Company may, under certain conditions, supplement) to the plans invested in the shares of the Company (see paragraph 6.2. of Chapter 5).

The Group made gross additional contributions ("abondement") to various savings plans that totaled €73.3 million in 2012.

3.2. Pension savings plan

The September 29, 2004 Group agreement on the provisions for retirement savings set up a Collective Retirement Savings Plan (PERCO). An amendment to this plan signed on April 15, 2011 provides for the additional contribution of credit transferred from the time-savings scheme to the PERCO (CET-PERCO gateway).

An amendment to the plan signed on March 30, 2012 adjusted the management mechanisms of the PERCO in order to better secure retirement savings and extended the scope of the agreement to include Total Petrochemicals France, Total Raffinage-Chimie and Total Raffinage France.

3.3. Agreements mentioned in Article L. 225-100-3 of the French Commercial Code

There are no agreements mentioned in paragraph 9 or 10 of Article L. 225-100-3 of the French Commercial Code.

3.4. Filing of Form 20-F with the United States Securities and Exchange Commission

In order to meet its obligations related to the listing of its shares in the United States, the Company files, along with this Registration Document, an annual report on Form 20-F, in English, with the SEC.

Pursuant to the requirements introduced by Section 302 of the Sarbanes-Oxley Act of July 30, 2002, the Chairman and Chief Executive Officer and the Chief Financial Officer of the Company have conducted, with the assistance of the General Management, an evaluation of the effectiveness of the disclosure controls and procedures as defined by U.S. regulations, over the period covered by the Form 20-F. For fiscal year 2012, the Chairman and Chief Executive Officer and the Chief Financial Officer concluded that the disclosure controls and procedures were effective (refer to point 1.10. in Chapter 5).

4. Documents on display

Documents and information concerning TOTAL S.A., including its by-laws and the Company's statutory and consolidated financial statements for the year ended December 31, 2012 or for previous fiscal years may be consulted at the Company's registered office pursuant to the legal and regulatory provisions in force.

TOTAL's registration documents filed with the French Financial Markets Authority (*Autorité des marchés financiers*) for each of the past five fiscal years, the first half financial reports, the first half Group presentations of its results and outlook, as well as the quarterly financial information, are available on the Company's website (total.com, Investor/Regulated Information in France).

5. Information on holdings

5.1. General information

As of December 31, 2012, there were 883 consolidated subsidiaries, of which 803 were fully consolidated and 80 were accounted for under the equity method.

TOTAL S.A.'s scope of consolidation includes at least all companies in which the Company holds a direct or indirect interest, the book value of which on that date is at least equal to 10% of the amount of TOTAL S.A.'s equity or of the consolidated net assets of the Group, or which has generated at least 10% of the TOTAL S.A.'s net income or of the Group's consolidated net income during the last year.

A list of the principal companies consolidated by TOTAL S.A. is provided in a summary table in Note 35 to the Consolidated Financial Statements of this Registration Document (point 7., Chapter 9).

5.2. TOTAL's interest in Sanofi

In fiscal year 2012, TOTAL sold the remainder of its holding in Sanofi, held indirectly through its subsidiary Elf Aquitaine.

On February 16, 2012, TOTAL S.A. declared in the AMF notice No. 212C0276 that on February 15, 2012, its voting rights in Sanofi indirectly fell below the 5% threshold and that it holds 2.83% of the share capital and 4.69% of the voting rights of the company (following the conversion of registered Sanofi shares to bearer shares, which caused a decrease in the number of voting rights, and to the disposal of Sanofi shares on the market).

Over the years 2010 and 2011, TOTAL's interest in Sanofi successively changed from 7.33% of the outstanding shares and 12.29% of the voting rights on December 31, 2009, to 5.51% of the outstanding shares and 9.15% of the voting rights on December 31, 2010, and then to 3.22% of the outstanding shares and 5.46% of the voting rights on December 31, 2011.

5.3. TOTAL's interest in Novatek

On March 2, 2011, TOTAL announced the signing of an agreement in principle to acquire a 12.09% capital interest in Novatek, a Russian company listed on the Moscow Interbank Currency Exchange and the London Stock Exchange, with both parties intending TOTAL to increase its stake to 15% within 12 months and to 19.40% within 36 months.

TOTAL acquired its 12.09% capital interest in Novatek on April 1, 2011 by purchasing shares from Novatek's two major shareholders. Further to this transaction, TOTAL is now represented on the Novatek Board of Directors.

TOTAL raised its stake to 14.09% on December 8, 2011, by acquiring an additional 2% capital interest in Novatek from its two major shareholders, in the framework of the agreement concluded in March 2011.

In 2012, TOTAL proceeded to the acquisition of shares in Novatek on a gradual basis. As of December 31, 2012, TOTAL held (through its subsidiary Total E&P Arctic Russia) 465,846,900 shares out of a total of 3,036,306,000 outstanding shares, representing 15.34% of Novatek's share capital and voting rights.

5.4. TOTAL's interest in SunPower

On April 28, 2011, SunPower, an American company listed on the NASDAQ, and TOTAL announced the signing of a strategic agreement for the acquisition by TOTAL, through a friendly takeover bid, of 60% of SunPower's outstanding shares for a price of $23.25 per share, totaling around $1.4 billion. The friendly takeover bid was concluded successfully on June 21, 2011.

TOTAL also signed in 2011 a five-year financial guarantee agreement with SunPower for a maximum amount of $1 billion, as well as a liquidity support agreement for a maximum amount of $600 million for a maximum five-year term.

In January 2012, TOTAL's interest in SunPower increased to 66% as the result of capital increase coinciding with the Tenesol transaction (see paragraph 4.2.1.1.1., Chapter 2).

As of December 31, 2012, TOTAL held (through its subsidiary Total Gas & Power USA) 78,576,682 shares out of a total of 119,234,280 outstanding shares, representing 65.90% of SunPower's share capital and voting rights.

Consolidated Financial Statements

The Management report was approved by the Board of Directors on February 12, 2013 and has not been updated with subsequent events.

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1. Statutory auditor's report on the Consolidated Financial Statements

This is a free translation into English of the statutory auditors' report on the Consolidated Financial Statements issued in French and it is provided solely for the convenience of English-speaking users.
The statutory auditors' report includes information specifically required by French law in such reports, whether modified or not.
This information is presented below the audit opinion on the Consolidated Financial Statements and includes an explanatory paragraph discussing the auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the Consolidated Financial Statements taken as a whole and not to provide separate assurance on individual account balances, transactions or disclosures.
This report also includes information relating to the specific verification of information given in the Group's Management Report.
This report should be read in conjunction with and construed in accordance with French law and professional auditing standards applicable in France.

Year ended December 31, 2012

To the Shareholders,

In compliance with the assignment entrusted to us by your General Shareholder's Annual Meeting, we hereby report to you, for the year ended 31 December 2012, on:
- the audit of the accompanying Consolidated Financial Statements of TOTAL S.A.;
- the justification of our assessments;
- the specific verification required by law.

These Consolidated Financial Statements have been approved by the Board of Directors. Our role is to express an opinion on these Consolidated Financial Statements based on our audit.

I. Opinion on the Consolidated Financial Statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Consolidated Financial Statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the Consolidated Financial Statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the Consolidated Financial Statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the Consolidated Financial Statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2012 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

II. Justification of our assessments

In accordance with the requirements of Article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

As stated in the Note "Introduction" to the Consolidated Financial Statements, some accounting principles applied by TOTAL S.A. involve a significant amount of assumptions and estimates. Actual results may differ significantly from these estimates, if different assumptions or circumstances apply. 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. These assumptions and estimates are principally related to the application of the successful efforts method for the oil and gas activities, the depreciation of long-lived assets, the provisions for dismantlement, removal and environmental costs, the valuation of retirement obligations and the determination of the current and deferred taxation. Detailed information relating to the application of these accounting principles is given in the notes to the Consolidated Financial Statements.

In order to assess the reasonableness of management's estimates, we performed audit procedures, using sampling techniques, that entailed the review of the assumptions and calculations on which the estimates are based on, the comparison of prior years' actual results to their related estimates and the review of management's process for approving the estimates. Additionally, the notes to the financial statements were reviewed to ensure that appropriate information regarding the estimates used by management had been disclosed.

These assessments were made as part of our audit of the Consolidated Financial Statements taken as a whole; and therefore contributed to the opinion we formed which is expressed in the first part of this report.

III. Specific verification

As required by law we have also verified, in accordance with professional standards applicable in France, the information relative to the Group, given in the parent Company's Management Report.

We have no matters to report as to its fair presentation and its consistency with the Consolidated Financial Statements.

Paris-La Défense, March 7, 2013

The statutory auditors

French original signed by

KPMG Audit
A division of KPMG S.A.
Jay Nirsimloo

ERNST & YOUNG Audit
Pascal Macioce
Laurent Vitse

2. Consolidated statement of income

TOTAL

For the year ended December 31,

(M€) [a]		2012	2011	2010
Sales	*(notes 4 & 5)*	**200,061**	**184,693**	**159,269**
Excise taxes		(17,762)	(18,143)	(18,793)
Revenues from sales		182,299	166,550	140,476
Purchases net of inventory variation	*(note 6)*	(126,798)	(113,892)	(93,171)
Other operating expenses	*(note 6)*	(22,668)	(19,843)	(19,135)
Exploration costs	*(note 6)*	(1,446)	(1,019)	(864)
Depreciation, depletion and amortization of tangible assets and mineral interests		(9,525)	(7,506)	(8,421)
Other income	*(note 7)*	1,462	1,946	1,396
Other expense	*(note 7)*	(915)	(1,247)	(900)
Financial interest on debt		(671)	(713)	(465)
Financial income from marketable securities & cash equivalents		100	273	131
Cost of net debt	*(note 29)*	(571)	(440)	(334)
Other financial income	*(note 8)*	558	609	442
Other financial expense	*(note 8)*	(499)	(429)	(407)
Equity in income (loss) of affiliates	*(note 12)*	2,010	1,925	1,953
Income taxes	*(note 9)*	(13,066)	(14,073)	(10,228)
Consolidated net income		**10,841**	**12,581**	**10,807**
Group share		10,694	12,276	10,571
Non-controlling interests		147	305	236
Earnings per share (€)		4.74	5.46	4.73
Fully-diluted earnings per share (€)		4.72	5.44	4.71

(a) Except for per share amounts.

3. Consolidated statement of comprehensive income

TOTAL

For the year ended December 31,

(M€)	2012	2011	2010
Consolidated net income	**10,841**	**12,581**	**10,807**
Other comprehensive income			
Currency translation adjustment	(701)	1,498	2,231
Available for sale financial assets	(338)	337	(100)
Cash flow hedge	65	(84)	(80)
Share of other comprehensive income of associates, net amount	160	(15)	302
Other	(13)	(2)	(7)
Tax effect	63	(55)	28
Total other comprehensive income (net amount) *(note 17)*	**(764)**	**1,679**	**2,374**
Comprehensive income	**10,077**	**14,260**	**13,181**
Group share	*9,969*	*13,911*	*12,936*
Non-controlling interests	*108*	*349*	*245*

4. Consolidated balance sheet

TOTAL

As of December 31,
(M€)

ASSETS		2012	2011	2010
Non-current assets				
Intangible assets, net	*(notes 5 & 10)*	12,858	12,413	8,917
Property, plant and equipment, net	*(notes 5 & 11)*	69,332	64,457	54,964
Equity affiliates: investments and loans	*(note 12)*	13,759	12,995	11,516
Other investments	*(note 13)*	1,190	3,674	4,590
Hedging instruments of non-current financial debt	*(note 20)*	1,626	1,976	1,870
Deferred income taxes	*(note 9)*	1,832	1,767	1,378
Other non-current assets	*(note 14)*	3,715	3,104	2,277
Total non-current assets		**104,312**	**100,386**	**85,512**
Current assets				
Inventories, net	*(note 15)*	17,397	18,122	15,600
Accounts receivable, net	*(note 16)*	19,206	20,049	18,159
Other current assets	*(note 16)*	10,086	10,767	7,483
Current financial assets	*(note 20)*	1,562	700	1,205
Cash and cash equivalents	*(note 27)*	15,469	14,025	14,489
Assets classified as held for sale	*(note 34)*	3,797	-	1,270
Total current assets		**67,517**	**63,663**	**58,206**
Total assets		**171,829**	**164,049**	**143,718**

LIABILITIES & SHAREHOLDERS' EQUITY		2012	2011	2010
Shareholders' equity				
Common shares		5,915	5,909	5,874
Paid-in surplus and retained earnings		71,827	66,506	60,538
Currency translation adjustment		(1,488)	(988)	(2,495)
Treasury shares		(3,342)	(3,390)	(3,503)
Total shareholders' equity - Group share	*(note 17)*	**72,912**	**68,037**	**60,414**
Non-controlling interests		**1,281**	**1,352**	**857**
Total shareholders' equity		**74,193**	**69,389**	**61,271**
Non-current liabilities				
Deferred income taxes	*(note 9)*	12,785	12,260	9,947
Employee benefits	*(note 18)*	1,973	2,232	2,171
Provisions and other non-current liabilities	*(note 19)*	11,585	10,909	9,098
Non-current financial debt	*(note 20)*	22,274	22,557	20,783
Total non-current liabilities		**48,617**	**47,958**	**41,999**
Current liabilities				
Accounts payable		21,648	22,086	18,450
Other creditors and accrued liabilities	*(note 21)*	14,698	14,774	11,989
Current borrowings	*(note 20)*	11,016	9,675	9,653
Other current financial liabilities	*(note 20)*	176	167	159
Liabilities directly associated with the assets classified as held for sale	*(note 34)*	1,481	-	197
Total current liabilities		**49,019**	**46,702**	**40,448**
Total liabilities and shareholders' equity		**171,829**	**164,049**	**143,718**

5. Consolidated statement of cash flow

TOTAL

(note 27)

For the year ended December 31, (M€)	2012	2011	2010
CASH FLOW FROM OPERATING ACTIVITIES			
Consolidated net income	10,841	12,581	10,807
Depreciation, depletion and amortization	10,481	8,628	9,117
Non-current liabilities, valuation allowances, and deferred taxes	1,385	1,665	527
Impact of coverage of pension benefit plans	(362)	-	(60)
(Gains) losses on disposals of assets	(1,321)	(1,590)	(1,046)
Undistributed affiliates' equity earnings	211	(107)	(470)
(Increase) decrease in working capital	1,084	(1,739)	(496)
Other changes, net	143	98	114
Cash flow from operating activities	**22,462**	**19,536**	**18,493**
CASH FLOW USED IN INVESTING ACTIVITIES			
Intangible assets and property, plant and equipment additions	(19,905)	(17,950)	(13,812)
Acquisitions of subsidiaries, net of cash acquired	(191)	(854)	(862)
Investments in equity affiliates and other securities	(898)	(4,525)	(654)
Increase in non-current loans	(1,949)	(1,212)	(945)
Total expenditures	**(22,943)**	**(24,541)**	**(16,273)**
Proceeds from disposals of intangible assets and property, plant and equipment	1,418	1,439	1,534
Proceeds from disposals of subsidiaries, net of cash sold	352	575	310
Proceeds from disposals of non-current investments	2,816	5,691	1,608
Repayment of non-current loans	1,285	873	864
Total divestments	**5,871**	**8,578**	**4,316**
Cash flow used in investing activities	**(17,072)**	**(15,963)**	**(11,957)**
CASH FLOW USED IN FINANCING ACTIVITIES			
Issuance (repayment) of shares:			
- Parent company shareholders	32	481	41
- Treasury shares	(68)	-	49
Dividends paid:			
- Parent company shareholders	(5,184)	(5,140)	(5,098)
- Non-controlling interests	(104)	(172)	(152)
Other transactions with non-controlling interests	1	(573)	(429)
Net issuance (repayment) of non-current debt	5,279	4,069	3,789
Increase (decrease) in current borrowings	(2,754)	(3,870)	(731)
Increase (decrease) in current financial assets and liabilities	(947)	896	(817)
Cash flow used in financing activities	**(3,745)**	**(4,309)**	**(3,348)**
Net increase (decrease) in cash and cash equivalents	**1,645**	**(736)**	**3,188**
Effect of exchange rates	(201)	272	(361)
Cash and cash equivalents at the beginning of the period	14,025	14,489	11,662
Cash and cash equivalents at the end of the period	**15,469**	**14,025**	**14,489**

6. Consolidated statement of changes in shareholders' equity

TOTAL

(M€)	Common shares issued		Paid-in surplus and retained earnings	Currency translation adjustment	Treasury shares		Shareholders' equity - Group share	Non-controlling interests	Total shareholders' equity
	Number	Amount			Number	Amount			
As of January 1, 2010	**2,348,422,884**	**5,871**	**55,372**	**(5,069)**	**(115,407,190)**	**(3,622)**	**52,552**	**987**	**53,539**
Net income 2010	-	-	10,571	-	-	-	10,571	236	10,807
Other comprehensive income *(note 17)*	-	-	(216)	2,581	-	-	2,365	9	2,374
Comprehensive income	**-**	**-**	**10,355**	**2,581**	**-**	**-**	**12,936**	**245**	**13,181**
Dividend	-	-	(5,098)	-	-	-	(5,098)	(152)	(5,250)
Issuance of common shares *(note 17)*	1,218,047	3	38	-	-	-	41	-	41
Purchase of treasury shares	-	-	-	-	-	-	-	-	-
Sale of treasury shares[(a)]	-	-	(70)	-	2,919,511	119	49	-	49
Share-based payments *(note 25)*	-	-	140	-	-	-	140	-	140
Share cancellation *(note 17)*	-	-	-	-	-	-	-	-	-
Other operations with non-controlling interests	-	-	(199)	(7)	-	-	(206)	(223)	(429)
Other items	-	-	-	-	-	-	-	-	-
As of December 31, 2010	**2,349,640,931**	**5,874**	**60,538**	**(2,495)**	**(112,487,679)**	**(3,503)**	**60,414**	**857**	**61,271**
Net income 2011	-	-	12,276	-	-	-	12,276	305	12,581
Other comprehensive income *(note 17)*	-	-	231	1,404	-	-	1,635	44	1,679
Comprehensive income	**-**	**-**	**12,507**	**1,404**	**-**	**-**	**13,911**	**349**	**14,260**
Dividend	-	-	(6,457)	-	-	-	(6,457)	(172)	(6,629)
Issuance of common shares *(note 17)*	14,126,382	35	446	-	-	-	481	-	481
Purchase of treasury shares	-	-	-	-	-	-	-	-	-
Sale of treasury shares[(a)]	-	-	(113)	-	2,933,506	113	-	-	-
Share-based payments *(note 25)*	-	-	161	-	-	-	161	-	161
Share cancellation *(note 17)*	-	-	-	-	-	-	-	-	-
Other operations with non-controlling interests	-	-	(553)	103	-	-	(450)	(123)	(573)
Other items	-	-	(23)	-	-	-	(23)	441	418
As of December 31, 2011	**2,363,767,313**	**5,909**	**66,506**	**(988)**	**(109,554,173)**	**(3,390)**	**68,037**	**1,352**	**69,389**
Net income 2012	-	-	10,694	-	-	-	10,694	147	10,841
Other comprehensive income *(note 17)*	-	-	(219)	(506)	-	-	(725)	(39)	(764)
Comprehensive income	**-**	**-**	**10,475**	**(506)**	**-**	**-**	**9,969**	**108**	**10,077**
Dividend	-	-	(5,237)	-	-	-	(5,237)	(104)	(5,341)
Issuance of common shares *(note 17)*	2,165,833	6	26	-	-	-	32	-	32
Purchase of treasury shares	-	-	-	-	(1,800,000)	(68)	(68)	-	(68)
Sale of treasury shares[(a)]	-	-	(116)	-	2,962,534	116	-	-	-
Share-based payments *(note 25)*	-	-	146	-	-	-	146	-	146
Share cancellation *(note 17)*	-	-	-	-	-	-	-	-	-
Other operations with non-controlling interests	-	-	11	6	-	-	17	(16)	1
Other items	-	-	16	-	-	-	16	(59)	(43)
As of December 31, 2012	**2,365,933,146**	**5,915**	**71,827**	**(1,488)**	**(108,391,639)**	**(3,342)**	**72,912**	**1,281**	**74,193**

(a) Treasury shares related to the stock option purchase plans and restricted stock grants.

7. Notes to the Consolidated Financial Statements

On February 12, 2013, the Board of Directors established and authorized the publication of the Consolidated Financial Statements of TOTAL S.A. for the year ended December 31, 2012, which will be submitted for approval to the shareholders' meeting to be held on May 17, 2013.

Introduction

The Consolidated Financial Statements of TOTAL S.A. and its subsidiaries (the Group) are presented in Euros and 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, 2012.

The accounting principles applied in the Consolidated Financial Statements as of December 31, 2012 were the same as those that were used as of December 31, 2011 except for amendments and interpretations of IFRS which were mandatory for the periods beginning after January 1, 2012 (and not early adopted). Their adoption has no material impact on the Consolidated Financial Statements as of December 31, 2012.

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 obligations and environmental remediation, the pensions and post-retirements benefits 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 cost. Assets and liabilities are measured at fair value when required by the standards.

Accounting policies used by the Group are described below:

A) Principles of consolidation

Entities that are directly controlled by the parent company or indirectly controlled by other consolidated entities are fully consolidated.

Investments in jointly-controlled entities are consolidated under the equity method. The Group accounts for jointly-controlled operations and jointly-controlled assets by recognizing its share of assets, liabilities, income and expenses.

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 intercompany balances, transactions and income are eliminated.

B) Business combinations

Business combinations are accounted for using the acquisition method. This method requires the recognition of the acquired identifiable assets, assumed liabilities and any non-controlling interests in the companies acquired by the Group at their fair value.

The value of the purchase price is finalized within one year from the acquisition date.

The acquirer shall recognize goodwill at the acquisition date, being the excess of:

- The consideration transferred, the amount of non-controlling interests and, in business combinations achieved in stages, the fair value at the acquisition date of the investment previously held in the acquired company;
- Over the fair value at the acquisition date of acquired identifiable assets and assumed liabilities.

If the consideration transferred is lower than the fair value of acquired identifiable assets and assumed liabilities, an additional analysis is performed on the identification and valuation of the identifiable elements of the assets and liabilities. After having completed such additional analysis any residual badwill is recorded as income.

In transactions with non-controlling interests, the difference between the price paid (received) and the book value of non-controlling interests acquired (sold) is recognized directly in equity.

Non-Monetary Contributions by venturers to a jointly-controlled entity in exchange for an equity interest in the jointly-controlled entity are accounted for by applying guidance provided in SIC 13 "Jointly Controlled Entities – Non-Monetary Contributions by Venturers". A gain or loss on disposal of the previously held investment is recorded up to the share of the co-venturer in the jointly controlled entity.

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 other than the functional currency of the entity 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 the statement of income.

(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 "Non-controlling interests" (for the share of non-controlling interests) as deemed appropriate.

D) Sales and revenues from sales

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.

(i) Sale of goods

Revenues from sales are recognized when the significant risks and rewards of ownership have been passed to the buyer and when the amount is recoverable and can be reasonably measured.

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, is recognized as "Crude oil and natural gas inventories" or "Other current assets" or "Other creditors and accrued liabilities", as appropriate.

Quantities delivered that represent production royalties and taxes, when paid in cash, are included in oil and gas sales, except for the United States and Canada.

Certain transactions within the trading activities (contracts involving quantities that are purchased from 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.

(ii) Sale of services

Revenues from services are recognized when the services have been rendered.

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.

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.

(iii) Solar farm development projects

SunPower develops and sells solar farm projects. This activity generally contains a property component (land ownership or an interest in land rights). The revenue associated with the development of these projects is recognized when the entities-projects and land rights are irrevocably sold.

Revenues under contracts for construction of solar systems are recognized based on the progress of construction works, measured according to the percentage of costs incurred relative to total forecast costs.

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 expense is recognized on a straight-line basis between the grant date and vesting date.

The fair value of the options is calculated using the Black-Scholes model at the grant date.

For restricted share plans, the fair value is calculated using the market price at the grant date after deducting the expected distribution rate during the vesting period.

The number of allocated equity instruments can be revised during the vesting period in cases of non compliance with performance conditions, with the exception of those related to the market, or according to the rate of turnover of the beneficiaries.

The cost of employee-reserved capital increases is immediately expensed. A discount reduces the expense in order to account for the non-transferability 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 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).

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, excluding TOTAL shares held by TOTAL S.A. (Treasury shares) and TOTAL shares held by the Group subsidiaries which are deducted from consolidated shareholders' equity.

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, 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 and mining activity

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;
  - 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 future 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, development and production 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 duration of use of the economic life of the asset.

Proved mineral interests are depreciated using the unit-of-production method based on proved reserves.

(iii) Mining activity

Before an assessment can be made on the existence of resources, exploration costs, including studies and core drilling campaigns as a whole, are expensed.

When the assessment concludes that resources exist, the costs engaged subsequently to this assessment are capitalized temporarily while waiting for the field final development decision, if a positive decision is highly probable. Otherwise, these costs are expensed.

Once the development decision is taken, the predevelopment costs capitalized temporarily are integrated with the cost of development and depreciated from the start of production at the same pace than development assets.

Mining development costs include the initial stripping costs and all costs incurred to access resources, and particularly the costs of:

- Surface infrastructures;
- Machinery and mobile equipment which are significantly costly;
- Utilities and off-sites.

These costs are capitalized and depreciated either on a straight line basis or depleted using the UOP method from the start of production.

I) Goodwill and other intangible assets excluding mineral interests

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.

Guidance for calculating goodwill is presented in Note 1 paragraph B to the Consolidated Financial Statements. 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).

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 3 to 20 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
Transportation equipments	5-20 years
Storage tanks and related equipment	10-15 years
Specialized complex installations and pipelines	10-30 years
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 cash-generating 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. When this value is less than the carrying amount of the CGU, an impairment loss is recorded. It is allocated first to goodwill in counterpart of "Other expenses". These impairment losses are then allocated to "Depreciation, depletion and amortization of tangible assets and mineral interests" for property, plant and mineral interests and to "Other expenses" for other intangible assets.

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) Other investments

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 impairment loss, a loss is recorded in the statement of income. This impairment is reversed in the statement of income only when the securities are sold.

(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:

1) 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 underlying 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.

2) Cash flow hedge of the currency risk of the external debt. Changes in fair value are recorded in Other comprehensive Income 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 only 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" and changes in fair value are recorded in Other comprehensive income for the effective portion of the hedging and in the statement of income for the ineffective portion of the hedging. Gains or losses on hedging instruments previously recorded in equity, are reclassified to the statement of income in the same period as the total or partial disposal of the foreign activity.

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, power and coal purchase/sales contracts within 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. According to the industry practice, these instruments are considered 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 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.

Estimations of fair value, 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 has 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 paper 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. In addition stocks held for trading are measured at fair value less costs of sale.

Refining & Chemicals

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 more than two months on average.

Crude oil costs include raw material and receiving costs. Refining costs principally include crude oil costs, production costs (energy, labor, depreciation of producing assets) and an allocation of production overheads (taxes, maintenance, insurance, etc.).

Costs of chemical product inventories consist of raw material costs, direct labor costs and an allocation of production overheads. Start-up costs, general administrative costs and financing costs are excluded from the cost price of refined and chemicals products.

Marketing & Services

The costs of refined products include mainly crude oil costs, production costs (energy, labor, depreciation of producing assets) and an allocation of production overheads (taxes, maintenance, insurance, etc.).

Start-up costs, general administrative costs and financing costs are excluded from the cost price of refined products.

Product inventories purchased from entities external to the Group are valued at their purchase cost plus primary costs of transport.

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 at the opening balance sheet date, 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 are 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 are applied:

– Emission rights are managed as a cost of production and as such are recognized in inventories:
  - emission rights allocated for free are booked in inventories with a nil carrying amount,
  - purchased emission rights are booked at acquisition cost,
  - sales or annual restorations of emission rights consist of decreases in inventories recognized based on a weighted average cost,
  - if the carrying amount of inventories at closing date is higher than the market value, an impairment loss is recorded.

– At each closing, a provision is recorded in order to materialize the obligation of emission rights restoration related to the emissions of the period. This provision is calculated based on estimated emissions of the period, valued at weighted average cost of the inventories at the end of the period. It is reversed when the emission rights are restored.

– If emission rights to be delivered at the end of the compliance period are higher than emission rights (allocated and purchased) booked in inventories, the shortage is accounted for as a liability at market value.

– Forward transactions are recognized at their fair market value in the balance sheet. Changes in the fair value of such forward transactions are recognized in the statement of income.

U) Energy savings certificates

In the absence of current IFRS standards or interpretations on accounting for energy savings certificates, the following principles are applied:

– If the obligations linked to the sales of energy are greater than the number of ESC held then a liability is recorded. These liabilities are valued based on the price of last transactions;

– In the event that the number of ESC’s held exceeds the obligation at the balance sheet date this is accounted for as inventory;

– ESC inventories are valued at weighted average cost (acquisition cost for those ESC acquired or cost incurred for those ESC generated internally).

If the carrying value of the inventory of certificates at the balance sheet date is higher than the market value, an impairment loss is recorded in income.

V) 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. Depreciation of assets ceases from the date of classifcation in “Non-current assets held for sale”.

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.

W) 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 under the equity method, as provided for in the alternative method of IAS 31 "Interests in joint ventures".

X) 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, 2012, are as follows:

Standards not yet adopted by the European Union at December 31, 2012

- In November 2009, the IASB issued standard IFRS 9 "Financial Instruments" that introduces new requirements for the classification and measurement of financial assets, and included in October 2010 requirements regarding classification and measurement of financial liabilities. This standard shall be completed with texts on impairment and hedge accounting. Under standard IFRS 9, financial assets and liabilities are generally measured either at fair value through profit or loss or at amortized cost if certain conditions are met. The standard should be applicable for annual periods starting on or after January 1, 2015. The application of the standard as published in 2010 should not have any material effect on the Group's Consolidated balance sheet, statement of income and shareholder's equity.

Standards adopted by the European Union at December 31, 2012

- In May 2011, the IASB issued a package of standards on consolidation: standard IFRS 10 "Consolidated Financial Statements", standard IFRS 11 "Joint arrangements", standard IFRS 12 "Disclosure of interests in other entities", revised standard IAS 27 "Separate financial statements" and revised standard IAS 28 "Investments in associates and joint ventures". These standards are applicable for annual periods beginning on or after January 1, 2013. The application of these standards will not have a significant effect on the balance sheet, income statement and the consolidated equity of the Group.
- In June 2011, the IASB issued revised standard IAS 19 "Employee benefits", which leads in particular to the full recognition of the net position in respect of employee benefits obligations (liabilities net of assets) in the balance sheet, to the elimination of the corridor approach currently used by the Group, the elimination of the depreciation of past services costs, and to the obligation to evaluate the expected return on plan assets on a normative basis (via the discount rate used to value the debt). This standard is applicable retrospectively from January 1st, 2013. The application of this standard will have an impact on January 1st, 2013 of an increase in employee benefit provisions of €2.8 billion and a decrease in equity of €2.8 billion before tax (€1.7 billion after tax). The impact on the profit for 2011 and 2012 is not significant.
- In addition, the IASB published in May 2011 standard IFRS 13 "Fair value measurement", applicable for annual periods beginning on or after January 1, 2013, and in June 2011 revised standard IAS 1 "Presentation of financial statements", applicable for annual periods beginning on or after July 1, 2012. The application of these standards will not have a 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 Refining & Chemicals and Marketing & Services 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, depending on the nature of the inventory, determined using either the month-end prices differential between one period and another or 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) Effect of changes in fair value

The effect of changes in fair value presented as adjustment items reflects for some transactions differences between internal measure of performance used by TOTAL's management and the accounting for these transactions under IFRS.

IFRS requires that trading inventories be recorded at their fair value using period end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories based on forward prices.

Furthermore, TOTAL, in its trading activities, enters into storage contracts, which future effects are recorded at fair value in Group's internal economic performance. IFRS precludes recognition of this fair value effect.

(iv) Until June 30, 2010, TOTAL's equity share of adjustment items reconciling "Business net income" to Net income attributable to equity holders of Sanofi (see Note 3, paragraph on the sales of Sanofi shares and loss of significant influence over Sanofi).

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 non-controlling interests.

(iii) Adjusted income

Operating income, net operating income, or net income excluding the effect of adjustment items described above.

(iv) Fully-diluted adjusted earnings per share

Adjusted net income divided by the fully-diluted weighted-average number of common shares.

(v) Capital employed

Non-current assets and working capital, at replacement cost, net of deferred income taxes and non-current liabilities.

(vi) 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.

(vii) ROE (Return on Equity)

Ratio of adjusted consolidated net income to average adjusted shareholders' equity (after distribution) between the beginning and the end of the period.

(viii) 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

During 2012, 2011 and 2010, main changes in the Group structure and main acquisitions and divestments were as follows:

2012

• Upstream

– TOTAL finalized in February 2012 the acquisition in Uganda of a one-third interest in Blocks 1, 2 and 3A held by Tullow Oil plc for €1,157 million ($1,487 million), entirely consisting of mineral interests. TOTAL has become an equal partner with Tullow and CNOOC in the Blocks, each with a one-third interest and each being an operator of one of the Blocks. TOTAL is the operator of Block 1.

– TOTAL finalized during 2012 the acquisition of an additional 1.25% interest in Novatek for an amount of €368 million ($480 million), increasing TOTAL's overall interest in Novatek to 15.34%.

– TOTAL finalized in October 2012 the sale of its interest in the Cusiana field as well as a participation in OAM and ODC pipelines in Colombia to Sinochem, for an amount of €318 million ($409 million), net of cash sold.

• Holding

– During 2012, TOTAL gradually sold its remaining interest in Sanofi, generating a net capital gain of €341 million after tax. As at the December 31, 2012 the Group retains no further interest in the capital of Sanofi.

Information relating to sales in progress is presented in accordance with IFRS 5 "Non-current assets held for sale and discontinued operations" in note 34.

2011

• Upstream

– TOTAL finalized in March 2011 the acquisition from Santos of an additional 7.5% interest in Australia's GLNG project. This increases TOTAL's overall stake in the project to 27.5%.

The acquisition cost amounted to €202 million ($281 million) and mainly corresponded to the value of mineral interests that have been recognized as intangible assets in the Consolidated Balance Sheet for €227 million.

– In March 2011, Total E&P Canada Ltd., a TOTAL subsidiary, and Suncor Energy Inc. (Suncor) have finalized a strategic oil sands alliance encompassing the Suncor-operated Fort Hills mining project, the TOTAL-operated Joslyn mining project and the Suncor-operated Voyageur upgrader project. All three assets are located in the Athabasca region of the province of Alberta, in Canada.

TOTAL acquired 19.2% of Suncor's interest in the Fort Hills project, increasing TOTAL's overall interest in the project to 39.2%. Suncor, as operator, held 40.8%. TOTAL also acquired

a 49% stake in the Suncor-operated Voyageur upgrader project. For those two acquisitions, the Group paid €1,937 million (CAD 2,666 million) mainly representing the value of intangible assets for €474 million and the value of tangible assets for €1,550 million.

Furthermore, TOTAL sold to Suncor 36.75% interest in the Joslyn project for €612 million (CAD 842 million). The Group, as operator, retained a 38.25% interest in the project.

– TOTAL finalized in April 2011 the sale of its 75.8% interest in its Upstream Cameroonian affiliate Total E&P Cameroun to Perenco, for an amount of €172 million ($247 million), net of cash sold.

– TOTAL and the Russian company Novatek signed in March 2011 two Memorandums of Cooperation to develop the cooperation between TOTAL on one side, and Novatek and its main shareholders on the other side.

This cooperation was developed around the two following axes:

- In April 2011, TOTAL took a 12.09% shareholding in Novatek for an amount of €2,901 million ($4,108 million). In December 2011, TOTAL finalized the acquisition of an additional 2% interest in Novatek for an amount of €596 million ($796 million), which increased TOTAL's overall interest in Novatek to 14.09%. TOTAL considered that it had a significant influence especially through its representation on the Board of Directors of Novatek and its participation in the major Yamal LNG project. Therefore, the interest in Novatek was accounted for by the equity method since the second quarter of 2011.
- In October 2011, TOTAL finalized the acquisition of a 20% interest in the Yamal LNG project and has become Novatek's partner in this project.

– TOTAL finalized in July 2011 the sale of 10% of its interest in the Colombian pipeline OCENSA. The Group still held a 5.2% interest in this asset.

– TOTAL finalized in September 2011 the acquisition of Esso Italiana's interests respectively in the Gorgoglione concession (25% interest), which contains the Tempa Rossa field, and in two exploration licenses located in the same area (51.7% for each one). The acquisition increased TOTAL's interest in the operated Tempa Rossa field to 75%.

– TOTAL finalized in December 2011 the sale to Silex Gas Norway AS, a wholly owned subsidiary of Allianz, of its entire stake in Gassled (6.4%) and related entities for an amount of €477 million (NOK 3.7 billion).

– Total E&P USA Inc. signed in December 2011 an agreement to enter into a Joint Venture with Chesapeake Exploration L.L.C., a subsidiary of Chesapeake Energy Corporation, and its partner EnerVest Ltd. Under the terms of this agreement, TOTAL acquired a 25% share in Chesapeake's and EnerVest's liquids-rich area of the Utica shale play. TOTAL paid to Chesapeake and EnerVest €500 million ($696 million) in cash for the acquisition of these assets. TOTAL will also be committed to pay additional amounts up to $1.63 billion over a maximum period of 7 years in the form of a 60% carry of Chesapeake and EnerVest's future capital expenditures on drilling and completion of wells within the Joint Venture. Furthermore, TOTAL will also acquire a 25% share in any new acreage which will be acquired by Chesapeake in the liquids-rich area of the Utica shale play.

• Refining & Chemicals

– TOTAL finalized in July 2011 the sale of its photocure and coatings resins businesses to Arkema for an amount of €520 million, net of cash sold.

– TOTAL and International Petroleum Investment Company (a company wholly-owned by the Government of Abu Dhabi) entered into an agreement on February 15, 2011 for the sale, to International Petroleum Investment Company (IPIC), of the 48.83% equity interest held by TOTAL in the share capital of CEPSA, to be completed within the framework of a public tender offer being launched by IPIC for all the CEPSA shares not yet held by IPIC, at a unit purchase price of €28 per CEPSA share. TOTAL sold to IPIC all of its equity interest in CEPSA and received, as of July 29, 2011, an amount of €3,659 million.

• Marketing & Services

– TOTAL finalized in October 2011 the sale of most of its Marketing assets in the United Kingdom, the Channel Islands and the Isle of Man, to Rontec Investments LLP, a consortium led by Snax 24, one of the leading independent forecourt operators in the United Kingdom, for an amount of €424 million (£368 million).

– After the all-cash tender of $23.25 per share launched on April 28, 2011 and completed on June 21, 2011, TOTAL has acquired a 60% stake in SunPower Corp., a U.S. company listed on NASDAQ with headquarters in San Jose (California). Shares of SunPower Corp. continue to be traded on the NASDAQ.

The acquisition cost, whose cash payment occurred on June 21, 2011, amounted to €974 million ($1,394 million).

The goodwill amounted to $533 million and was fully depreciated on 31st December, 2011.

2010

• Upstream

– Total E&P Canada Ltd., a TOTAL subsidiary, signed in July 2010 an agreement with UTS Energy Corporation (UTS) to acquire UTS Corporation with its main asset, a 20% interest in the Fort Hills mining project in the Athabasca region of the Canadian province of Alberta.

Total E&P Canada completed on September 30, 2010 the acquisition of all UTS shares for a cash amount of 3.08 Canadian dollars per share. Taking into account the cash held by UTS and acquired by TOTAL (€232 million), the cost of the acquisition for TOTAL amounted to €862 million. This amount mainly represented the value of mineral interests that have been recognized as intangible assets in the consolidated balance sheet for €646 million and the value of tangible assets that have been recognized in the consolidated balance sheet for €217 million.

– TOTAL completed in September 2010 an agreement for the sale to BP and Hess of its interests in the Valhall (15.72%) and Hod (25%) fields, in the Norwegian North Sea, for an amount of €800 million.

– TOTAL signed in September 2010 an agreement with Santos and Petronas to acquire a 20% interest in the GLNG project in Australia. Upon completion of this transaction finalised in October 2010, the project brought together Santos (45%, operator), Petronas (35%) and TOTAL (20%).

The acquisition cost amounted to €566 million and it mainly represented the value of mineral interests that have been recognized as intangible assets in the consolidated balance sheet for €617 million.

In addition, TOTAL announced in December 2010 the signature of an agreement to acquire an additional 7.5% interest in this project.

– TOTAL sold in December 2010 its 5% interest in Block 31, located in the Angolan ultra deep offshore, to the company China Sonangol International Holding Limited.

• **Refining & Chemicals**

– TOTAL closed on April 1, 2010 the sale of its consumer specialty chemicals business, Mapa Spontex, to U.S.-based Jarden Corporation for an enterprise value of €335 million.

• **Marketing & Services**

– TOTAL and ERG announced in January 2010 that they signed an agreement to create a joint venture, named TotalErg, by contribution of the major part of their activities in the refining and marketing business in Italy. TotalErg has been operational since October 1st, 2010. The shareholder pact calls for joint governance as well as operating independence for the new entity. TOTAL's interest in TotalErg is 49% and is accounted for by the equity method (see Note 12 to the Consolidated Financial Statements).

• **Corporate**

– 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 did not already hold, representing 0.52% of Elf Aquitaine's share capital and 0.27% of its voting rights, at a price of €305 per share (including the remaining 2009 dividend). On April 13, 2010, the French *Autorité des marchés financiers* (AMF) issued its clearance decision for this offer.

The public tender offer was open from April 16 to April 29, 2010 inclusive. The Elf Aquitaine shares targeted by the offer which were not tendered to the offer have been transferred to TOTAL S.A. under the squeeze out upon payment to the shareholders equal to the offer price on the first trading day after the offer closing date, *i.e.* on April 30, 2010.

On April 30, 2010, TOTAL S.A. announced that, following the squeeze out, it held 100% of Elf Aquitaine shares, with the transaction amounting to €450 million.

In application of revised standard IAS 27 "Consolidated and Separate Financial Statements", effective for annual periods beginning on or after January 1, 2010, transactions with non-controlling interests are accounted for as equity transactions, *i.e.* in consolidated shareholder's equity.

As a consequence, following the squeeze out of the Elf Aquitaine shares by TOTAL S.A., the difference between the consideration paid and the book value of non-controlling interests acquired was recognized directly as a decrease in equity.

– During 2010, TOTAL progressively sold 1.88% of Sanofi's share capital, thus reducing its interest to 5.51%.

As from July 1, 2010, given its reduced representation on the Board of Directors and the decrease in the percentage of voting rights, TOTAL ceased to have a significant influence over Sanofi-Aventis and no longer consolidated this investment under the equity method. The investment in Sanofi is accounted for as a financial asset available for sale in the line "Other investments" of the consolidated balance sheet at its fair value, *i.e.* at the stock price.

Net income as of December 31, 2010 included a €135 million gain relating to this change in the accounting treatment.

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 and which is reviewed by the main operational decision-making body of the Group, namely the Executive Committee.

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.

Until December 31, 2011, the Group's activities were divided into three business segments as follows:

– an Upstream segment including, alongside the activities of the Exploration & Production of hydrocarbons, the activities of Gas & New Energies;

– a Downstream segment including the activities of the Refining & Marketing, and of Trading & Shipping division; and

– a Chemicals segment including Base Chemicals and Specialties.

At 31 December, 2012 the Group's activities are from now on divided into three business segments as follows:

– an Upstream segment including, alongside the activities of the Exploration & Production of hydrocarbons, the activities of Gas & Power;

– a Refining & Chemicals segment constituting a major industrial hub comprising the activitites of refining, petrochemicals, fertilizers and speciality chemicals. This segment also includes the activitites of oil Trading & Shipping; and

– a Marketing & Services segment including the global activitites of supply and marketing in the field of petroleulm products as well as the activity of New Energies.

In addition the Corporate segment includes holdings operating and financial activities.

Accordingly the business segment information for comparative periods has been restated according to the current organization in effect at December 31, 2012.

A) Information by business segment

For the year ended December 31, 2012

(M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	22,143	91,117	86,614	187	-	200,061
Intersegment sales	31,521	44,470	755	199	(76,945)	-
Excise taxes	-	(3,593)	(14,169)	-	-	(17,762)
Revenues from sales	**53,664**	**131,994**	**73,200**	**386**	**(76,945)**	**182,299**
Operating expenses	(25,914)	(129,441)	(71,525)	(977)	76,945	(150,912)
Depreciation, depletion and amortization of tangible assets and mineral interests	(7,437)	(1,445)	(607)	(36)	-	(9,525)
Operating income	**20,313**	**1,108**	**1,068**	**(627)**	**-**	**21,862**
Equity in income (loss) of affiliates and other items	2,325	213	(198)	276	-	2,616
Tax on net operating income	(12,370)	(283)	(383)	(124)	-	(13,160)
Net operating income	**10,268**	**1,038**	**487**	**(475)**	**-**	**11,318**
Net cost of net debt	-	-	-	-	-	(477)
Non-controlling interests	-	-	-	-	-	(147)
Net income	**-**	**-**	**-**	**-**	**-**	**10,694**

For the year ended December 31, 2012 (adjustments[a])

(M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	(9)	-	-	-	-	(9)
Intersegment sales	-	-	-	-	-	-
Excise taxes	-	-	-	-	-	-
Revenues from sales	**(9)**	**-**	**-**	**-**	**-**	**(9)**
Operating expenses	(586)	(199)	(229)	(88)	-	(1,102)
Depreciation, depletion and amortization of tangible assets and mineral interests	(1,200)	(206)	(68)	-	-	(1,474)
Operating income[b]	**(1,795)**	**(405)**	**(297)**	**(88)**	**-**	**(2,585)**
Equity in income (loss) of affiliates and other items	240	(41)	(119)	146	-	226
Tax on net operating income	637	70	66	(108)	-	665
Net operating income[b]	**(918)**	**(376)**	**(350)**	**(50)**	**-**	**(1,694)**
Net cost of net debt	-	-	-	-	-	-
Non-controlling interests	-	-	-	-	-	27
Net income	**-**	**-**	**-**	**-**	**-**	**(1,667)**

(a) Adjustments include special items, inventory valuation effect and the effect of changes in fair value.
(b) Of which inventory valuation effect

	Upstream	*Refining & Chemicals*	*Marketing & Services*	*Corporate*
- on operating income	-	*(179)*	*(55)*	-
- on net operating income	-	*(116)*	*(39)*	-

For the year ended December 31, 2012 (adjusted) (M€)[a]	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	22,152	91,117	86,614	187	-	200,070
Intersegment sales	31,521	44,470	755	199	(76,945)	-
Excise taxes	-	(3,593)	(14,169)	-	-	(17,762)
Revenues from sales	**53,673**	**131,994**	**73,200**	**386**	**(76,945)**	**182,308**
Operating expenses	(25,328)	(129,242)	(71,296)	(889)	76,945	(149,810)
Depreciation, depletion and amortization of tangible assets and mineral interests	(6,237)	(1,239)	(539)	(36)	-	(8,051)
Adjusted operating income	**22,108**	**1,513**	**1,365**	**(539)**	**-**	**24,447**
Equity in income (loss) of affiliates and other items	2,085	254	(79)	130	-	2,390
Tax on net operating income	(13,007)	(353)	(449)	(16)	-	(13,825)
Adjusted net operating income	**11,186**	**1,414**	**837**	**(425)**	**-**	**13,012**
Net cost of net debt	-	-	-	-	-	(477)
Non-controlling interests	-	-	-	-	-	(174)
Adjusted net income	**-**	**-**	**-**	**-**	**-**	**12,361**
Adjusted fully-diluted earnings per share (€)	**-**	**-**	**-**	**-**	**-**	**5.45**

(a) Except for earnings per share.

For the year ended December 31, 2012 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Total expenditures	19,618	1,944	1,301	80	-	22,943
Total divestments	2,798	304	152	2,617	-	5,871
Cash flow from operating activities	18,950	2,127	1,132	253	-	22,462
Balance sheet as of December 31, 2012						
Property, plant and equipment, intangible assets, net	68,310	9,220	4,433	227	-	82,190
Investments in equity affiliates	9,194	1,579	626	-	-	11,399
Loans to equity affiliates and other non-current assets	5,336	1,656	1,535	570	-	9,097
Working capital	(329)	9,623	2,821	(1,772)	-	10,343
Provisions and other non-current liabilities	(21,170)	(2,439)	(1,519)	(1,215)	-	(26,343)
Assets and liabilities classified as held for sale	3,072	-	-	-	-	3,072
Capital Employed (balance sheet)	**64,413**	**19,639**	**7,896**	**(2,190)**	**-**	**89,758**
Less inventory valuation effect	-	(3,236)	(642)	-	-	(3,878)
Capital Employed (Business segment information)	**64,413**	**16,403**	**7,254**	**(2,190)**	**-**	**85,880**
ROACE as a percentage	**18%**	**9%**	**12%**	**-**	**-**	**16%**

For the year ended December 31, 2011 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	22,211	77,146	85,325	11	-	184,693
Intersegment sales	27,301	44,277	805	185	(72,568)	-
Excise taxes	-	(2,362)	(15,781)	-	-	(18,143)
Revenues from sales	**49,512**	**119,061**	**70,349**	**196**	**(72,568)**	**166,550**
Operating expenses	(21,894)	(116,365)	(68,396)	(667)	72,568	(134,754)
Depreciation, depletion and amortization of tangible assets and mineral interests	(5,039)	(1,936)	(496)	(35)	-	(7,506)
Operating income	**22,579**	**760**	**1,457**	**(506)**	**-**	**24,290**
Equity in income (loss) of affiliates and other items	2,198	647	(377)	336	-	2,804
Tax on net operating income	(13,566)	(136)	(438)	(38)	-	(14,178)
Net operating income	**11,211**	**1,271**	**642**	**(208)**	**-**	**12,916**
Net cost of net debt	-	-	-	-	-	(335)
Non-controlling interests	-	-	-	-	-	(305)
Net income	**-**	**-**	**-**	**-**	**-**	**12,276**

For the year ended December 31, 2011 (adjustments[a]) (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	45	-	-	-	-	45
Intersegment sales	-	-	-	-	-	-
Excise taxes	-	-	-	-	-	-
Revenues from sales	**45**	**-**	**-**	**-**	**-**	**45**
Operating expenses	-	852	271	-	-	1,123
Depreciation, depletion and amortization of tangible assets and mineral interests	(75)	(705)	(1)	-	-	(781)
Operating income[b]	**(30)**	**147**	**270**	**-**	**-**	**387**
Equity in income (loss) of affiliates and other items	682	337	(363)	90	-	746
Tax on net operating income	(43)	(61)	(78)	(80)	-	(262)
Net operating income[b]	**609**	**423**	**(171)**	**10**	**-**	**871**
Net cost of net debt	-	-	-	-	-	-
Non-controlling interests	-	-	-	-	-	(19)
Net income	**-**	**-**	**-**	**-**	**-**	**852**

(a) Adjustments include special items, inventory valuation effect and the effect of changes in fair value.

(b) Of which inventory valuation effect

	Upstream	Refining & Chemicals	Marketing & Services	Corporate
- on operating income	-	928	287	-
- on net operating income	-	669	200	-

For the year ended December 31, 2011 (adjusted) (M€) [a]	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	22,166	77,146	85,325	11	-	184,648
Intersegment sales	27,301	44,277	805	185	(72,568)	-
Excise taxes	-	(2,362)	(15,781)	-	-	(18,143)
Revenues from sales	**49,467**	**119,061**	**70,349**	**196**	**(72,568)**	**166,505**
Operating expenses	(21,894)	(117,217)	(68,667)	(667)	72,568	(135,877)
Depreciation, depletion and amortization of tangible assets and mineral interests	(4,964)	(1,231)	(495)	(35)	-	(6,725)
Adjusted operating income	**22,609**	**613**	**1,187**	**(506)**	**-**	**23,903**
Equity in income (loss) of affiliates and other items	1,516	310	(14)	246	-	2,058
Tax on net operating income	(13,523)	(75)	(360)	42	-	(13,916)
Adjusted net operating income	**10,602**	**848**	**813**	**(218)**	**-**	**12,045**
Net cost of net debt	-	-	-	-	-	(335)
Non-controlling interests	-	-	-	-	-	(286)
Adjusted net income	**-**	**-**	**-**	**-**	**-**	**11,424**
Adjusted fully-diluted earnings per share (€)	**-**	**-**	**-**	**-**	**-**	**5.06**

(a) Except for earnings per share.

For the year ended December 31, 2011 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Total expenditures	20,662	1,910	1,834	135	-	24,541
Total divestments	2,591	2,509	1,955	1,523	-	8,578
Cash flow from operating activities	17,044	2,146	541	(195)	-	19,536
Balance sheet as of December 31, 2011						
Property, plant and equipment, intangible assets, net	63,250	9,037	4,338	245	-	76,870
Investments in equity affiliates	8,731	1,321	697	-	-	10,749
Loans to equity affiliates and other non-current assets	4,494	1,878	1,314	3,105	-	10,791
Working capital	699	9,851	2,902	(1,374)	-	12,078
Provisions and other non-current liabilities	(19,843)	(2,837)	(1,585)	(1,136)	-	(25,401)
Assets and liabilities classified as held for sale	-	-	-	-	-	-
Capital Employed (balance sheet)	**57,331**	**19,250**	**7,666**	**840**	**-**	**85,087**
Less inventory valuation effect	-	(3,367)	(667)	13	-	(4,021)
Capital Employed (Business segment information)	**57,331**	**15,883**	**6,999**	**853**	**-**	**81,066**
ROACE as a percentage	**21%**	**5%**	**13%**	**-**	**-**	**16%**

For the year ended December 31, 2010 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	18,526	65,156	75,580	7	-	159,269
Intersegment sales	22,540	34,522	677	186	(57,925)	-
Excise taxes	-	(2,177)	(16,616)	-	-	(18,793)
Revenues from sales	**41,066**	**97,501**	**59,641**	**193**	**(57,925)**	**140,476**
Operating expenses	(18,230)	(94,587)	(57,613)	(665)	57,925	(113,170)
Depreciation, depletion and amortization of tangible assets and mineral interests	(5,345)	(2,531)	(506)	(39)	-	(8,421)
Operating income	**17,491**	**383**	**1,522**	**(511)**	**-**	**18,885**
Equity in income (loss) of affiliates and other items	1,548	133	208	595	-	2,484
Tax on net operating income	(10,146)	92	(545)	263	-	(10,336)
Net operating income	**8,893**	**608**	**1,185**	**347**	**-**	**11,033**
Net cost of net debt	-	-	-	-	-	(226)
Non-controlling interests	-	-	-	-	-	(236)
Net income	**-**	**-**	**-**	**-**	**-**	**10,571**

For the year ended December 31, 2010 (adjustments[a]) (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	-	-	-	-	-	-
Intersegment sales	-	-	-	-	-	-
Excise taxes	-	-	-	-	-	-
Revenues from sales					**-**	
Operating expenses	-	803	212	-	-	1,015
Depreciation, depletion and amortization of tangible assets and mineral interests	(203)	(1,213)	-	-	-	(1,416)
Operating income[b]	**(203)**	**(410)**	**212**	**-**	**-**	**(401)**
Equity in income (loss) of affiliates and other items[c]	192	(196)	45	227	-	268
Tax on net operating income	275	202	(53)	(6)	-	418
Net operating income[b]	**264**	**(404)**	**204**	**221**	**-**	**285**
Net cost of net debt	-	-	-	-	-	-
Non-controlling interests	-	-	-	-	-	(2)
Net income	**-**	**-**	**-**	**-**	**-**	**283**

(a) Adjustments include special items, inventory valuation effect and, until June 30, 2010, equity share of adjustments related to Sanofi.

(b) Of which inventory valuation effect	*Upstream*	*Refining & Chemicals*	*Marketing & Services*	*Corporate*
- on operating income	-	*765*	*228*	-
- on net operating income	-	*584*	*169*	-
(c) Of which equity share of adjustments related to Sanofi	-	-	-	*(81)*

For the year ended December 31, 2010 (adjusted) (M€) [(a)]	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Non-Group sales	18,526	65,156	75,580	7	-	159,269
Intersegment sales	22,540	34,522	677	186	(57,925)	-
Excise taxes	-	(2,177)	(16,616)	-	-	(18,793)
Revenues from sales	**41,066**	**97,501**	**59,641**	**193**	**(57,925)**	**140,476**
Operating expenses	(18,230)	(95,390)	(57,825)	(665)	57,925	(114,185)
Depreciation, depletion and amortization of tangible assets and mineral interests	(5,142)	(1,318)	(506)	(39)	-	(7,005)
Adjusted operating income	**17,694**	**793**	**1,310**	**(511)**	**-**	**19,286**
Equity in income (loss) of affiliates and other items	1,356	329	163	368	-	2,216
Tax on net operating income	(10,421)	(110)	(492)	269	-	(10,754)
Adjusted net operating income	**8,629**	**1,012**	**981**	**126**	**-**	**10,748**
Net cost of net debt	-	-	-	-	-	(226)
Non-controlling interests	-	-	-	-	-	(234)
Adjusted net income	**-**	**-**	**-**	**-**	**-**	**10,288**
Adjusted fully-diluted earnings per share (€)	**-**	**-**	**-**	**-**	**-**	**4.58**

(a) Except for earnings per share.

For the year ended December 31, 2010 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Total expenditures	13,049	2,124	1,019	81	-	16,273
Total divestments	2,067	763	83	1,403	-	4,316
Cash flow from operating activities	15,617	1,226	1,105	545	-	18,493
Balance sheet as of December 31, 2010						
Property, plant and equipment, intangible assets, net	50,560	9,325	3,743	253	-	63,881
Investments in equity affiliates	4,761	2,555	1,817	-	-	9,133
Loans to equity affiliates and other non-current assets	4,135	1,536	858	4,099	-	10,628
Working capital	(369)	9,866	1,517	(211)	-	10,803
Provisions and other non-current liabilities	(16,076)	(2,771)	(1,188)	(1,181)	-	(21,216)
Assets and liabilities classified as held for sale	660	413	-	-	-	1,073
Capital Employed (balance sheet)	**43,671**	**20,924**	**6,747**	**2,960**	**-**	**74,302**
Less inventory valuation effect	-	(3,659)	(838)	1,061	-	(3,436)
Capital Employed (Business segment information)	**43,671**	**17,265**	**5,909**	**4,021**	**-**	**70,866**
ROACE as a percentage[(a)]	**N/A**	**N/A**	**N/A**	**-**	**-**	**16%**

(a) The 2009 capital employed has not been recalculated according to the new organisation.

B) ROE (Return on Equity)

The Group evaluates the return on equity as the ratio of adjusted consolidated net income to average adjusted shareholders' equity between the beginning and the end of the period. Thus, adjusted shareholders' equity for the year ended December 31, 2012 is calculated after payment of a dividend of €2.34 per share, subject to approval by the shareholders' meeting on May 17, 2013.

The ROE is calculated as follows:

For the year ended December 31, (M€)	2012	2011	2010
Adjusted net income - Group share	12,361	11,424	10,288
Adjusted non-controlling interests	174	286	234
Adjusted consolidated net income	**12,535**	**11,710**	**10,522**
Shareholders' equity - Group share	72,912	68,037	60,414
Distribution of the income based on existing shares at the closing date	(1,299)	(1,255)	(2,553)
Non-controlling interests	1,281	1,352	857
Adjusted shareholders' equity[(a)]	**72,894**	**68,134**	**58,718**
ROE	18%	18%	19%

(a) Adjusted shareholders' equity as of December 31, 2009 amounted to €50,993 million.

C) Reconciliation of the information by business segment with consolidated financial statements

The table below presents the impact of adjustment items on the consolidated statement of income:

For the year ended December 31, 2012 (M€)	Adjusted	Adjustments[(a)]	Consolidated statement of income
Sales	200,070	(9)	200,061
Excise taxes	(17,762)	-	(17,762)
Revenues from sales	182,308	(9)	182,299
Purchases, net of inventory variation	(126,564)	(234)	(126,798)
Other operating expenses	(21,800)	(868)	(22,668)
Exploration costs	(1,446)	-	(1,446)
Depreciation, depletion and amortization of tangible assets and mineral interests	(8,051)	(1,474)	(9,525)
Other income	681	781	1,462
Other expense	(448)	(467)	(915)
Financial interest on debt	(671)	-	(671)
Financial income from marketable securities & cash equivalents	100	-	100
Cost of net debt	(571)	-	(571)
Other financial income	558	-	558
Other financial expense	(499)	-	(499)
Equity in income (loss) of affiliates	2,098	(88)	2,010
Income taxes	(13,731)	665	(13,066)
Consolidated net income	**12,535**	**(1,694)**	**10,841**
Group share	12,361	(1,667)	10,694
Non-controlling interests	174	(27)	147

(a) Adjustments include special items, inventory valuation effect and, as from January 1st, 2012, the effect of changes in fair value.

For the year ended December 31, 2011 (M€)	Adjusted	Adjustments[(a)]	Consolidated statement of income
Sales	184,648	45	184,693
Excise taxes	(18,143)	-	(18,143)
Revenues from sales	166,505	45	166,550
Purchases, net of inventory variation	(115,107)	1,215	(113,892)
Other operating expenses	(19,751)	(92)	(19,843)
Exploration costs	(1,019)	-	(1,019)
Depreciation, depletion and amortization of tangible assets and mineral interests	(6,725)	(781)	(7,506)
Other income	430	1,516	1,946
Other expense	(536)	(711)	(1,247)
Financial interest on debt	(713)	-	(713)
Financial income from marketable securities & cash equivalents	273	-	273
Cost of net debt	(440)	-	(440)
Other financial income	609	-	609
Other financial expense	(429)	-	(429)
Equity in income (loss) of affiliates	1,984	(59)	1,925
Income taxes	(13,811)	(262)	(14,073)
Consolidated net income	**11,710**	**871**	**12,581**
Group share	11,424	852	12,276
Non-controlling interests	286	19	305

(a) Adjustments include special items, inventory valuation effect and, as from January 1st, 2011, the effect of changes in fair value.

For the year ended December 31, 2010 (M€)	Adjusted	Adjustments[(a)]	Consolidated statement of income
Sales	159,269	-	159,269
Excise taxes	(18,793)	-	(18,793)
Revenues from sales	140,476	-	140,476
Purchases, net of inventory variation	(94,286)	1,115	(93,171)
Other operating expenses	(19,035)	(100)	(19,135)
Exploration costs	(864)	-	(864)
Depreciation, depletion and amortization of tangible assets and mineral interests	(7,005)	(1,416)	(8,421)
Other income	524	872	1,396
Other expense	(346)	(554)	(900)
Financial interest on debt	(465)	-	(465)
Financial income from marketable securities & cash equivalents	131	-	131
Cost of net debt	(334)	-	(334)
Other financial income	442	-	442
Other financial expense	(407)	-	(407)
Equity in income (loss) of affiliates	2,003	(50)	1,953
Income taxes	(10,646)	418	(10,228)
Consolidated net income	**10,522**	**285**	**10,807**
Group share	10,288	283	10,571
Non-controlling interests	234	2	236

(a) Adjustments include special items, inventory valuation effect and, until June 30, 2010, equity share of adjustments related to Sanofi.

D) 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, 2012 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	-	(179)	(55)	-	(234)
Effect of changes in fair value	(9)	-	-	-	(9)
Restructuring charges	-	(2)	-	-	(2)
Asset impairment charges	(1,200)	(206)	(68)	-	(1,474)
Other items	(586)	(18)	(174)	(88)	(866)
Total	**(1,795)**	**(405)**	**(297)**	**(88)**	**(2,585)**

Adjustments to net income, Group share

For the year ended December 31, 2012 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	-	(116)	(41)	-	(157)
Effect of changes in fair value	(7)	-	-	-	(7)
Restructuring charges	-	(24)	(53)	-	(77)
Asset impairment charges	(769)	(192)	(121)	(30)	(1,112)
Gains (losses) on disposals of assets	240	-	-	341	581
Other items	(382)	(44)	(108)	(361)	(895)
Total	**(918)**	**(376)**	**(323)**	**(50)**	**(1,667)**

Adjustments to operating income

For the year ended December 31, 2011 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	-	928	287	-	1,215
Effect of changes in fair value	45	-	-	-	45
Restructuring charges	-	-	-	-	-
Asset impairment charges	(75)	(706)	-	-	(781)
Other items	-	(75)	(17)	-	(92)
Total	**(30)**	**147**	**270**	**-**	**387**

Adjustments to net income, Group share

For the year ended December 31, 2011 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	-	669	165	-	834
Effect of changes in fair value	32	-	-	-	32
Restructuring charges	-	(72)	(50)	-	(122)
Asset impairment charges	(75)	(476)	(463)	-	(1,014)
Gains (losses) on disposals of assets	843	415	206	74	1,538
Other items	(178)	(113)	(61)	(64)	(416)
Total	**622**	**423**	**(203)**	**10**	**852**

Adjustments to operating income

For the year ended December 31, 2010 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	-	765	228	-	993
Effect of changes in fair value	-	-	-	-	-
Restructuring charges	-	-	-	-	-
Asset impairment charges	(203)	(1,213)	-	-	(1,416)
Other items	-	38	(16)	-	22
Total	**(203)**	**(410)**	**212**	**-**	**(401)**

Adjustments to net income, Group share

For the year ended December 31, 2010 (M€)	Upstream	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	-	584	164	-	748
Effect of changes in fair value	-	-	-	-	-
TOTAL's equity share of adjustments related to Sanofi	-	-	-	(81)	(81)
Restructuring charges	-	(53)	-	-	(53)
Asset impairment charges	(288)	(841)	(95)	-	(1,224)
Gains (losses) on disposals of assets	589	19	136	302	1,046
Other items	(37)	(109)	(7)	-	(153)
Total	**264**	**(400)**	**198**	**221**	**283**

E) Additional information on impairments

In the Upstream, Refining & Chemicals, Marketing & Services and Holdings segments, impairments of assets have been recognized for the year ended December 31, 2012, with an impact of €1,474 million in operating income and €1,112 million in net income, Group share. These impairments have been disclosed as adjustments to operating income and adjustments to net income, Group share. These items are identified in paragraph 4D 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 CGU's 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";
- the future cash flows have been determined with the assumptions in the long-term 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;
- the future cash flows, based on the long-term plan, are prepared over a period consistent with the life of the assets within the CGU. They are prepared post-tax and include specific risks attached to CGU assets. They are discounted using a 8% post-tax discount rate, this rate being a weighted-average capital cost estimated from historical market data. This rate has been applied consistently for the years ending in 2010, 2011 and 2012.
- the value in use calculated by discounting the above post-tax cash flows using a 8% post-tax discount rate is not materially different from value in use calculated by discounting pre-tax cash flows using a pre-tax discount rate determined by an iterative computation from the post-tax value in use. These pre-tax discount rates are in a range from 9% to 13% in 2012.

The CGUs of the Upstream segment impacted by these impairments are hydrocarbon fields. For the year ended December 31, 2012 impairments of assets have been recognized with an impact of €1,200 million in operating income and €769 million in net income, Group share. These impairments mainly concern shale gas assets in the Barnett basin of the United States due to the persistent weakness of gas prices in the American market (Henry Hub). A +10% variation in the price of hydrocarbons in identical operating conditions would have a positive impact in operating income of €360 million and €234 million in net income, Group share. A variation of -1% in the discount rate would have a positive impact in operating income of €156 million and €101 million in net income, Group share. For these assets and certain assets where the value in use is close to the net book value, opposite variations in the above assumptions would have respective impacts in operating income of €(1,733) million and €(1,678) million, and of €(1,262) million and €(1,246) million in net income, Group share.

The additional impairments that could be recorded in the case of unfavourable evolutions of the price of hydrocarbons or discount rates concern mainly shale gas assets in the Barnett basin of the United States as well as certain oil assets in Canada, more specifically the CGU consisting of the Voyageur Upgrader and the Fort Hills and Joslyn mines. As part of agreements signed in March, 2011 with Suncor, TOTAL increased its interest to 39.2% in the Fort Hills mine operated by Suncor, and sold a percentage of its interest in the Joslyn mine, retaining a 38.25% interest (TOTAL operator). TOTAL also acquired a 49% interest in the Voyageur Upgrader project, operated by Suncor, and intended to upgrade bitumen from the Fort Hills and Joslyn mines. In 2012 the estimates of project costs and the evolution of perspectives for oil markets in

North America have challenged the economic expectations for these projects. As a consequence the partners, TOTAL and Suncor, launched a joint strategic review of the development plan for the Voyageur Upgrader (net book value of the Upgrader €1.7 billion at 31 December, 2012, as compared to a CGU value of €4.3 billion). This detailed review includes optimization of the development plan, evacuation logistics studies and implications of possible evolutions of the project. This review will not be finalized before the first quarter of 2013. During this interim review period and until a decision on the future of this project can be taken, development spending on the project will be minimized. Decisions on the future development of this project will require agreement of both partners, TOTAL and Suncor.

The CGUs for the Refining & Chemicals segment are defined by the legal entities having the operating activities for the refining and petrochemical activities. The CGUs for the other activities of the sector are global divisions, each division grouping together a set of businesses or homogeneous products for strategic, commercial and industrial plans. For the year 2012 the Group recorded impairments of €206 million in operating profit and €192 million in net income, Group share, on European assets. In the context of persistent volatility of European refining margins the Group did not change impairments on CGUs for refining in France and the United Kingdom. The various scenarios of sensitivity (gross margin and discount rates) would not lead to additional impairments on CGUs of this segment.

The CGUs of Marketing & Services are subsidiaries or groups of subsidiaries organised by relevant geographical zone. For the year 2012 the Group recorded impairments on CGUs of the Marketing & Services segment of €68 million in operating profit and €121 million in net income, Group share. These impairments were in respect of the CGU SunPower (closure of sites) and holdings in equity consolidated associate companies.

In respect of SunPower a 0.5% decrease of the unit sale prices would have a negative impact of €83 million in net income, Group share. An increase of 1% in the discount rate would have a negative impact of €77 million in net income, Group share. SunPower is a CGU acquired in 2011 for which specific assumptions were applied notably because of its equity financing and listing on the NASDAQ. Future cash flows for this CGU were therefore discounted using a post-tax discount rate of 14%, corresponding to the weighted average cost of capital for this CGU (17.5% pre- tax). The various scenarios of sensitivity would not lead to additional impairments on the other CGUs of this segment.

For the year 2012 the Group recorded impairments in the Holding segment for €30 million in net income, Group share further to the loss of value of certain listed securities.

For the year ended December 31, 2011, impairments of assets have been recognized in the Upstream, Refining & Chemicals and Marketing & Services segments with an impact of €781 million in operating income and €1,014 million in net income, Group share. These impairments have been disclosed as adjustments to operating income and adjustments to net income, Group share.

For the year ended December 31, 2010, impairments of assets have been recognized in the Upstream, Refining & Chemicals and Marketing & Services segments with an impact of €1,416 million in operating income and €1,224 million in net income, Group share. These impairments have been disclosed as adjustments to operating income and adjustments to net income, Group share.

No reversal of impairment has been recognized for the years ended December 31, 2012, 2011 and 2010.

5) Information by geographical area

(M€)	France	Rest of Europe	North America	Africa	Rest of the world	Total
For the year ended December 31, 2012						
Non-Group sales	45,981	103,862	17,648	17,921	14,649	200,061
Property, plant and equipment, intangible assets, net	4,560	17,697	15,220	24,999	19,714	82,190
Capital expenditures	1,589	4,406	3,148	7,274	6,526	22,943
For the year ended December 31, 2011						
Non-Group sales	42,626	81,453	15,917	15,077	29,620	184,693
Property, plant and equipment, intangible assets, net	5,637	15,576	14,518	23,546	17,593	76,870
Capital expenditures	1,530	3,802	5,245	5,264	8,700	24,541
For the year ended December 31, 2010						
Non-Group sales	36,820	72,636	12,432	12,561	24,820	159,269
Property, plant and equipment, intangible assets, net	5,666	14,568	9,584	20,166	13,897	63,881
Capital expenditures	1,062	2,629	3,626	4,855	4,101	16,273

6) Operating expenses

For the year ended December 31,

(M€)	2012	2011	2010
Purchases, net of inventory variation[a]	(126,798)	(113,892)[b]	(93,171)
Exploration costs	(1,446)	(1,019)	(864)
Other operating expenses[c]	(22,668)	(19,843)	(19,135)
of which non-current operating liabilities (allowances) reversals	*552*	*615*	*387*
of which current operating liabilities (allowances) reversals	*(51)*	*(150)*	*(101)*
Operating expenses	**(150,912)**	**(134,754)**	**(113,170)**

(a) Includes taxes paid on oil and gas production in the Upstream segment, namely royalties.
(b) As of December 31, 2011, the Group valued under/over lifting at market value. The impact in operating expenses is €577 million and €103 million in net income, Group share as of December 31, 2011.
(c) 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"). Also includes an amount of €176 million for the exceptional contribution of 4% on the value of the oil stocks established by the second corrective finance act for 2012 in France.This exceptional contribution is due by every person, with the exception of the state, owning volumes of certain types of petroleum products situated in the territory of metropolitan France.

7) Other income and other expense

For the year ended December 31,

(M€)	2012	2011	2010
Gains (losses) on disposal of assets	1,321	1,650	1,117
Foreign exchange gains	26	118	-
Other	115	178	279
Other income	**1,462**	**1,946**	**1,396**
Foreign exchange losses	-	-	-
Amortization of other intangible assets (excl. mineral interests)	(250)	(592)	(267)
Other	(665)	(655)	(633)
Other expense	**(915)**	**(1,247)**	**(900)**

Other income

In 2012, gains and losses on disposal of assets were mainly related to the sale of the interest in Sanofi and to the sale of assets in the Upstream segment (sales in Colombia (see Note 3 to the Consolidated Financial Statements), Great Britain and Nigeria).

In 2011, gains and losses on disposal of assets were mainly related to the sale of the interest in CEPSA, to the sale of assets in the Upstream segment (especially the sale of 10% Group's interest in the Colombian pipeline OCENSA) and to the sale of photocure and coatings resins businesses (see Note 3 to the Consolidated Financial Statements).

In 2010, gains and losses on disposal of assets were mainly related to sales of assets in the Upstream segment (sale of the interests in the Valhall and Hod fields in Norway and sale of the interest in Block 31 in Angola, see Note 3 to the Consolidated Financial Statements), as well as the change in the accounting treatment and the disposal of shares of Sanofi (see Note 3 to the Consolidated Financial Statements).

Other expense

In 2012, the heading "Other" is mainly comprised of a provision for the amount of $398 million in relation to a transaction in progress with the United States Securities and Exchange Commission (SEC) and the Department of Justice (DoJ) in the United States (see Note 32 to the Consolidated Financial Statements).

In 2011, the heading "Other" is mainly comprised of €243 million of restructuring charges in the Upstream, Refining & Chemicals and Marketing & Services segments.

In 2010, the heading "Other" was mainly comprised of €248 million of restructuring charges in the Refining & Chemicals.

8) Other financial income and expense

As of December 31, (M€)	2012	2011	2010
Dividend income on non-consolidated subsidiaries	223	330	255
Capitalized financial expenses	248	171	113
Other	87	108	74
Other financial income	**558**	**609**	**442**
Accretion of asset retirement obligations	(405)	(344)	(338)
Other	(94)	(85)	(69)
Other financial expense	**(499)**	**(429)**	**(407)**

9) Income taxes

As from 2011, TOTAL S.A. is taxed in accordance with the common French tax regime further to its exit from the consolidated income tax treatment. This exit had no significant impact, neither on the Group's financial situation nor on the consolidated results.

However, an additional tax to corporate income tax of 3%, due on dividends distributed by French companies or foreign organizations subject to corporate income tax in France, was established by the second corrective finance act for 2012. This new tax is liable on amounts distributed, the payment of which was due from August 17th, 2012, the effective date of the law.

The impact of this additional tax for the Group is a charge of €120 million relating to distributions for the 1st, 2nd and the 3rd quarters of 2012. This additional tax is not tax deductible.

In addition, 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 €27,007 million as of December 31, 2012. The determination of the tax effect relating to such reinvested income is not practicable.

No deferred tax is recognized on unremitted earnings (approximately €28,212 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, (M€)	2012	2011	2010
Current income taxes	(12,430)	(12,495)	(9,934)
Deferred income taxes	(636)	(1,578)	(294)
Total income taxes	**(13,066)**	**(14,073)**	**(10,228)**

Before netting deferred tax assets and liabilities by fiscal entity, the components of deferred tax balances are as follows:

As of December 31, (M€)	2012	2011	2010
Net operating losses and tax carry forwards	2,247	1,584	1,145
Employee benefits	483	621	535
Other temporary non-deductible provisions	3,816	3,521	2,757
Gross deferred tax assets	**6,546**	**5,726**	**4,437**
Valuation allowance	(719)	(667)	(576)
Net deferred tax assets	**5,827**	**5,059**	**3,861**
Excess tax over book depreciation	(14,083)	(12,831)	(10,966)
Other temporary tax deductions	(2,697)	(2,721)	(1,339)
Gross deferred tax liability	**(16,780)**	**(15,552)**	**(12,305)**
Net deferred tax liability	**(10,953)**	**(10,493)**	**(8,444)**

Carried forward tax losses on net operating losses in the table above for €2,247 million as of December 31, 2012, only come from foreign subsidiaries, notably Belgium for €567 million and the United States for €467 million.

After netting deferred tax assets and liabilities by fiscal entity, deferred taxes are presented on the balance sheet as follows:

As of December 31, (M€)	2012	2011	2010
Deferred tax assets, non-current	1,832	1,767	1,378
Deferred tax assets, current *(note 16)*	-	-	151
Deferred tax liabilities, non-current	(12,785)	(12,260)	(9,947)
Deferred tax liabilities, current	-	-	(26)
Net amount	**(10,953)**	**(10,493)**	**(8,444)**

The net deferred tax variation in the balance sheet is analyzed as follows:

As of December 31, (M€)	2012	2011	2010
Opening balance	**(10,493)**	**(8,444)**	**(7,639)**
Deferred tax on income	(636)	(1,578)	(294)
Deferred tax on shareholders' equity[a]	63	(55)	28
Changes in scope of consolidation[b]	74	(17)	(59)
Currency translation adjustment	39	(399)	(480)
Closing balance	**(10,953)**	**(10,493)**	**(8,444)**

(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).
(b) Changes in scope of consolidation include the impact of reclassifications in Assets classified as held for sale and Liabilities directly associated with the assets classified as held for sale for €81 million.

Reconciliation between provision for income taxes and pre-tax income:

For the year ended December 31, (M€)	2012	2011	2010
Consolidated net income	10,841	12,581	10,807
Provision for income taxes	13,066	14,073	10,228
Pre-tax income	**23,907**	**26,654**	**21,035**
French statutory tax rate	36.10%	36.10%	34.43%
Theoretical tax charge	**(8,630)**	**(9,622)**	**(7,242)**
Difference between French and foreign income tax rates	(5,934)	(5,740)	(4,921)
Tax effect of equity in income (loss) of affiliates	726	695	672
Permanent differences	811	889	1,375
Adjustments on prior years income taxes	82	(19)	(45)
Adjustments on deferred tax related to changes in tax rates	(69)	(201)	2
Changes in valuation allowance of deferred tax assets	(52)	(71)	(65)
Other	-	(4)	(4)
Net provision for income taxes	**(13,066)**	**(14,073)**	**(10,228)**

The French statutory tax rate includes the standard corporate tax rate (33.33%) and additional applicable taxes that bring the overall tax rate to 36.10% in 2012 (versus 36.10% in 2011 and 34.43% in 2010).

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.

Net operating losses and carried forward tax credits

Deferred tax assets related to carried forward tax credits on net operating losses expire in the following years:

As of December 31, (M€)	2012		2011		2010	
	Basis	Tax	Basis	Tax	Basis	Tax
2011	-	-	-	-	225	110
2012	-	-	242	115	177	80
2013	316	150	171	81	146	59
2014	249	116	104	47	1,807	602
2015 (a)	167	75	8	2	190	62
2016 (b)	26	8	2,095	688	-	-
2017 and after	3,187	971	-	-	-	-
Unlimited	3,049	927	2,119	651	774	232
Total	**6,994**	**2,247**	**4,739**	**1,584**	**3,319**	**1,145**

(a) Net operating losses and carried forward tax credits in 2015 and after for 2010.
(b) Net operating losses and carried forward tax credits in 2016 and after for 2011.

10) Intangible assets

As of December 31, 2012 (M€)	Cost	Amortization and impairment	Net
Goodwill	1,852	(963)	889
Proved mineral interests	8,803	(3,291)	5,512
Unproved mineral interests	6,416	(913)	5,503
Other intangible assets	3,571	(2,617)	954
Total intangible assets	**20,642**	**(7,784)**	**12,858**

As of December 31, 2011 (M€)	Cost	Amortization and impairment	Net
Goodwill	1,903	(993)	910
Proved mineral interests	8,319	(2,626)	5,693
Unproved mineral interests	5,400	(555)	4,845
Other intangible assets	3,377	(2,412)	965
Total intangible assets	**18,999**	**(6,586)**	**12,413**

As of December 31, 2010 (M€)	Cost	Amortization and impairment	Net
Goodwill	1,498	(596)	902
Proved mineral interests	6,294	(2,369)	3,925
Unproved mineral interests	3,805	(343)	3,462
Other intangible assets	2,803	(2,175)	628
Total intangible assets	**14,400**	**(5,483)**	**8,917**

Changes in net intangible assets are analyzed in the following table:

(M€)	Net amount as of January 1,	Acquisitions	Disposals	Amortization and impairment	Currency translation adjustment	Other	Net amount as of December 31,
2012	**12,413**	**2,466**	**(58)**	**(1,439)**	**(163)**	**(361)**	**12,858**
2011	8,917	2,504	(428)	(991)	358	2,053	12,413
2010	7,514	2,466	(62)	(553)	491	(939)	8,917

In 2012, the heading “Other” mainly includes the reclassification of assets in accordance with IFRS 5 “Non-current assets held for sale and discontinued operations” for €(333) million (see Note 34 to the Consolidated Financial Statements).

In 2011, the heading “Other” mainly included Chesapeake’s Barnett shale mineral interests reclassified into the acquisitions for €(649) million, the not yet paid part of the acquisition of Chesapeake’s mineral interests in Utica for €1,216 million, the reclassification of Joslyn’s mineral interests sold in 2011 and formerly classified in accordance with IFRS 5 “Non-current assets held for sale and discontinued operations” for €384 million, and €697 million related to the acquisition of SunPower.

In 2010, the heading “Other” mainly included Chesapeake’s Barnett shale mineral interests reclassified into the acquisitions for €(975) million and the reclassification of Joslyn’s mineral interests in accordance with IFRS 5 “Non-current assets held for sale and discontinued operations” for €(390) million, including the currency translation adjustment, partially compensated by the acquisition of UTS for €646 million (see Note 3 to the Consolidated Financial Statements).

A summary of changes in the carrying amount of goodwill by business segment for the year ended December 31, 2012 is as follows:

(M€)	Net goodwill as of January 1, 2012	Increases	Impairments	Other	Net goodwill as of December 31, 2012
Upstream	66	-	-	(64)	2
Refining & Chemicals	727	91	(11)	(19)	788
Marketing & Services	92	-	-	(18)	74
Corporate	25	-	-	-	25
Total	**910**	**91**	**(11)**	**(101)**	**889**

In 2012, the heading “Other” principally corresponds to the reclassification of assets in accordance with IFRS 5 “Non-current assets held for sale and discontinued operations”.

11) Property, plant and equipment

As of December 31, 2012 (M€)	Cost	Depreciation and impairment	Net
Upstream properties			
Proved properties	87,896	(57,832)	30,064
Unproved properties	229	-	229
Work in progress	26,645	(172)	26,473
Subtotal	**114,770**	**(58,004)**	**56,766**
Other property, plant and equipment			
Land	1,354	(407)	947
Machinery, plant and equipment (including transportation equipment)	25,501	(19,458)	6,043
Buildings	6,489	(4,172)	2,317
Work in progress	1,732	(277)	1,455
Other	6,840	(5,036)	1,804
Subtotal	**41,916**	**(29,350)**	**12,566**
Total property, plant and equipment	**156,686**	**(87,354)**	**69,332**

As of December 31, 2011 (M€)	Cost	Depreciation and impairment	Net
Upstream properties			
Proved properties	84,222	(54,589)	29,633
Unproved properties	209	-	209
Work in progress	21,190	(15)	21,175
Subtotal	**105,621**	**(54,604)**	**51,017**
Other property, plant and equipment			
Land	1,346	(398)	948
Machinery, plant and equipment (including transportation equipment)	25,838	(18,349)	7,489
Buildings	6,241	(4,131)	2,110
Work in progress	1,534	(306)	1,228
Other	6,564	(4,899)	1,665
Subtotal	**41,523**	**(28,083)**	**13,440**
Total property, plant and equipment	**147,144**	**(82,687)**	**64,457**

As of December 31, 2010 (M€)	Cost	Depreciation and impairment	Net
Upstream properties			
Proved properties	77,183	(50,582)	26,601
Unproved properties	347	(1)	346
Work in progress	14,712	(37)	14,675
Subtotal	**92,242**	**(50,620)**	**41,622**
Other property, plant and equipment			
Land	1,304	(393)	911
Machinery, plant and equipment (including transportation equipment)	23,831	(17,010)	6,821
Buildings	6,029	(3,758)	2,271
Work in progress	2,350	(488)	1,862
Other	6,164	(4,687)	1,477
Subtotal	**39,678**	**(26,336)**	**13,342**
Total property, plant and equipment	**131,920**	**(76,956)**	**54,964**

Changes in net property, plant and equipment are analyzed in the following table:

(M€)	Net amount as of January 1,	Acquisitions	Disposals	Depreciation and impairment	Currency translation adjustment	Other	Net amount as of December 31,
2012	**64,457**	**17,439**	**(633)**	**(9,042)**	**(409)**	**(2,480)**	**69,332**
2011	54,964	15,443	(1,489)	(7,636)	1,692	1,483	64,457
2010	51,590	11,346	(1,269)	(8,564)	2,974	(1,113)	54,964

In 2012, the heading "Disposals" mainly includes the impact of sales of assets in the Upstream segment in Great Britain, Norway and Nigeria.

In 2012, the heading "Depreciation and impairment" includes the impact of impairments of shale gas assets in the Barnett basin recognized for €1,134 million (see Note 4E to the Consolidated Financial Statements).

In 2012, the heading "Other" principally includes the reclassification of assets in accordance with IFRS 5 "Non-current assets held for sale and discontinued operations" for an amount of €2,992 million (see Note 34 to the Consolidated Financial Statements).

In 2011, the heading "Disposals" mainly included the impact of sales of assets in the Upstream segment (disposal of the interests in Gassled in Norway and in Joslyn's field in Canada) and in the Marketing & Services segment (disposal of Marketing assets in the United Kingdom) (see Note 3 to the Consolidated Financial Statements).

In 2011, the heading "Depreciation and impairment" included the impact of impairments of assets recognized for €781 million (see Note 4D to the Consolidated Financial Statements).

In 2011, the heading "Other" corresponded to the increase of the asset for sites restitution for an amount of €653 million. It also included €428 million related to the reclassification of tangible assets of Joslyn and resins businesses sold in 2011 and formerly classified in accordance with IFRS 5 "Non-current assets held for sale and discontinued operations".

In 2010, the heading "Disposals" mainly included the impact of sales of assets in the Upstream segment (sale of the interests in the Valhall and Hod fields in Norway and sale of the interest in Block 31 in Angola, see Note 3 to the Consolidated Financial Statements).

In 2010, the heading "Depreciation and impairment" included the impact of impairments of assets recognized for €1,416 million (see Note 4D to the Consolidated Financial Statements).

In 2010, the heading "Other" mainly corresponded to the change in the consolidation method of Samsung Total Petrochemicals (see Note 12 to the Consolidated Financial Statements) for €(541) million and the reclassification for €(537) million, including the currency translation adjustment, of property, plant and equipment related to Joslyn, Total E&P Cameroun, and resins businesses subject to a disposal project in accordance with IFRS 5 "Non-current assets held for sale and discontinued operations", partially compensated by the acquisition of UTS for €217 million (see Note 3 to the Consolidated Financial Statements).

Property, plant and equipment presented above include the following amounts for facilities and equipment under finance leases that have been capitalized:

As of December 31, 2012 (M€)	Cost	Depreciation and impairment	Net
Machinery, plant and equipment	391	(294)	97
Buildings	54	(26)	28
Other	207	(2)	205
Total	**652**	**(322)**	**330**

As of December 31, 2011 (M€)	Cost	Depreciation and impairment	Net
Machinery, plant and equipment	414	(284)	130
Buildings	54	(25)	29
Other	-	-	-
Total	**468**	**(309)**	**159**

As of December 31, 2010 (M€)	Cost	Depreciation and impairment	Net
Machinery, plant and equipment	480	(332)	148
Buildings	54	(24)	30
Other	-	-	-
Total	**534**	**(356)**	**178**

12) Equity affiliates: investments and loans

Equity value As of December 31,	2012	2011	2010	2012	2011	2010
(M€)		% owned			Equity value	
NLNG	15.00%	15.00%	15.00%	714	953	1,108
PetroCedeño - EM	30.32%	30.32%	30.32%	1,282	1,233	1,136
CEPSA (Upstream share)[(b)]	-	-	48.83%	-	-	340
Angola LNG Ltd.	13.60%	13.60%	13.60%	957	869	710
Qatargas	10.00%	10.00%	10.00%	106	97	85
FOSMAX	27.54%	27.60%	28.03%	112	119	125
Dolphin Energy Ltd (Del) Abu Dhabi	24.50%	24.50%	24.50%	95	208	172
Qatar Liquefied Gas Company Limited II (Train B)	16.70%	16.70%	16.70%	219	209	184
Yemen LNG Co	39.62%	39.62%	39.62%	252	169	25
Shtokman Development AG	25.00%	25.00%	25.00%	268	248	214
Novatek[(c)]	15.34%	14.09%	-	3,815	3,368	-
Other	-	-	-	549	681	661
Total associates				**8,369**	**8,154**	**4,760**
Yamal LNG[(c)]	20.02%	20.01%	-	702	495	-
Ichthys LNG Ltd[(c)]	24.00%	24.00%	-	79	82	-
Other	-	-	-	44	-	-
Total jointly-controlled entities				**825**	**577**	**-**
Total Upstream				**9,194**	**8,731**	**4,760**
CEPSA (Refining & Chemicals share)[(b)]	-	-	48.83%	-	-	1,487
Qatar Petrochemical Company Ltd.	20.00%	20.00%	20.00%	228	240	221
Saudi Aramco Total Refining & Petrochemicals	37.50%	37.50%	37.50%	177	121	51
Qatofin Company Limited	36.36%	36.36%	36.36%	285	136	27
Other	-	-	-	131	118	124
Total associates				**821**	**615**	**1,910**
Samsung Total Petrochemicals	50.00%	50.00%	50.00%	758	706	645
Total jointly-controlled entities				**758**	**706**	**645**
Total Refining & Chemicals				**1,579**	**1,321**	**2,555**
CEPSA (Marketing & Services share)[(b)]	-	-	48.83%	-	-	1,075
AMYRIS	18.50%	21.37%	22.03%	31	79	101
Other	-	-	-	158	197	139
Total associates				**189**	**276**	**1,315**
SARA	50.00%	50.00%	50.00%	122	125	134
TotalErg	49.00%	49.00%	49.00%	264	296	289
Other	-	-	-	51	-	80
Total jointly-controlled entities				**437**	**421**	**503**
Total Marketing & Services				**626**	**697**	**1,818**
Sanofi[(a)]	-	-	-	-	-	-
Total associates				**-**	**-**	**-**
Total jointly-controlled entities				**-**	**-**	**-**
Total Corporate				**-**	**-**	**-**
Total investments				**11,399**	**10,749**	**9,133**
Loans				2,360	2,246	2,383
Total investments and loans				**13,759**	**12,995**	**11,516**

(a) End of the accounting for by the equity method of Sanofi as of July 1st, 2010 (see Note 3 to the Consolidated Financial Statements).
(b) Sale of CEPSA on July 29th, 2011.
(c) Investment accounted for by the equity method as from 2011.

Equity in income (loss) (M€)	As of December 31, 2012	2011	2010	For the year ended December 31, 2012	2011	2010
	% owned			Equity in income (loss)		
NLNG	15.00%	15.00%	15.00%	434	374	207
PetroCedeño - EM	30.32%	30.32%	30.32%	123	55	195
CEPSA (Upstream share)[b]	-	-	48.83%	-	15	57
Angola LNG Ltd.	13.60%	13.60%	13.60%	14	6	8
Qatargas	10.00%	10.00%	10.00%	233	196	136
FOSMAX	27.54%	27.60%	28.03%	11	13	-
Dolphin Energy Ltd (Del) Abu Dhabi	24.50%	24.50%	24.50%	125	131	121
Qatar Liquefied Gas Company Limited II (Train B)	16.70%	16.70%	16.70%	483	446	288
Yemen LNG Co	39.62%	39.62%	39.62%	84	130	37
Shtokman Development AG	25.00%	25.00%	25.00%	(7)	1	(5)
Novatek[c]	15.34%	14.09%	-	34	24	-
Other	-	-	-	331	320	157
Total associates				**1,865**	**1,711**	**1,201**
Yamal LNG[c]	20.02%	20.01%	-	(11)	-	-
Ichthys LNG Ltd[c]	24.00%	24.00%	-	(2)	(7)	-
Other	-	-	-	4	-	-
Total jointly-controlled entities				**(9)**	**(7)**	**-**
Total Upstream				**1,856**	**1,704**	**1,201**
CEPSA (Refining & Chemicals share)[b]	-	-	48.83%	-	32	164
Qatar Petrochemical Company Ltd.	20.00%	20.00%	20.00%	82	89	84
Saudi Aramco Total Refining & Petrochemicals	37.50%	37.50%	37.50%	(29)	(30)	(20)
Qatofin Company Limited	36.36%	36.36%	36.36%	152	98	36
Other	-	-	-	(30)	(8)	57
Total associates				**175**	**181**	**321**
Samsung Total Petrochemicals	50.00%	50.00%	50.00%	68	114	104
Total jointly-controlled entities				**68**	**114**	**104**
Total Refining & Chemicals				**243**	**295**	**425**
CEPSA (Marketing & Services share)[b]	-	-	48.83%	-	13	86
AMYRIS[a]	18.50%	21.37%	22.03%	(64)	(23)	(3)
Other	-	-	-	(14)	(27)	7
Total associates				**(78)**	**(37)**	**90**
SARA	50.00%	50.00%	50.00%	14	11	31
TotalErg	49.00%	49.00%	49.00%	(32)	7	(11)
Other	-	-	-	7	(55)	8
Total jointly-controlled entities				**(11)**	**(37)**	**28**
Total Marketing & Services				**(89)**	**(74)**	**118**
Sanofi[a]	-	-	-	-	-	209
Total associates				**-**	**-**	**209**
Total jointly-controlled entities				**-**	**-**	**-**
Total Corporate				**-**	**-**	**209**
Total investments				**2,010**	**1,925**	**1,953**

(a) End of the accounting for by the equity method of Sanofi as of July 1st, 2010 (see Note 3 to the Consolidated Financial Statements).
(b) Sale of CEPSA on July 29th, 2011.
(c) Investment accounted for by the equity method as from 2011.

The market value of the Group's share in Novatek amounts to €3,996 million as of December 31, 2012 for an equity value of €3,815 million.

The equity value of the Group's share in Shtokman Development AG amounts to €268 million as of December 31, 2012.

In 2007, TOTAL and Gazprom signed an agreement for the first phase of development of the Shtokman gas and condensates offshore field located in the Barents Sea. A joint venture, Shtokman Development AG ("SDAG") (TOTAL, 25%) was created in 2008 to design, build, finance and operate this first phase based on an initial development plan intended to produce 23.7 Bm³/y (0.4 Mboe/d) of gaz, with half of the gas being piped to Europe and the other half being exported as LNG.

The studies performed on the Shtokman project demonstrated that initially selected technical solutions had too high capital and operating costs to provide an acceptable return on investment, and led the partners at the first quarter 2012 to redefine the development plan for LNG production only.

Within this framework, TOTAL and Gazprom, are pursuing discussions so as to conclude a new agreement reflecting the revised development scheme and replacing the previous agreement of 2007 expired since July 1st, 2012. In parallel, TOTAL and Gazprom are pursuing dialogue on technical studies to achieve an economically viable project.

In Group share, the main financial items of the equity affiliates are as follows:

As of December 31, (M€)	2012		2011		2010	
	Associates	Jointly-controlled entities	Associates	Jointly-controlled entities	Associates	Jointly-controlled entities
Assets	18,937	4,673	18,088	3,679	19,192	2,770
Shareholders' equity	9,379	2,020	9,045	1,704	7,985	1,148
Liabilities	9,558	2,653	9,043	1,975	11,207	1,622

For the year ended December 31, (M€)	2012		2011		2010	
	Associates	Jointly-controlled entities	Associates	Jointly-controlled entities	Associates	Jointly-controlled entities
Revenues from sales	9,068	6,436	9,948	5,631	16,529	2,575
Pre-tax income	2,565	54	2,449	119	2,389	166
Income tax	(603)	(6)	(594)	(49)	(568)	(34)
Net income	**1,962**	**48**	**1,855**	**70**	**1,821**	**132**

13) Other investments

The investments detailed below are classified as "Financial assets available for sale" (see Note 1 paragraph M (ii) to the Consolidated Financial Statements).

As of December 31, 2012 (M€)	Carrying amount	Unrealized gain (loss)	Balance sheet value
Areva[(b)]	37	10	47
CME Group	1	7	8
Olympia Energy Fund - energy investment fund	38	(6)	32
Gevo	3	-	3
Other publicly traded equity securities	1	-	1
Total publicly traded equity securities[(c)]	**80**	**11**	**91**
BBPP	61	-	61
Ocensa[(d)]	83	-	83
BTC Limited	119	-	119
Other equity securities	836	-	836
Total other equity securities[(c)]	**1,099**	**-**	**1,099**
Other investments	**1,179**	**11**	**1,190**

As of December 31, 2011 (M€)	Carrying amount	Unrealized gain (loss)	Balance sheet value
Sanofi[a]	2,100	351	2,451
Areva[b]	69	1	70
Arkema	-	-	-
Chicago Mercantile Exchange Group	1	6	7
Olympia Energy Fund - energy investment fund	38	(5)	33
Gevo	15	(3)	12
Other publicly traded equity securities	3	(1)	2
Total publicly traded equity securities[c]	**2,226**	**349**	**2,575**
BBPP	62	-	62
Ocensa[d]	85	-	85
BTC Limited	132	-	132
Other equity securities	820	-	820
Total other equity securities[c]	**1,099**	**-**	**1,099**
Other investments	**3,325**	**349**	**3,674**

As of December 31, 2010 (M€)	Carrying amount	Unrealized gain (loss)	Balance sheet value
Sanofi[a]	3,510	(56)	3,454
Areva[b]	69	63	132
Arkema	-	-	-
Chicago Mercantile Exchange Group	1	9	10
Olympia Energy Fund - energy investment fund	37	(3)	34
Other publicly traded equity securities	2	(1)	1
Total publicly traded equity securities[c]	**3,619**	**12**	**3,631**
BBPP	60	-	60
BTC Limited	141	-	141
Other equity securities	758	-	758
Total other equity securities[c]	**959**	**-**	**959**
Other investments	**4,578**	**12**	**4,590**

(a) End of the accounting for by the equity method of Sanofi as of July 1st, 2010 (see Note 3 to the Consolidated Financial Statements).
(b) Unrealized gain based on the investment certificate.
(c) Including cumulative impairments of €669 million in 2012, €604 million in 2011 and €597 million in 2010.
(d) End of the accounting for by the equity method of Ocensa in July 2011 (see Note 3 to the Consolidated Financial Statements).

14) Other non-current assets

As of December 31, 2012 (M€)	Gross value	Valuation allowance	Net value
Loans and advances[a]	2,593	(386)	2,207
Other	1,508	-	1,508
Total	**4,101**	**(386)**	**3,715**

As of December 31, 2011 (M€)	Gross value	Valuation allowance	Net value
Loans and advances[a]	2,454	(399)	2,055
Other	1,049	-	1,049
Total	**3,503**	**(399)**	**3,104**

As of December 31, 2010

(M€)	Gross value	Valuation allowance	Net value
Loans and advances[(a)]	2,060	(464)	1,596
Other	681	-	681
Total	**2,741**	**(464)**	**2,277**

(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, (M€)	Valuation allowance as of January 1,	Increases	Decreases	Currency translation adjustment and other variations	Valuation allowance as of December 31,
2012	**(399)**	**(16)**	**18**	**11**	**(386)**
2011	(464)	(25)	122	(32)	(399)
2010	(587)	(33)	220	(64)	(464)

15) Inventories

As of December 31, 2012

(M€)	Gross value	Valuation allowance	Net value
Crude oil and natural gas	3,044	(17)	3,027
Refined products	7,169	(86)	7,083
Chemicals products	1,440	(94)	1,346
Trading inventories	3,782	-	3,782
Other inventories	2,620	(461)	2,159
Total	**18,055**	**(658)**	**17,397**

As of December 31, 2011

(M€)	Gross value	Valuation allowance	Net value
Crude oil and natural gas	3,791	(24)	3,767
Refined products	7,483	(36)	7,447
Chemicals products	1,489	(103)	1,386
Trading inventories	3,233	-	3,233
Other inventories	2,695	(406)	2,289
Total	**18,691**	**(569)**	**18,122**

As of December 31, 2010

(M€)	Gross value	Valuation allowance	Net value
Crude oil and natural gas	3,402	-	3,402
Refined products	5,897	(28)	5,869
Chemicals products	1,350	(99)	1,251
Trading inventories	3,504	-	3,504
Other inventories	1,892	(318)	1,574
Total	**16,045**	**(445)**	**15,600**

Changes in the valuation allowance on inventories are as follows:

For the year ended December 31, (M€)	Valuation allowance as of January 1,	Increase (net)	Currency translation adjustment and other variations	Valuation allowance as of December 31,
2012	**(569)**	**(96)**	**7**	**(658)**
2011	(445)	(83)	(41)	(569)
2010	(417)	(39)	11	(445)

16) Accounts receivable and other current assets

As of December 31, 2012

(M€)	Gross value	Valuation allowance	Net value
Accounts receivable	**19,678**	**(472)**	**19,206**
Recoverable taxes	2,796	-	2,796
Other operating receivables	6,416	(258)	6,158
Deferred income tax	-	-	-
Prepaid expenses	1,085	-	1,085
Other current assets	47	-	47
Other current assets	**10,344**	**(258)**	**10,086**

As of December 31, 2011

(M€)	Gross value	Valuation allowance	Net value
Accounts receivable	**20,532**	**(483)**	**20,049**
Recoverable taxes	2,398	-	2,398
Other operating receivables	7,750	(283)	7,467
Deferred income tax	-	-	-
Prepaid expenses	840	-	840
Other current assets	62	-	62
Other current assets	**11,050**	**(283)**	**10,767**

As of December 31, 2010

(M€)	Gross value	Valuation allowance	Net value
Accounts receivable	**18,635**	**(476)**	**18,159**
Recoverable taxes	2,227	-	2,227
Other operating receivables	4,543	(136)	4,407
Deferred income tax	151	-	151
Prepaid expenses	657	-	657
Other current assets	41	-	41
Other current assets	**7,619**	**(136)**	**7,483**

Changes in the valuation allowance on “Accounts receivable” and “Other current assets” are as follows:

(M€)	Valuation allowance as of January 1,	Increase (net)	Currency translation adjustments and other variations	Valuation allowance as of December 31,
Accounts receivable				
2012	**(483)**	**(56)**	**67**	**(472)**
2011	(476)	4	(11)	(483)
2010	(468)	(31)	23	(476)
Other current assets				
2012	**(283)**	**26**	**(1)**	**(258)**
2011	(136)	(132)	(15)	(283)
2010	(69)	(66)	(1)	(136)

As of December 31, 2012, the net portion of the overdue receivables included in “Accounts receivable” and “Other current assets” was €3,442 million, of which €2,025 million was due in less than 90 days, €679 million was due between 90 days and 6 months, €260 million was due between 6 and 12 months and €478 million was due after 12 months.

As of December 31, 2011, the net portion of the overdue receivables included in “Accounts receivable” and “Other current assets” was €3,556 million, of which €1,857 million was due in less than 90 days, €365 million was due between 90 days and 6 months, €746 million was due between 6 and 12 months and €588 million was due after 12 months.

As of December 31, 2010, the net portion of the overdue receivables included in “Accounts receivable” and “Other current assets” was €3,141 million, of which €1,885 million was due in less than 90 days, €292 million was due between 90 days and 6 months, €299 million was due between 6 and 12 months and €665 million was due after 12 months.

17) Shareholders' equity

Number of TOTAL shares

The Company's common shares, par value €2.50, as of December 31, 2012 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 (Statutes), 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 3,421,533,930 shares as of December 31, 2012 compared to 3,446,401,650 shares as of December 31, 2011 and 3,439,391,697 as of December 31, 2010.

Variation of the share capital

As of January 1, 2010		**2,348,422,884**
Shares issued in connection with:	Exercise of TOTAL share subscription options	1,218,047
As of January 1, 2011		**2,349,640,931**
Shares issued in connection with:	Capital increase reserved for employees	8,902,717
	Exercise of TOTAL share subscription options	5,223,665
As of December 31, 2011		**2,363,767,313**
Shares issued in connection with:	Capital increase as part of a global free share plan intended for the Group Employees	1,366,950
	Exercise of TOTAL share subscription options	798,883
As of December 31, 2012[(a)]		**2,365,933,146**

(a) Including 108,391,639 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:

	2012	2011	2010
Number of shares as of January 1,	**2,363,767,313**	**2,349,640,931**	**2,348,422,884**
Number of shares issued during the year (pro rated)			
Exercise of TOTAL share subscription options	663,429	3,412,123	412,114
Exercise of TOTAL share purchase options	-	-	984,800
TOTAL performance shares	991,126	978,503	416,420
Global free TOTAL share plan[(a)]	683,868	506	15
Capital increase reserved for employees	-	5,935,145	-
TOTAL shares held by TOTAL S.A. or by its subsidiaries and deducted from shareholders' equity	(110,304,173)	(112,487,679)	(115,407,190)
Weighted-average number of shares	**2,255,801,563**	**2,247,479,529**	**2,234,829,043**
Dilutive effect			
TOTAL share subscription and purchase options	247,527	470,095	1,758,006
TOTAL performance shares	7,748,805	6,174,808	6,031,963
Global free TOTAL share plan[(a)]	1,703,554	2,523,233	1,504,071
Capital increase reserved for employees	1,134,296	303,738	371,493
Weighted-average number of diluted shares	**2,266,635,745**	**2,256,951,403**	**2,244,494,576**

(a) The Board of Directors approved on May 21, 2010 the implementation and conditions of a global free share plan intended for the Group Employees.

Capital increase reserved for Group employees

The Combined General Meeting of May 11, 2012, in its seventeenth resolution, delegated to the Board of Directors the authority to carry out in one or more occasions within a maximum period of twenty-six months, a capital increase reserved for employees belonging to an employee savings plan.

The Combined General Meeting of May 11, 2012, in its eighteenth resolution, also delegated to the Board of Directors the powers necessary to accomplish in one or more occasions within a maximum period of eighteen months, a capital increase with the objective of providing employees with their registered office located outside France with benefits comparable to those granted to the employees included in the seventeenth resolution of the Combined General Meeting of May 11, 2012.

Pursuant to these delegations, the Board of Directors, during its September 18, 2012, meeting, decided to proceed with a capital increase reserved for employees that included a classic offering and a leverage offering depending on the employees' choice, within the limit of 18 million shares with dividend rights as of January 1, 2012, and delegated to the Chairman and Chief Executive Officer all powers to determine the opening and closing of the subscription period and the subscription price. This capital increase, opened in 2013, should be completed before the General Meeting of 2013.

The prior capital increase reserved for employees of the Group was decided by the Board of Directors on October 28, 2010, under the terms of the authorization of the Combined General Meeting of May 21, 2010, and resulted in the subscription of 8,902,717 shares with a par value of €2.5 at a unit price of €34.80. The issuance of the shares was acknowledged on April 28, 2011.

Capital increase as part of a global free share plan intended for Group employees

The Shareholders' Meeting held on May 16, 2008, in its seventeenth resolution, delegated to the Board of Directors the authority to grant, in one or more occasions within a maximum period of thirty-eight months, restricted shares to employees and executive officers of the Company or companies outside France affiliated with the Company, within a limit of 0.8% of the outstanding share capital of the Company as of the date of the decision of the Board of Directors to grant such shares.

Pursuant to this delegation, the Board of Directors, during its May 21, 2010 meeting, determined the terms of a global free share plan intended for Group employees and granted the Chairman and Chief Executive Officer all powers necessary to implement this plan.

As a result, on July 2, 2012, the Chairman and Chief Executive Officer of the Group acknowledged the issuance and the final allocation of 1,366,950 ordinary shares with a nominal value of €2.50 to beneficiaries designated by the terms defined by the Board of Directors meeting held on May 21, 2010.

On December 31, 2012, 974,900 additional shares may be issued as part of this plan.

Share cancellation

The Group did not proceed with a reduction of capital by cancellation of shares held by the Company during the fiscal years 2010, 2011 and 2012.

Treasury shares (TOTAL shares held by TOTAL S.A.)

As of December 31, 2012, TOTAL S.A. holds 8,060,371 of its own shares, representing 0.34% of its share capital, detailed as follows:

- 7,994,470 shares allocated to TOTAL share grant plans for Group employees; and
- 65,901 shares intended to be allocated to new TOTAL share purchase option plans or to new share grant plans.

These shares are deducted from the consolidated shareholders' equity.

As of December 31, 2011, TOTAL S.A. held 9,222,905 of its own shares, representing 0.39% of its share capital, detailed as follows:

- 6,712,528 shares allocated to TOTAL share grant plans for Group employees;
- 2,510,377 shares intended to be allocated to new TOTAL share purchase option plans or to new share grant plans.

These shares were deducted from the consolidated shareholders' equity.

As of December 31, 2010, TOTAL S.A. held 12,156,411 of its own shares, representing 0.52% of its share capital, detailed as follows:

- 6,012,460 shares allocated to TOTAL share grant plans for Group employees;
- 6,143,951 shares intended to be allocated to new TOTAL share purchase option plans or to new share grant plans.

These shares were deducted from the consolidated shareholders' equity.

TOTAL shares held by Group subsidiaries

As of December 31, 2012, 2011 and 2010, TOTAL S.A. held indirectly through its subsidiaries 100,331,268 of its own shares, representing 4.24% of its share capital as of December 31, 2012, 4.24% of its share capital as of December 31, 2011 and 4.27% of its share capital as of December 31, 2010 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), 100% indirectly controlled by TOTAL S.A.

These shares are deducted from the consolidated shareholders' equity.

Dividend

TOTAL S.A. paid on March 22, 2012, the third quarterly interim dividend of €0.57 per share for the fiscal year 2011 (the ex-dividend date was March 19, 2012). TOTAL S.A. also paid on June 21, 2012, the balance of the dividend of €0.57 per share for the 2011 fiscal year (the ex-dividend date was June 18, 2012).

In addition, TOTAL S.A. paid two quarterly interim dividends for the fiscal year 2012:

- The first quarterly interim dividend of €0.57 per share for the fiscal year 2012, decided by the Board of Directors on April 26, 2012, was paid on September 27, 2012 (the ex-dividend date was September 24, 2012); and

- The second quarterly interim dividend of €0.59 per share for the fiscal year 2012, decided by the Board of Directors on July 26, 2012, was paid on December 20, 2012 (the ex-dividend date was December 17, 2012).

The Board of Directors, during its October 30, 2012 meeting, decided to set the third quarterly interim dividend for the fiscal year 2012 at €0.59 per share. This interim dividend will be paid on March 21, 2013 (the ex-dividend date will be March 18, 2013).

A resolution will be submitted at the shareholders' meeting on May 17, 2013 to pay a dividend of €2.34 per share for the 2012 fiscal year, *i.e.* a balance of €0.59 per share to be distributed after deducting the quarterly interim dividend of €0.57 and the two quarterly interim dividends of €0.59 per share that will have already been paid.

Paid-in surplus

In accordance with French law, the paid-in surplus corresponds to premiums related to shares, contributions or mergers 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 except in cases of a refund of shareholder contributions.

As of December 31, 2012, paid-in surplus amounted to €27,684 million (€27,655 million as of December 31, 2011 and €27,208 million as of December 31, 2010).

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 €539 million as of December 31, 2012 (€539 million as of December 31, 2011 and €514 million as of December 31, 2010) with regards to additional corporation tax to be applied on regulatory reserves so that they become distributable.

Futhermore, the additional tax to corporate income tax of 3%, due on dividends distributed by French companies or foreign organizations subject to corporate income in France, established by the second corrective finance act for 2012 would be payable for an amount of €375 million.

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, (M€)	2012		2011		2010	
Currency translation adjustment		**(701)**		**1,498**		**2,231**
Unrealized gain/(loss) of the period	(712)		1,435		2,234	
Less gain/(loss) included in net income	(11)		(63)		3	
Available for sale financial assets		**(338)**		**337**		**(100)**
Unrealized gain/(loss) of the period	63		382		(50)	
Less gain/(loss) included in net income	401		45		50	
Cash flow hedge		**65**		**(84)**		**(80)**
Unrealized gain/(loss) of the period	152		(131)		(195)	
Less gain/(loss) included in net income	87		(47)		(115)	
Share of other comprehensive income of equity affiliates, net amount		**160**		**(15)**		**302**
Other		**(13)**		**(2)**		**(7)**
Unrealized gain/(loss) of the period	(13)		(2)		(7)	
Less gain/(loss) included in net income	-		-		-	
Tax effect		**63**		**(55)**		**28**
Total other comprehensive income, net amount		**(764)**		**1,679**		**2,374**

Tax effects relating to each component of other comprehensive income are as follows:

For the year ended December 31, (M€)	2012			2011			2010		
	Pre-tax amount	Tax effect	Net amount	Pre-tax amount	Tax effect	Net amount	Pre-tax amount	Tax effect	Net amount
Currency translation adjustment	(701)	-	(701)	1,498	-	1,498	2,231	-	2,231
Available for sale financial assets	(338)	89	(249)	337	(93)	244	(100)	2	(98)
Cash flow hedge	65	(26)	39	(84)	38	(46)	(80)	26	(54)
Share of other comprehensive income of equity affiliates, net amount	160	-	160	(15)	-	(15)	302	-	302
Other	(13)	-	(13)	(2)	-	(2)	(7)	-	(7)
Total other comprehensive income	**(827)**	**63**	**(764)**	**1,734**	**(55)**	**1,679**	**2,346**	**28**	**2,374**

18) Employee benefits obligations

Liabilities for employee benefits obligations consist of the following:

As of December 31, (M€)	2012	2011	2010
Pension benefits liabilities	1,077	1,268	1,268
Other benefits liabilities	627	620	605
Restructuring reserves (early retirement plans)	269	344	298
Total	**1,973**	**2,232**	**2,171**
Net liabilities relating to assets held for sale	4	-	-

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.

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:

As of December 31, (M€)	Pension benefits			Other benefits		
	2012	2011	2010	2012	2011	2010
Change in benefit obligation						
Benefit obligation at beginning of year	9,322	8,740	8,169	628	623	547
Service cost	180	163	159	14	13	11
Interest cost	429	420	441	29	28	29
Curtailments	(1)	(24)	(4)	-	(1)	(3)
Settlements	-	(111)	(60)	-	-	-
Special termination benefits	-	-	-	-	-	1
Plan participants' contributions	9	9	11	-	-	-
Benefits paid	(549)	(451)	(471)	(37)	(34)	(33)
Plan amendments	205	33	28	8	4	1
Actuarial losses (gains)	1,217	435	330	58	(9)	57
Foreign currency translation and other	81	108	137	1	4	13
Benefit obligation at year-end	**10,893**	**9,322**	**8,740**	**701**	**628**	**623**
Change in fair value of plan assets						
Fair value of plan assets at beginning of year	(7,028)	(6,809)	(6,286)	-	-	-
Expected return on plan assets	(378)	(385)	(396)	-	-	-
Actuarial losses (gains)	(327)	155	(163)	-	-	-
Settlements	-	80	56	-	-	-
Plan participants' contributions	(9)	(9)	(11)	-	-	-
Employer contributions	(787)	(347)	(269)	-	-	-
Benefits paid	452	386	394	-	-	-
Foreign currency translation and other	(71)	(99)	(134)	-	-	-
Fair value of plan assets at year-end	**(8,148)**	**(7,028)**	**(6,809)**	**-**	**-**	**-**
Unfunded status	**2,745**	**2,294**	**1,931**	**701**	**628**	**623**
Unrecognized prior service cost	(249)	(78)	(105)	3	9	10
Unrecognized actuarial (losses) gains	(2,510)	(1,713)	(1,170)	(75)	(17)	(28)
Asset ceiling	10	10	9	-	-	-
Net recognized amount	**(4)**	**513**	**665**	**629**	**620**	**605**
Pension benefits and other benefits liabilities	1,077	1,268	1,268	627	620	605
Other non-current assets	(1,083)	(755)	(603)	-	-	-
Net benefit liabilities relating to assets held for sale	2	-	-	2	-	-

As of December 31, 2012, the fair value of pension benefits and other pension benefits which are entirely or partially funded amounts to €9,918 million and the present value of the unfunded benefits amounts to €1,677 million (against €8,277 million and €1,673 million respectively as of December 31, 2011 and €7,727 million and €1,636 million respectively as of December 31, 2010).

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, (M€)	2012	2011	2010	2009	2008
Experience actuarial (gains) losses related to the defined benefit obligation	147	(58)	(54)	(108)	12
Experience actuarial (gains) losses related to the fair value of plan assets	(327)	155	(163)	(317)	1,099

As of December 31, (M€)	2012	2011	2010	2009	2008
Pension benefits					
Benefit obligation	10,893	9,322	8,740	8,169	7,405
Fair value of plan assets	(8,148)	(7,028)	(6,809)	(6,286)	(5,764)
Unfunded status	**2,745**	**2,294**	**1,931**	**1,883**	**1,641**
Other benefits					
Benefits obligation	701	628	623	547	544
Fair value of plan assets	-	-	-	-	-
Unfunded status	**701**	**628**	**623**	**547**	**544**

The Group expects to contribute €158 million to its pension plans in 2013.

Estimated future payments (M€)	Pension benefits	Other benefits
2013	503	37
2014	538	36
2015	544	37
2016	546	36
2017	583	37
2018-2022	2,945	191

Asset allocation	Pension benefits		
As of December 31,	2012	2011	2010
Equity securities	29%	29%	34%
Debt securities	64%	64%	60%
Monetary	3%	4%	3%
Real estate	4%	3%	3%

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 is determined by reference to the high quality rates for AA-rated prime corporate bonds for a duration equivalent to that of the obligations. It derives from a benchmark per country of different market data at the closing date.

Assumptions used to determine benefits obligations	Pension benefits			Other benefits		
As of December 31,	2012	2011	2010	2012	2011	2010
Discount rate (weighted average for all regions)	3.79%	4.61%	5.01%	3.82%	4.70%	5.00%
Of which Euro zone	*3.20%*	*4.21%*	*4.58%*	*3.19%*	*4.25%*	*4.55%*
Of which United States	*4.00%*	*5.00%*	*5.49%*	*4.00%*	*4.97%*	*5.42%*
Of which United Kingdom	*4.25%*	*4.75%*	*5.50%*	-	-	-
Average expected rate of salary increase	4.60%	4.69%	4.55%	-	-	-
Expected rate of healthcare inflation						
– initial rate	-	-	-	4.54%	4.82%	4.82%
– ultimate rate	-	-	-	3.74%	3.77%	3.75%

Assumptions used to determine the net periodic benefit cost (income)	Pension benefits			Other benefits		
For the year endend December 31,	2012	2011	2010	2012	2011	2010
Discount rate (weighted average for all regions)	4.61%	5.01%	5.41%	4.70%	5.00%	5.60%
Of which Euro zone	*4.21%*	*4.58%*	*5.12%*	*4.25%*	*4.55%*	*5.18%*
Of which United States	*5.00%*	*5.49%*	*6.00%*	*4.97%*	*5.42%*	*5.99%*
Of which United Kingdom	*4.75%*	*5.50%*	*5.50%*	-	-	-
Average expected rate of salary increase	4.69%	4.55%	4.50%	-	-	-
Expected return on plan assets	5.35%	5.90%	6.39%	-	-	-
Expected rate of healthcare inflation						
– initial rate	-	-	-	4.82%	4.82%	4.91%
– ultimate rate	-	-	-	3.77%	3.75%	3.79%

A 0.5% increase or decrease in discount rates – all other things being equal - would have the following approximate impact on the benefit obligation:

(M€)	0.5% increase	0.5% decrease
Benefit obligation as of December 31, 2012	(683)	765
2013 net periodic benefit cost (income)	(26)	25

The components of the net periodic benefit cost (income) in 2012, 2011 and 2010 are:

For the year ended December 31,	Pension benefits			Other benefits		
(M€)	2012	2011	2010	2012	2011	2010
Service cost	180	163	159	14	13	11
Interest cost	429	420	441	29	28	29
Expected return on plan assets	(378)	(385)	(396)	-	-	-
Amortization of prior service cost	31	58	74	2	2	(5)
Amortization of actuarial losses (gains)	101	46	66	1	-	(4)
Asset ceiling	-	2	(3)	-	-	-
Curtailments	(1)	(22)	(3)	-	(1)	(3)
Settlements	-	(9)	7	-	-	-
Special termination benefits	-	-	-	-	-	1
Net periodic benefit cost (income)	**362**	**273**	**345**	**46**	**42**	**29**

A positive or negative change of one-percentage-point in the healthcare inflation rate would have the following approximate impact:

(M€)	1% increase	1% decrease
Benefit obligation as of December 31, 2012	100	(77)
2012 net periodic benefit cost (income)	5	(5)

19) Provisions and other non-current liabilities

As of December 31, (M€)	2012	2011	2010
Litigations and accrued penalty claims	930	572	485
Provisions for environmental contingencies	556	600	644
Asset retirement obligations	7,624	6,884	5,917
Other non-current provisions	1,028	1,099	1,116
Other non-current liabilities	1,447	1,754	936
Total	**11,585**	**10,909**	**9,098**

In 2012, litigation reserves mainly include a provision of $398 million in relation to a transaction in progress with the United States Securities and Exchange Commission (SEC) and the Department of Justice (DoJ) in the United States (see Note 32 to the Consolidated Financial Statements). It also includes a provision covering risks concerning antitrust investigations related to Arkema for an amount of €17 million as of December 31, 2012. Other risks and commitments that give rise to contingent liabilities are described in Note 32 to the Consolidated Financial Statements.

In 2012, other non-current provisions mainly include:

- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €17 million as of December 31, 2012;
- Provisions related to restructuring activities in the Refining & Chemicals and Marketing & Services segments for €196 million as of December 31, 2012; and
- Provisions for financial risks related to non-consolidated and equity consolidated affiliates for €147 million as of December 31, 2012;
- The contingency reserve regarding to guarantees granted in relation to solar panels of SunPower for €89 million as of December 31, 2012.

In 2012, 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 €737 million debt related to the acquisition of an interest in the liquids-rich area of the Utica shale play (see Note 3 to the Consolidated Financial Statements).

In 2011, litigation reserves mainly included a provision covering risks concerning antitrust investigations related to Arkema amounting to €17 million as of December 31, 2011. Other risks and commitments that give rise to contingent liabilities are described in Note 32 to the Consolidated Financial Statements.

In 2011, other non-current provisions mainly included:

- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €21 million as of December 31, 2011;
- Provisions related to restructuring activities in the

Refining & Chemicals and Marketing & Services segments for €227 million as of December 31, 2011; and

- The contingency reserve related to the Buncefield depot explosion (civil liability) for €80 million as of December 31, 2011.

In 2011, other non-current liabilities mainly included debts (whose maturity is more than one year) related to fixed assets acquisitions. This heading was mainly composed of a €991 million debt related to the acquisition of an interest in the liquids-rich area of the Utica shale play (see Note 3 to the Consolidated Financial Statements).

In 2010, litigation reserves mainly included a provision covering risks concerning antitrust investigations related to Arkema amounting to €17 million as of December 31, 2010. Other risks and commitments that give rise to contingent liabilities are described in Note 32 to the Consolidated Financial Statements.

In 2010, other non-current provisions mainly included:

- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability) for €31 million as of December 31, 2010;
- Provisions related to restructuring activities in the Refining & Chemicals and Marketing & Services segments for €261 million as of December 31, 2010; and
- The contingency reserve related to the Buncefield depot explosion (civil liability) for €194 million as of December 31, 2010.

In 2010, other non-current liabilities mainly included debts (whose maturity is more than one year) related to fixed assets acquisitions.

Changes in provisions and other non-current liabilities

Changes in provisions and other non-current liabilities are as follows:

(M€)	As of January 1,	Allowances	Reversals	Currency translation adjustment	Other	As of December 31,
2012	**10,909**	**1,217**	**(887)**	**47**	**299**	**11,585**
2011	9,098	921	(798)	227	1,461	10,909
2010	9,381	1,052	(971)	497	(861)	9,098

Allowances

In 2012, allowances of the period (€1,217 million) mainly include:

- Asset retirement obligations for €405 million (accretion);
- Environmental contingencies for €74 million in the Marketing & Services and Refining & Chemicals segments;
- Provisions related to restructuring of activities for €74 million.
- A provision of $398 million in relation to a transaction in progress with the United States Securities and Exchange Commission (SEC)and the Department of Justice (DoJ) in the United States (see Note 32 to the Consolidated Financial Statements).

In 2011, allowances of the period (€921 million) mainly included:

- Asset retirement obligations for €344 million (accretion);
- Environmental contingencies for €100 million in the Downstream and Chemicals segments; and
- Provisions related to restructuring of activities for €79 million.

In 2010, allowances of the period (€1,052 million) mainly included:

- Asset retirement obligations for €338 million (accretion);
- Environmental contingencies for €88 million in the Downstream and Chemicals segments;
- The contingency reserve related to the Buncefield depot explosion (civil liability) for €79 million; and
- Provisions related to restructuring of activities for €226 million.

Reversals

In 2012, reversals of the period (€887 million) are mainly related to the following incurred expenses:

- Provisions for asset retirement obligations for €314 million;
- Environmental contingencies written back for €109 million;
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability), written back for €10 million;
- The contingency reserve related to the Buncefield depot explosion (civil liability), written back for €81 million; and
- Provisions for restructuring and social plans written back for €111 million.

In 2011, reversals of the period (€798 million) were mainly related to the following incurred expenses:

- Provisions for asset retirement obligations for €189 million;
- Environmental contingencies written back for €70 million;
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability), written back for €10 million;
- The contingency reserve related to the Buncefield depot explosion (civil liability), written back for €116 million; and
- Provisions for restructuring and social plans written back for €164 million.

In 2010, reversals of the period (€971 million) were mainly related to the following incurred expenses:

- Provisions for asset retirement obligations for €214 million;
- €26 million for litigation reserves in connection with antitrust investigations;
- Environmental contingencies written back for €66 million;
- The contingency reserve related to the Toulouse-AZF plant explosion (civil liability), written back for €9 million;
- The contingency reserve related to the Buncefield depot explosion (civil liability), written back for €190 million; and
- Provisions for restructuring and social plans written back for €60 million.

Changes in the asset retirement obligation

Changes in the asset retirement obligation are as follows:

(M€)	As of January 1,	Accretion	Revision in estimates	New obligations	Spending on existing obligations	Currency translation adjustment	Other	As of December 31,
2012	**6,884**	**405**	**183**	**115**	**(314)**	**82**	**269**	**7,624**
2011	5,917	344	330	323	(189)	150	9	6,884
2010	5,469	338	79	175	(214)	316	(246)	5,917

In 2012 the heading “Other” includes €385 million increase in provisions to cover the costs of abandonment of wells in the Elgin-Franklin field (Great Britain) that will not return to production, and a €183 million increase in provisions for the restoration of the Lacq site in France on which activities are going to be stopped. These amounts are partially offset by sales of assets notably in Great Britain and Norway that have been reclassified in accordance with IFRS 5 “Non-current assets held for sale and discontinued operations” (see Note 34 to the Consolidated Financial Statements).

20) Financial debt and related financial instruments

A) Non-current financial debt and related financial instruments

As of December 31, 2012

(M€) (Assets)/Liabilities	Secured	Unsecured	Total
Non-current financial debt	713	21,561	22,274
of which hedging instruments of non-current financial debt (liabilities)	-	*11*	*11*
Hedging instruments of non-current financial debt (assets)[a]	-	(1,626)	(1,626)
Non-current financial debt - net of hedging instruments	**713**	**19,935**	**20,648**
Bonds after fair value hedge	-	15,227	15,227
Fixed rate bonds and bonds after cash flow hedge	-	4,504	4,504
Bank and other, floating rate	306	29	335
Bank and other, fixed rate	81	168	249
Financial lease obligations	326	7	333
Non-current financial debt - net of hedging instruments	**713**	**19,935**	**20,648**

(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.

As of December 31, 2011

(M€) (Assets)/Liabilities	Secured	Unsecured	Total
Non-current financial debt	349	22,208	22,557
of which hedging instruments of non-current financial debt (liabilities)	-	*146*	*146*
Hedging instruments of non-current financial debt (assets)[a]	-	(1,976)	(1,976)
Non-current financial debt - net of hedging instruments	**349**	**20,232**	**20,581**
Bonds after fair value hedge	-	15,148	15,148
Fixed rate bonds and bonds after cash flow hedge	-	4,424	4,424
Bank and other, floating rate	129	446	575
Bank and other, fixed rate	76	206	282
Financial lease obligations	144	8	152
Non-current financial debt - net of hedging instruments	**349**	**20,232**	**20,581**

(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.

As of December 31, 2010

(M€) (Assets)/Liabilities	Secured	Unsecured	Total
Non-current financial debt	287	20,496	20,783
of which hedging instruments of non-current financial debt (liabilities)	-	*178*	*178*
Hedging instruments of non-current financial debt (assets)[a]	-	(1,870)	(1,870)
Non-current financial debt - net of hedging instruments	**287**	**18,626**	**18,913**
Bonds after fair value hedge	-	15,491	15,491
Fixed rate bonds and bonds after cash flow hedge	-	2,836	2,836
Bank and other, floating rate	47	189	236
Bank and other, fixed rate	65	110	175
Financial lease obligations	175	-	175
Non-current financial debt - net of hedging instruments	**287**	**18,626**	**18,913**

(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, 2012, after taking into account currency and interest rates swaps, is detailed as follows:

Bonds after fair value hedge (M€)	Year of issue	Fair value after hedging as of December 31, 2012	Fair value after hedging as of December 31, 2011	Fair value after hedging as of December 31, 2010	Currency	Maturity	Initial rate before hedging instruments
Parent company							
Bond	1998	127	129	125	FRF	2013	5.000%
Current portion (less than one year)		(127)	-	-			
Total Parent company		**-**	**129**	**125**			
TOTAL CAPITAL[(a)]							
Bond	2002	-	15	15	USD	2012	5.890%
Bond	2003	23	23	22	USD	2013	4.500%
Bond	2004	-	-	57	AUD	2011	5.750%
Bond	2004	-	-	116	CAD	2011	4.875%
Bond	2004	-	-	235	USD	2011	4.125%
Bond	2004	-	-	75	USD	2011	4.125%
Bond	2004	-	129	125	CHF	2012	2.375%
Bond	2004	51	52	51	NZD	2014	6.750%
Bond	2005	-	-	57	AUD	2011	5.750%
Bond	2005	-	-	60	CAD	2011	4.000%
Bond	2005	-	-	120	CHF	2011	1.625%
Bond	2005	-	-	226	CHF	2011	1.625%
Bond	2005	-	-	139	USD	2011	4.125%
Bond	2005	-	63	63	AUD	2012	5.750%
Bond	2005	-	200	194	CHF	2012	2.135%
Bond	2005	-	65	65	CHF	2012	2.135%
Bond	2005	-	97	97	CHF	2012	2.375%
Bond	2005	-	404	391	EUR	2012	3.250%
Bond	2005	-	57	57	NZD	2012	6.500%
Bond	2006	-	-	42	EUR	2011	EURIBOR 3 months +0.040%
Bond	2006	-	-	300	EUR	2011	3.875%
Bond	2006	-	-	150	EUR	2011	3.875%
Bond	2006	-	-	300	EUR	2011	3.875%
Bond	2006	-	-	120	USD	2011	5.000%
Bond	2006	-	-	300	EUR	2011	3.875%
Bond	2006	-	-	472	USD	2011	5.000%
Bond	2006	-	62	62	AUD	2012	5.625%
Bond	2006	-	72	72	CAD	2012	4.125%
Bond	2006	-	100	100	EUR	2012	3.250%
Bond	2006	-	74	74	GBP	2012	4.625%
Bond	2006	-	100	100	EUR	2012	3.250%
Bond	2006	125	125	125	CHF	2013	2.510%
Bond	2006	127	127	127	CHF	2014	2.635%
Bond	2006	130	130	130	CHF	2016	2.385%
Bond	2006	65	65	65	CHF	2016	2.385%
Bond	2006	64	64	64	CHF	2016	2.385%
Bond	2006	63	63	63	CHF	2016	2.385%
Bond	2006	129	129	129	CHF	2018	3.135%
Bond	2007	-	-	77	USD	2011	5.000%
Bond	2007	-	370	370	USD	2012	5,000%
Bond	2007	-	222	222	USD	2012	5.000%
Bond	2007	-	61	61	AUD	2012	6.500%
Bond	2007	-	72	72	CAD	2012	4.125%
Bond	2007	-	71	71	GBP	2012	4.625%
Bond	2007	300	300	300	EUR	2013	4.125%
Bond	2007	73	73	73	GBP	2013	5.500%
Bond	2007	305	306	306	GBP	2013	5.500%
Bond	2007	72	72	72	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%

Bonds after fair value hedge (M€)	Year of issue	Fair value after hedging as of December 31, 2012	Fair value after hedging as of December 31, 2011	Fair value after hedging as of December 31, 2010	Currency	Maturity	Initial rate before hedging instruments
TOTAL CAPITAL[(a)] (continued)							
Bond	2007	121	121	121	CHF	2015	3.125%
Bond	2007	300	300	300	EUR	2017	4.700%
Bond	2007	76	76	76	CHF	2018	3.135%
Bond	2007	60	60	60	CHF	2018	3.135%
Bond	2008	-	-	92	AUD	2011	7.500%
Bond	2008	-	-	100	EUR	2011	3.875%
Bond	2008	-	-	150	EUR	2011	3.875%
Bond	2008	-	-	50	EUR	2011	3.875%
Bond	2008	-	-	50	EUR	2011	3.875%
Bond	2008	-	-	60	JPY	2011	EURIBOR 6 months +0.018%
Bond	2008	-	-	102	USD	2011	3.750%
Bond	2008	-	62	62	CHF	2012	2.135%
Bond	2008	-	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	63	GBP	2012	4.625%
Bond	2008	-	62	62	NOK	2012	6.000%
Bond	2008	-	69	69	USD	2012	5.000%
Bond	2008	60	60	60	AUD	2013	7.500%
Bond	2008	61	61	61	AUD	2013	7.500%
Bond	2008	127	128	127	CHF	2013	3.135%
Bond	2008	62	62	62	CHF	2013	3.135%
Bond	2008	200	200	200	EUR	2013	4.125%
Bond	2008	100	100	100	EUR	2013	4.125%
Bond	2008	999	1,000	1,000	EUR	2013	4.750%
Bond	2008	63	63	63	GBP	2013	5.500%
Bond	2008	149	149	149	JPY	2013	EURIBOR 6 months +0.008%
Bond	2008	191	191	191	USD	2013	4.000%
Bond	2008	61	61	61	CHF	2015	3.135%
Bond	2008	62	62	62	CHF	2015	3.135%
Bond	2008	61	61	61	CHF	2015	3.135%
Bond	2008	62	62	62	CHF	2018	3.135%
Bond	2009	56	56	56	AUD	2013	5.500%
Bond	2009	54	54	54	AUD	2013	5.500%
Bond	2009	236	236	236	CHF	2013	2.500%
Bond	2009	77	77	77	USD	2013	4.000%
Bond	2009	131	131	131	CHF	2014	2.625%
Bond	2009	998	998	997	EUR	2014	3.500%
Bond	2009	150	150	150	EUR	2014	3.500%
Bond	2009	40	40	40	HKD	2014	3.240%
Bond	2009	105	107	103	AUD	2015	6.000%
Bond	2009	550	550	550	EUR	2015	3,625%
Bond	2009	684	684	684	USD	2015	3.125%
Bond	2009	227	232	224	USD	2015	3.125%
Bond	2009	99	99	99	CHF	2016	2.385%
Bond	2009	115	115	115	GBP	2017	4.250%
Bond	2009	225	225	225	GBP	2017	4.250%
Bond	2009	448	448	448	EUR	2019	4.875%
Bond	2009	69	69	69	HKD	2019	4.180%
Bond	2009	-	-	374	USD	2021	4.250%
Bond	2010	103	105	102	AUD	2014	5.750%
Bond	2010	69	70	68	AUD	2015	6.000%
Bond	2010	70	71	69	AUD	2015	6.000%
Bond	2010	64	64	64	AUD	2015	6.000%

Bonds after fair value hedge (M€)	Year of issue	Fair value after hedging as of December 31, 2012	Fair value after hedging as of December 31, 2011	Fair value after hedging as of December 31, 2010	Currency	Maturity	Initial rate before hedging instruments
TOTAL CAPITAL[a] (continued)							
Bond	2010	109	111	108	CAD	2014	2.500%
Bond	2010	482	491	476	EUR	2022	3.125%
Bond	2010	53	54	53	NZD	2014	4.750%
Bond	2010	189	193	187	USD	2015	2.875%
Bond	2010	947	966	935	USD	2015	3.000%
Bond	2010	757	773	748	USD	2016	2.300%
Bond	2011	586	597	-	USD	2018	3.875%
Bond	2011	113	116	-	USD	2016	6.500%
Current portion (less than one year)		(3,333)	(2,992)	(3,450)			
Total TOTAL CAPITAL		**9,204**	**12,617**	**15,143**			
TOTAL CAPITAL CANADA Ltd.[b]							
Bond	2011	567	565	-	CAD	2014	1.625%
Bond	2011	567	565	-	CAD	2014	USLIBOR 3 months +0.38%
Bond	2011	76	75	-	CAD	2014	5.750%
Bond	2011	743	738	-	CAD	2013	USLIBOR 3 months +0.09%
Bond	2011	83	82	-	CAD	2016	4.000%
Bond	2011	69	69	-	CAD	2016	3.625%
Current portion (less than one year)		(743)	-	-			
Total TOTAL CAPITAL CANADA Ltd.		**1,362**	**2,094**	**-**			
TOTAL CAPITAL INTERNATIONAL[c]							
Bond	2012	78	-	-	USD	2017	4.875%
Bond	2012	758	-	-	USD	2017	1.500%
Bond	2012	116	-	-	USD	2017	4.125%
Bond	2012	1,137	-	-	USD	2017	1.550%
Bond	2012	76	-	-	USD	2016	2.250%
Bond	2012	111	-	-	USD	2017	2.250%
Bond	2012	485	-	-	USD	2023	2.125%
Bond	2012	379	-	-	USD	2016	0.750%
Bond	2012	757	-	-	USD	2023	2.700%
Bond	2012	80	-	-	USD	2017	2.250%
Bond	2012	79	-	-	USD	2017	3.875%
Bond	2012	76	-	-	USD	2017	2.000%
Current portion (less than one year)		-	-	-			
TOTAL CAPITAL INTERNATIONAL		**4,132**	**-**	**-**			
Other consolidated subsidiaries		**529**	**308**	**223**			
Total bonds after fair value hedge		**15,227**	**15,148**	**15,491**			

Bonds after cash flow hedge and fix rate bonds (M€)	Year of issue	Amount after hedging as of December 31, 2012	Amount after hedging as of December 31, 2011	Amount after hedging as of December 31, 2010	Currency	Maturity	Initial rate before hedging instruments
TOTAL CAPITAL[a]							
Bond	2005	-	294	293	GBP	2012	4.625%
Bond	2009	701	744	691	EUR	2019	4.875%
Bond	2009	926	386	-	USD	2021	4.250%
Bond	2009	379	1,016	917	EUR	2024	5.125%
Bond	2010	947	966	935	USD	2020	4.450%
Bond	2011	379	386	-	USD	2021	4.125%
Current portion (less than one year)		-	(294)	-			
Total TOTAL CAPITAL		**3,332**	**3,498**	**2,836**			
TOTAL CAPITAL INTERNATIONAL[c]							
Bond	2012	758	-	-	USD	2022	2.875%
Current portion (less than one year)		-	-	-			
Total TOTAL CAPITAL INTERNATIONAL		**758**	**-**	**-**			
Other consolidated subsidiaries		**414**	**926**	**-**			
Total Bonds after cash flow hedge		**4,504**	**4,424**	**2,836**			

(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.
(b) TOTAL CAPITAL CANADA Ltd. is a wholly-owned direct subsidiary of TOTAL S.A. It acts as a financing vehicle for the activities of the Group in Canada. 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.
(c) TOTAL CAPITAL INTERNATIONAL is a wholly-owned direct subsidiary of TOTAL S.A. 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, 2012 (M€)	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	%
2014	4,163	1	(331)	3,832	19%
2015	3,903	8	(438)	3,465	17%
2016	2,335	-	(210)	2,125	10%
2017	3,275	-	(149)	3,126	15%
2018 and beyond	8,598	2	(498)	8,100	39%
Total	**22,274**	**11**	**(1,626)**	**20,648**	**100%**

As of December 31, 2011 (M€)	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	%
2013	5,021	80	(529)	4,492	22%
2014	4,020	3	(390)	3,630	18%
2015	4,070	6	(456)	3,614	18%
2016	1,712	9	(193)	1,519	7%
2017 and beyond	7,734	48	(408)	7,326	35%
Total	**22,557**	**146**	**(1,976)**	**20,581**	**100%**

As of December 31, 2010 (M€)	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	%
2012	3,756	34	(401)	3,355	18%
2013	4,017	76	(473)	3,544	19%
2014	2,508	1	(290)	2,218	12%
2015	3,706	2	(302)	3,404	18%
2016 and beyond	6,796	65	(404)	6,392	33%
Total	**20,783**	**178**	**(1,870)**	**18,913**	**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, (M€)	2012	%	2011	%	2010	%
U.S. dollar	13,685	66%	8,645	42%	7,248	39%
Euro	5,643	27%	9,582	47%	11,417	60%
Other currencies	1,320	7%	2,354	11%	248	1%
Total	**20,648**	**100%**	**20,581**	**100%**	**18,913**	**100%**

As of December 31, (M€)	2012	%	2011	%	2010	%
Fixed rate	5,085	25%	4,854	24%	3,177	17%
Floating rate	15,563	75%	15,727	76%	15,736	83%
Total	**20,648**	**100%**	**20,581**	**100%**	**18,913**	**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, (M€) (Assets)/Liabilities	2012	2011	2010
Current financial debt[(a)]	6,392	5,819	5,867
Current portion of non-current financial debt	4,624	3,856	3,786
Current borrowings *(note 28)*	**11,016**	**9,675**	**9,653**
Current portion of hedging instruments of debt (liabilities)	84	40	12
Other current financial instruments (liabilities)	92	127	147
Other current financial liabilities *(note 28)*	**176**	**167**	**159**
Current deposits beyond three months	(1,093)	(101)	(869)
Current portion of hedging instruments of debt (assets)	(430)	(383)	(292)
Other current financial instruments (assets)	(39)	(216)	(44)
Current financial assets *(note 28)*	**(1,562)**	**(700)**	**(1,205)**
Current borrowings and related financial assets and liabilities, net	**9,630**	**9,142**	**8,607**

(a) As of December 31, 2011 and as of December 31, 2010, the current financial debt includes a commercial paper program in Total Capital Canada Ltd. Total Capital Canada Ltd. is a wholly-owned direct subsidiary of TOTAL S.A. It acts as a financing vehicle for the activities of the Group in Canada. 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.

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. Adjusted shareholders' equity for the year ended December 31, 2012 is calculated after payment of a dividend of €2.34 per share, subject to approval by the shareholders' meeting on May 17, 2013.

The net-debt-to-equity ratio is calculated as follows:

As of December 31, (M€) (Assets)/Liabilities	2012	2011	2010
Current borrowings	11,016	9,675	9,653
Other current financial liabilities	176	167	159
Current financial assets	(1,562)	(700)	(1,205)
Net financial assets and liabilities held for sale or exchange	756	-	-
Non-current financial debt	22,274	22,557	20,783
Hedging instruments on non-current financial debt	(1,626)	(1,976)	(1,870)
Cash and cash equivalents	(15,469)	(14,025)	(14,489)
Net financial debt	**15,565**	**15,698**	**13,031**
Shareholders' equity - Group share	72,912	68,037	60,414
Distribution of the income based on existing shares at the closing date	(1,299)	(1,255)	(2,553)
Non-controlling interests	1,281	1,352	857
Adjusted shareholders' equity	**72,894**	**68,134**	**58,718**
Net-debt-to-equity ratio	**21.4%**	**23.0%**	**22.2%**

21) Other creditors and accrued liabilities

As of December 31, (M€)	2012	2011	2010
Accruals and deferred income	240	231	184
Payable to States (including taxes and duties)	7,426	8,040	7,235
Payroll	1,128	1,062	996
Other operating liabilities	5,904	5,441	3,574
Total	**14,698**	**14,774**	**11,989**

As of December 31, 2012, the heading "Other operating liabilities" includes mainly the third quarterly interim dividend for the fiscal year 2012 for €1,366 million. This interim dividend will be paid on March 2013.

As of December 31, 2011, the heading "Other operating liabilities" mainly included the third quarterly interim dividend for the fiscal year 2011 for €1,317 million. This interim dividend was paid on March 2012.

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, 2012

(M€)	Operating leases	Finance leases
2013	781	55
2014	569	54
2015	514	53
2016	441	51
2017	337	19
2018 and beyond	971	236
Total minimum payments	**3,613**	**468**
Less financial expenses		(108)
Nominal value of contracts		**360**
Less current portion of finance lease contracts		(27)
Outstanding liability of finance lease contracts		**333**

For the year ended December 31, 2011

(M€)	Operating leases	Finance leases
2012	762	41
2013	552	40
2014	416	37
2015	335	36
2016	316	34
2017 and beyond	940	20
Total minimum payments	**3,321**	**208**
Less financial expenses		(31)
Nominal value of contracts		**177**
Less current portion of finance lease contracts		(25)
Outstanding liability of finance lease contracts		**152**

For the year ended December 31, 2010

(M€)	Operating leases	Finance leases
2011	582	39
2012	422	39
2013	335	39
2014	274	35
2015	230	35
2016 and beyond	1,105	54
Total minimum payments	**2,948**	**241**
Less financial expenses		(43)
Nominal value of contracts		**198**
Less current portion of finance lease contracts		(23)
Outstanding liability of finance lease contracts		**175**

Net rental expense incurred under operating leases for the year ended December 31, 2012 is €780 million (against €645 million in 2011 and €605 million in 2010).

23) Commitments and contingencies

As of December 31, 2012 (M€)		Maturity and installments		
	Total	Less than 1 year	Between 1 and 5 years	More than 5 years
Non-current debt obligations net of hedging instruments *(note 20)*	20,315	-	12,405	7,910
Current portion of non-current debt obligations net of hedging instruments *(note 20)*	4,251	4,251	-	-
Finance lease obligations *(note 22)*	360	27	143	190
Asset retirement obligations *(note 19)*	7,624	407	1,429	5,788
Contractual obligations recorded in the balance sheet	**32,550**	**4,685**	**13,977**	**13,888**
Operating lease obligations *(note 22)*	3,613	781	1,861	971
Purchase obligations	83,219	12,005	21,088	50,126
Contractual obligations not recorded in the balance sheet	**86,832**	**12,786**	**22,949**	**51,097**
Total of contractual obligations	**119,382**	**17,471**	**36,926**	**64,985**
Guarantees given for excise taxes	1,675	1,507	70	98
Guarantees given against borrowings	3,952	117	2,695	1,140
Indemnities related to sales of businesses	193	4	49	140
Guarantees of current liabilities	403	133	105	165
Guarantees to customers/suppliers	3,586	1,982	113	1,491
Letters of credit	2,298	1,785	252	261
Other operating commitments	2,659	753	702	1,204
Total of other commitments given	**14,766**	**6,281**	**3,986**	**4,499**
Mortgages and liens received	435	117	8	310
Sales obligations	80,514	7,416	26,137	46,961
Other commitments received	5,564	3,465	859	1,240
Total of commitments received	**86,513**	**10,998**	**27,004**	**48,511**

As of December 31, 2011 (M€)		Maturity and installments		
	Total	Less than 1 year	Between 1 and 5 years	More than 5 years
Non-current debt obligations net of hedging instruments *(note 20)*	20,429	-	13,121	7,308
Current portion of non-current debt obligations net of hedging instruments *(note 20)*	3,488	3,488	-	-
Finance lease obligations *(note 22)*	177	25	134	18
Asset retirement obligations *(note 19)*	6,884	272	804	5,808
Contractual obligations recorded in the balance sheet	**30,978**	**3,785**	**14,059**	**13,134**
Operating lease obligations *(note 22)*	3,321	762	1,619	940
Purchase obligations	77,353	11,049	20,534	45,770
Contractual obligations not recorded in the balance sheet	**80,674**	**11,811**	**22,153**	**46,710**
Total of contractual obligations	**111,652**	**15,596**	**36,212**	**59,844**
Guarantees given for excise taxes	1,765	1,594	73	98
Guarantees given against borrowings	4,778	1,027	2,797	954
Indemnities related to sales of businesses	39	-	34	5
Guarantees of current liabilities	376	262	35	79
Guarantees to customers/suppliers	3,265	1,634	57	1,574
Letters of credit	2,408	1,898	301	209
Other operating commitments	2,477	433	697	1,347
Total of other commitments given	**15,108**	**6,848**	**3,994**	**4,266**
Mortgages and liens received	408	7	119	282
Sales obligations[(a)]	62,216	4,221	17,161	40,834
Other commitments received	6,740	4,415	757	1,568
Total of commitments received	**69,364**	**8,643**	**18,037**	**42,684**

(a) As from December 31, 2011, the Group discloses its sales obligations.

As of December 31, 2010 (M€)		Maturity and installments		
	Total	Less than 1 year	Between 1 and 5 years	More than 5 years
Non-current debt obligations net of hedging instruments *(note 20)*	18,738	-	12,392	6,346
Current portion of non-current debt obligations net of hedging instruments *(note 20)*	3,483	3,483	-	-
Finance lease obligations *(note 22)*	198	23	129	46
Asset retirement obligations *(note 19)*	5,917	177	872	4,868
Contractual obligations recorded in the balance sheet	**28,336**	**3,683**	**13,393**	**11,260**
Operating lease obligations *(note 22)*	2,948	582	1,261	1,105
Purchase obligations	61,293	6,347	14,427	40,519
Contractual obligations not recorded in the balance sheet	**64,241**	**6,929**	**15,688**	**41,624**
Total of contractual obligations	**92,577**	**10,612**	**29,081**	**52,884**
Guarantees given for excise taxes	1,753	1,594	71	88
Guarantees given against borrowings	5,005	1,333	493	3,179
Indemnities related to sales of businesses	37	-	31	6
Guarantees of current liabilities	171	147	19	5
Guarantees to customers/suppliers	3,020	1,621	96	1,303
Letters of credit	1,250	1,247	-	3
Other operating commitments	2,057	467	220	1,370
Total of other commitments given	**13,293**	**6,409**	**930**	**5,954**
Mortgages and liens received	429	2	114	313
Other commitments received	6,387	3,878	679	1,830
Total of commitments received	**6,816**	**3,880**	**793**	**2,143**

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 €333 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 €27 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, and contracts for capital investment projects in the Refining & Chemicals 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 non-consolidated 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, 2012, the maturities of these guarantees are up to 2023.

Guarantees given against borrowings include the guarantee given in 2008 by TOTAL S.A. in connection with the financing of the Yemen LNG project for an amount of €584 million.

In 2010, TOTAL S.A. provided guarantees in connection with the financing of the Jubail project (operated by SAUDI ARAMCO TOTAL Refining and Petrochemical Company (SATORP)) of up to €2,416 million, proportional to TOTAL's share in the project (37.5%). In addition, TOTAL S.A. provided in 2010 a guarantee in favor of its partner in the Jubail project (Saudi Arabian Oil Company) with respect to Total Refining Saudi Arabia SAS's obligations under the shareholders agreement with respect to SATORP. As of December 31, 2012, this guarantee is of up to €932 million and has been recorded under "Other operating commitments".

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.

C) Commitments received

Sales obligations

These amounts represent binding obligations under contractual agreements to sell goods, including in particular hydrocarbon unconditional sale contracts (except when an active, highly-liquid market exists and volumes are re-sold shortly after purchase).

24) Related parties

The main transactions and balances with related parties (principally non-consolidated subsidiaries and equity affiliates) are detailed as follows:

As of December 31, (M€)	2012	2011	2010
Balance sheet			
Receivables			
Debtors and other debtors	646	585	432
Loans (excl. loans to equity affiliates)	383	331	315
Payables			
Creditors and other creditors	713	724	497
Debts	9	31	28

For the year ended December 31, (M€)	2012	2011	2010
Statement of Income			
Sales	3,959	4,400	3,194
Purchases	5,721	5,508	5,576
Financial expense	-	-	69
Financial income	106	79	74

Compensation for the administration and management bodies

The aggregate amount of direct and indirect compensation accounted for by the French and foreign affiliates of the Company for the executive officers of TOTAL (the members of the Management Committee and the Treasurer) and for the members of the Board of Directors who are employees of the Group, is detailed as follows:

For the year ended December 31, (M€)	2012	2011	2010
Number of people	34	30	26
Direct or indirect compensation received	21.3	20.4	20.8
Pension expenses[a]	11.4	9.4	12.2
Other long-term benefits expenses	-	-	-
Termination benefits expenses	-	4.8	-
Share-based payments expense (IFRS 2)[b]	10.6	10.2	10.0

(a) 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 €181.3 million provisioned as of December 31, 2012 (against €139.7 million as of December 31, 2011 and €113.8 million as of December 31, 2010).
(b) 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 F 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.

The compensation allocated to members of the Board of Directors for directors' fees totaled €1.10 million in 2012 (€1.07 million in 2011 and €0.96 million in 2010).

25) Share-based payments

A) TOTAL share subscription option plans

	2003 Plan	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plan	2011 Plan	Total	Weighted average exercise price
Date of the Shareholders' Meeting	05/17/2001	05/14/2004	05/14/2004	05/14/2004	05/11/2007	05/11/2007	05/11/2007	05/21/2010	05/21/2010		
Date of the award[a]	07/16/2003	07/20/2004	07/19/2005	07/18/2006	07/17/2007	10/09/2008	09/15/2009	09/14/2010	09/14/2011		
Exercise price until May 23, 2006 included[b]	33.30	39.85	49.73	-	-	-	-	-	-		
Exercise price since May 24, 2006[b]	32.84	39.30	49.04	50.60	60.10	42.90	39.90	38.20	33.00		
Expiry date	07/16/2011	07/20/2012	07/19/2013	07/18/2014	07/17/2015	10/09/2016	09/15/2017	09/14/2018	09/14/2019		
Number of options[c]											
Existing options as of January 1, 2010	**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**
Granted	-	-	-	-	-	-	-	4,788,420	-	4,788,420	38.20
Canceled[d]	(1,420)	(15,660)	(6,584)	(4,800)	(5,220)	(92,472)	(4,040)	(1,120)	-	(131,316)	43.50
Exercised	(1,075,765)	(141,202)	-	-	-	-	(1,080)	-	-	(1,218,047)	33.60
Existing options as of January 1, 2011	**5,734,444**	**12,338,847**	**6,178,856**	**5,640,886**	**5,866,445**	**4,349,158**	**4,371,890**	**4,787,300**	**-**	**49,267,826**	**43.80**
Granted	-	-	-	-	-	-	-	-	1,518,840	1,518,840	33.00
Canceled[e]	(738,534)	(28,208)	(16,320)	(17,380)	(16,080)	(13,260)	(14,090)	(85,217)	(1,000)	(930,089)	34.86
Exercised	(4,995,910)	(216,115)	-	-	-	(200)	-	(2,040)	(9,400)	(5,223,665)	33.11
Existing options as of January 1, 2012	**-**	**12,094,524**	**6,162,536**	**5,623,506**	**5,850,365**	**4,335,698**	**4,357,800**	**4,700,043**	**1,508,440**	**44,632,912**	**44.87**
Granted	-	-	-	-	-	-	-	-	-	-	-
Canceled[f]	-	(11,351,931)	(2,516)	(1,980)	(1,380)	(3,600)	(2,700)	(4,140)	(3,400)	(11,371,647)	39.31
Exercised	-	(742,593)	-	-	-	(1,630)	(20,200)	(34,460)	-	(798,883)	39.28
Existing options as of December 31, 2012	**-**	**-**	**6,160,020**	**5,621,526**	**5,848,985**	**4,330,468**	**4,334,900**	**4,661,443**	**1,505,040**	**32,462,382**	**46.96**

(a) The grant date is the date of the Board meeting awarding the share subscription options, except for the grant of October 9, 2008, decided by the Board on September 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 effective as of May 24, 2006.
(c) The number of options awarded, outstanding, canceled or exercised before May 23, 2006 included, was multiplied by four to take into account the four-for-one stock split approved by the shareholders' meeting on May 12, 2006.
(d) Out of 92,472 options awarded under the 2008 Plan that were canceled, 88,532 options were canceled due to the performance condition. The acquisition rate applicable to the subscription options that were subject to the performance condition of the 2008 Plan was 60%.
(e) Out of the 930,089 options canceled in 2011, 738,534 options that were not exercised expired on July 16, 2011 due to the expiry of the 2003 subscription option Plan.
(f) Out of the 11,371,647 options canceled in 2012, 11,351,931 options that were not exercised expired on July 20, 2012 due to the expiry of the 2004 subscription option Plan.

Options are exercisable, subject to a continuous employment condition, after a 2-year period from the date of the Board meeting awarding the options and expire eight years after this date. The underlying shares may not be transferred during four years from the date of grant. For the 2007 to 2011 Plans, 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 from the date of the grant.

In 2012 no new TOTAL share subscription option plan or TOTAL share purchase plan was decided.

2011 Plan

For the 2011 Plan, the Board of Directors decided that for each grantee other than the Chairman and Chief Executive Officer, the options will be finally granted to their beneficiary provided that the performance condition is fulfilled.

The performance condition states that the number of options finally granted is based on the average of the Return on Equity (ROE) of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012.

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 more than 7% and less than 18%; and
- is equal to 100% if the average ROE is more than or equal to 18%.

In addition, as part of the 2011 Plan, the Board of Directors decided that the number of share subscription options finally awarded to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share subscription 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 by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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 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 by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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%.

2010 Plan

For the 2010 Plan, the Board of Directors decided that:

- For each grantee of up to 3,000 options, other than the Chairman and Chief Executive Officer, the options will be finally granted to their beneficiary.
- For each grantee of more than 3,000 options and less or equal to 50,000 options (other than the Chairman and Chief Executive Officer):
  - The first 3,000 options and two-thirds above the first 3,000 options will be finally granted to their beneficiary;
  - The outstanding options, that are one-third of the options above the first 3,000 options, will be finally granted provided that the performance condition described below is fulfilled.
- For each grantee of more than 50,000 options (other than the Chairman and Chief Executive Officer):
  - The first 3,000 options, two-thirds of the options above the first 3,000 options and below the first 50,000 options, and one-third of the options above the first 50,000 options, will be finally granted to their beneficiary;
  - The outstanding options, that are one-third of the options above the first 3,000 options and below the first 50,000 options and two-thirds of the options above the first 50,000 options, will be finally granted provided that the performance condition is fulfilled.

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 by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011.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 more than 7% and less than 18%; and
- is equal to 100% if the average ROE is more than or equal to 18%.

In addition, as part of the 2010 Plan, the Board of Directors decided that the number of share subscription options finally awarded to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share subscription 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 by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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 performance condition states that the number of options finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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%.
- Due to the application of the performance condition, the acquisition rates were 100% for the 2010 Plan.

B) TOTAL share purchase option plans

	2002 Plan[(a)]	Total	Weighted average exercise price
Date of the Shareholders' Meeting	05/17/2001		
Date of the award[(b)]	07/09/2002		
Exercise price until May 23, 2006 included[(c)]	39.58		
Exercise price since May 24, 2006[(c)]	39.03		
Expiry date	07/09/2010		
Number of options[(d)]			
Existing options as of January 1, 2010	**5,935,261**	**5,935,261**	**39.03**
Granted	-	-	-
Canceled[(e)]	(4,671,989)	(4,671,989)	39.03
Exercised	(1,263,272)	(1,263,272)	39.03
Existing options as of January 1, 2011	**-**	**-**	**-**
Granted	-	-	-
Canceled	-	-	-
Exercised	-	-	-
Existing options as of January 1, 2012	**-**	**-**	**-**
Granted	-	-	-
Canceled	-	-	-
Exercised	-	-	-
Existing options as of December 31, 2012	**-**	**-**	**-**

(a) Options were exercisable, subject to a continued employment condition, after a 2-year vesting period from the date of the Board meeting awarding the options and expired 8 years after this date. The underlying shares may not be transferred during the 4-year period from the date of the grant. This plan expired on July 9, 2010.
(b) The grant date is the date of the Board meeting awarding the options.
(c) 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 effective as of May 24, 2006.
(d) The number of options awarded, outstanding, canceled or exercised before May 23, 2006 included, was multiplied by four to take into account the four-for-one stock split approved by the shareholders' meeting on May 12, 2006.
(e) Out of the 4,671,989 options canceled in 2010, 4,671,145 options that were not exercised expired due to the expiry of the 2002 purchase option Plan on July 9, 2010.

C) TOTAL performance share grants

	2008 Plan	2009 Plan	2010 Plan	2011 Plan	2012 Plan	Total
Date of the Shareholders' Meeting	05/16/2008	05/16/2008	05/16/2008	05/13/2011	05/13/2011	
Date of the award[(a)]	10/09/2008	09/15/2009	09/14/2010	09/14/2011	07/26/2012	
Date of the final award (end of vesting period)	10/10/2010	09/16/2011	09/15/2012	09/15/2013	07/27/2014	
Transfer authorized as from	10/10/2012	09/16/2013	09/15/2014	09/15/2015	07/27/2016	
Number of performance shares						
Outstanding as of January 1, 2010	**2,762,476**	**2,966,036**	**-**	**-**	**-**	**5,728,512**
Notified	-	-	3,010,011	-	-	3,010,011
Canceled[(d)]	(1,113,462)	(9,796)	(8,738)	-	-	(1,131,996)
Finally granted[(b)(c)]	(1,649,014)	(1,904)	(636)	-	-	(1,651,554)
Outstanding as of January 1, 2011	**-**	**2,954,336**	**3,000,637**	**-**	**-**	**5,954,973**
Notified	-	-	-	3,649,770	-	3,649,770
Canceled	356	(26,214)	(10,750)	(19,579)	-	(56,187)
Finally granted[(b)(c)(e)]	(356)	(2,928,122)	(1,836)	-	-	(2,930,314)
Outstanding as of January 1, 2012	**-**	**-**	**2,988,051**	**3,630,191**	**-**	**6,618,242**
Notified	-	-	-	-	4,295,930	4,295,930
Canceled	96	832	(32,650)	(18,855)	-	(50,577)
Finally granted[(b)(c)(f)]	(96)	(832)	(2,955,401)	(5,530)	-	(2,961,859)
Outstanding as of December 31, 2012	**-**	**-**	**-**	**3,605,806**	**4,295,930**	**7,901,736**

(a) The grant date is the date of the Board of Directors meeting that awarded the shares, except for the shares awarded by the Board of Directors at their meeting of September 9, 2008, and granted on October 9, 2008.
(b) Performance shares finally granted following the death of their beneficiaries (Plan 2008 during the year 2009, Plan 2009 and Plan 2010 during the year 2010, Plan 2010 during the year 2011, Plan 2011 during the year 2012).
(c) Including performance shares finally granted for which the entitlement right had been canceled erroneously.
(d) Out of the 1,113,462 canceled rights to the grant share under the 2008 Plan, 1,094,914 entitlement rights were canceled due to the performance condition. The acquisition rate for the 2008 Plan was 60%.
(e) The acquisition rate for the 2009 Plan was 100%.
(f) The acquisition rate for the 2010 Plan was 100%.

The performance shares, which are 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. The final grant is subject to a continued employment condition and a performance condition. Moreover, the transfer of the performance shares finally granted will not be permitted until the end of a 2-year mandatory holding period from the date of the final grant.

2012 Plan

For the 2012 Plan, the Board of Directors decided that, for each senior executive (other than the Chairman and Chief Executive Officer), the shares will be finally granted subject to a performance condition. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2012 and 2013. The acquisition rate:

- is equal to zero if the average ROE is less than or equal to 8%;
- varies on a straight-line basis between 0% and 100% if the average ROE is greater than 8% and less than 16%; and
- is equal to 100% if the average ROE is greater than or equal to 16%.

The Board of Directors decided also that, for each beneficiary (other than the Chairman and Chief Executive Officer and the senior executives) of more than 100 shares, the shares in excess of this number will be finally granted subject to the performance condition mentioned before.

In addition, as part of the 2012 plan, the Board of Directors decided that the number of performance share finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share granted, the performance condition states that the number of shares finally granted is based on the average ROE of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2013 and 2012. The acquisition rate is equal to zero if the average ROE is less than or equal to 8%; varies on a straight-line basis between 0% and 100% if the average ROE is more than 8% and less than 16%; and is equal to 100% if the average ROE is more than or equal to 16%.
- For 50% of the share granted, the performance condition states that the number of shares finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2013 and 2012. The acquisition rate is equal to zero if the average ROACE is less than or equal to 7%; varies on a straight-line basis between 7% and 100% if the average ROACE is more than 7% and less than 15%; and is equal to 100% if the average ROACE is more than or equal to 15%.

2011 Plan

For the 2011 Plan, the Board of Directors decided that, for each senior executive (other than the Chairman and Chief Executive Officer), the shares will be finally granted subject to a performance condition. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2011 and 2012. 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%.

The Board of Directors decided also that, for each beneficiary (other than the Chairman and Chief Executive Officer and the senior executives) of more than 100 shares, the shares in excess of this number will be finally granted subject to the performance condition mentioned before.

In addition, as part of the 2011 plan, the Board of Directors decided that the number of performance share finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share granted, the performance condition states that the number of shares finally granted is based on the average ROE of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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 granted, the performance condition states that the number of shares finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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%.

2010 Plan

For the 2010 Plan, the Board of Directors decided 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 calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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%.

Due to the application of the performance condition, the acquisition rate was 100% for the 2009 Plan.

D) Global free TOTAL share plan

The Board of Directors approved at its meeting on May 21, 2010, the implementation and conditions of a global free share plan intended for the Group's employees. On June 30, 2010, entitlement rights to twenty-five free shares were granted to every employee. The final grant is subject to a continued employment condition during the plan's vesting period. Depending on the country in which the companies of the Group are located, the acquisition period is either two years followed by a conservation period of two years (for the countries with a 2+2 structure), or four years without any conservation period (for the countries with a 4+0 structure).

Following the vesting period, the shares awarded will be new shares, issued from an increase of capital of TOTAL S.A., by incorporation of paid-in surplus or retained earnings.

The Chairman and Chief Executive Officer acknowledged on July 2, 2012, the issuance and the award of 1,366,950 shares to the beneficiaries designated at the end of the 2-year acquisition period.

	2010 Plan (2 + 2)	2010 Plan (4 + 0)	Total
Date of the Shareholders' Meeting	05/16/2008	05/16/2008	
Date of the award[(a)]	06/30/2010	06/30/2010	
Date of the final award	07/01/2012	07/01/2014	
Transfer authorized as from	07/01/2014	07/01/2014	
Number of free shares			
Outstanding as of January 1, 2010	**-**	**-**	**-**
Notified	1,508,850	1,070,650	2,579,500
Canceled	(125)	(75)	(200)
Finally granted[(b)]	(75)	-	(75)
Outstanding as of January 1, 2011	**1,508,650**	**1,070,575**	**2,579,225**
Notified	-	-	-
Canceled	(29,175)	(54,625)	(83,800)
Finally granted[(b)]	(475)	(425)	(900)
Outstanding as of January 1, 2012	**1,479,000**	**1,015,525**	**2,494,525**
Notified	-	-	-
Canceled	(111,725)	(40,275)	(152,000)
Finally granted[(b)(c)]	(1,367,275)	(350)	(1,367,625)
Outstanding as of December 31, 2012	**-**	**974,900**	**974,900**

(a) The June 30, 2010, grant was decided by the Board of Directors on May 21, 2010.
(b) Final grant following the death or disability of the beneficiary of the shares.
(c) Final grant of 1,366,950 shares to the designated beneficiaries at the end of the acquisition period.

E) SunPower plans

SunPower has three stock incentive plans: the 1996 Stock Plan ("1996 Plan"), the Third Amended and Restated 2005 SunPower Corporation Stock Incentive Plan ("2005 Plan") and the PowerLight Corporation Common Stock Option and Common Stock Purchase Plan ("PowerLight Plan"). The PowerLight Plan was assumed by SunPower by way of the acquisition of PowerLight in fiscal 2007. Under the terms of all three plans, SunPower may issue incentive or non-statutory stock options or stock purchase rights to directors, employees and consultants to purchase common stock. The 2005 Plan was adopted by SunPower's Board of Directors in August 2005, and was approved by shareholders in November 2005. The 2005 Plan replaced the 1996 Plan and allows not only for the grant of options, but also for the grant of stock appreciation rights, restricted stock grants, restricted stock units and other equity rights. The 2005 Plan also allows for tax withholding obligations related to stock option exercises or restricted stock awards to be satisfied through the retention of shares otherwise released upon vesting. The PowerLight Plan was adopted by PowerLight's Board of Directors in October 2000.

In May 2008, SunPower's stockholders approved an automatic annual increase available for grant under the 2005 Plan, beginning in fiscal 2009. The automatic annual increase is equal to the lower of three percent of the outstanding shares of all classes of SunPower's common stock measured on the last day of the immediately preceding fiscal quarter, 6.0 million shares, or such other number of shares as determined by SunPower's Board of Directors. As of December 30, 2012, approximately 7.1 million shares were available for grant under the 2005 Plan. No new awards are being granted under the 1996 Plan or the PowerLight Plan.

Incentive stock options may be granted at no less than the fair value of the common stock on the date of grant. Non-statutory stock options and stock purchase rights may be granted at no less than 85% of the fair value of the common stock at the date of grant. The options and rights become exercisable when and as determined by SunPower's Board of Directors, although these terms generally do not exceed ten years for stock options. Under the 1996 and 2005 Plans, the options typically vest over five years with a one-year cliff and monthly vesting thereafter. Under the PowerLight Plan, the options typically vest over five years with yearly cliff vesting. Under the 2005 Plan, the restricted stock grants and restricted stock units typically vest in three equal installments annually over three years.

The majority of shares issued are net of the minimum statutory withholding requirements that SunPower pays on behalf of its

employees. During 2012 and the six months ended January 1, 2012 SunPower withheld 905,953 and 221,262 shares, respectively, to satisfy the employees' tax obligations. SunPower pays such withholding requirements in cash to the appropriate taxing authorities. Shares withheld are treated as common stock repurchases for accounting and disclosure purposes and reduce the number of shares outstanding upon vesting.

The following table summarizes SunPower's stock option activities:

	Outstanding Stock Options			
	Shares (in thousands)	Weighted-Average Exercise Price Per Share (in dollars)	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands dollars)
Outstanding as of July 3, 2011	**519**	**25.39**		
Exercised	(29)	3.93		
Forfeited	(6)	31.29		
Outstanding as of January 1, 2012	**484**	**26.62**	**4.71**	**480**
Exercisable as of January 1, 2012	441	24.52	4.53	480
Expected to vest after January 1, 2012	40	48.08	6.64	-
Outstanding as of January 1, 2012	**484**	**26.62**		
Exercised	(20)	2.59		
Forfeited	(70)	24.17		
Outstanding as of December 30, 2012	**394**	**28.27**	**3.51**	**310**
Exercisable as of December 30, 2012	394	28.27	3.51	310

The intrinsic value of options exercised in 2012 and in the six months ended January 1, 2012 were $0.1 million and $0.3 million respectively. There were no stock options granted in 2012 and in the six months ended January 1, 2012.

The aggregate intrinsic value in the preceding table represents the total pre-tax intrinsic value, based on SunPower's closing stock price of $5.49 at December 30, 2012, which would have been received by the option holders had all option holders exercised their options as of that date. The total number of in-the-money options exercisable was 0.1 million shares as of December 30, 2012.

The following table summarizes SunPower's non-vested stock options and restricted stock activities thereafter:

	Stock Options		Restricted Stock Awards and Units	
	Shares (in thousands)	Weighted-Average Exercise Price Per Share (in dollars)	Shares (in thousands)	Weighted-Average Grant Date Fair Value Per Share (in dollars)(a)
Outstanding as of July 3, 2011	**67**	**41.34**	**7,198**	**16.03**
Granted	-	-	2,336	6.91
Vested(b)	(19)	28.73	(691)	18.96
Forfeited	(5)	31.29	(1,473)	14.10
Outstanding as of December 31, 2011	**43**	**48.33**	**7,370**	**13.25**
Granted	-	-	5,638	5.93
Vested(b)	(30)	57.79	(2,845)	13.94
Forfeited	(13)	24.72	(1,587)	11.52
Outstanding as of December 31, 2012	**-**	**-**	**8,576**	**8.35**

(a) The Company estimates the fair value of the restricted stock unit awards as the stock price on the grant date.
(b) Restricted stock awards and units vested include shares withheld on behalf of employees to satisfy the minimum statutory tax withholding requirements.

F) Share-based payment expense

Share-based payment expense before tax for the year 2012 amounts to €148 million and is broken down as follows:

- €13 million for TOTAL share subscription plans;
- €133 million for TOTAL restricted shares plans; and
- €2 million for SunPower plans.

Share-based payment expense before tax for the year 2011 amounts to €178 million and is broken down as follows:

- €27 million for TOTAL share subscription plans;
- €134 million for TOTAL restricted shares plans; and
- €17 million for SunPower plans.

Share-based payment expense before tax for the year 2010 amounted to €140 million and was broken down as follows:

- €31 million for TOTAL share subscription plans; and
- €109 million for TOTAL restricted shares plans.

The fair value of the options granted in 2011 and 2010 has been measured according to the Black-Scholes method and based on the following assumptions:

For the year ended December 31,	2012	2011	2010
Risk free interest rate (%)[a]	-	2.0	2.1
Expected dividends (%)[b]	-	5.6	5.9
Expected volatility (%)[c]	-	27.5	25.0
Vesting period (years)	-	2	2
Exercise period (years)	-	8	8
Fair value of the granted options (€ per option)	-	4.4	5.8

(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.

In 2012 no new TOTAL share subscription option plan was decided.

The cost of capital increases reserved for employees is reduced to take into account the non transferability of the shares that could be subscribed by the employees over a period of five years. The valuation method of non transferability 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 2011, 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,	2011
Date of the Board of Directors meeting that decided the issue	October 28, 2010
Subscription price (€)	34.80
Share price at the reference date (€)[a]	41.60
Number of shares (in millions)	8.90
Risk free interest rate (%)[b]	2.82
Employees loan financing rate (%)[c]	7.23
Non transferability cost (% of the reference's share price)	17.6

(a) Share price at the date which the Chairman and Chief Executive Officer decided the subscription period.
(b) Zero coupon Euro swap rate at 5 years.
(c) The employees loan financing rate is based on a 5 year consumer's credit rate.

Due to the fact that the non transferability cost was higher than the discount, no cost has been accounted in 2011.

In addition on September 18, 2012 the Board of Directors implemented a capital increase reserved for employees comprising a classic subscription formula and a formula with leverage at the choice of the employees, within the limit of 18 million shares, with dividend rights as of the January 1, 2012 and delegated all power to the Chairman and Chief Executive Officer to determine dates for the opening and closing of subscription period and the subscription price. This capital increase will be opened in 2013 and should be closed before the Combined General Meeting of 2013.

26) Payroll and staff

For the year ended December 31,	2012	2011	2010
Personnel expenses (M€)			
Wages and salaries (including social charges)	7,135	6,579	6,246
Group Employees			
France			
Management	11,347	11,123	10,852
Other	23,656	23,914	24,317
International			
Management	16,307	15,713	15,146
Other	45,816	45,354	42,540
Total	**97,126**	**96,104**	**92,855**

The number of employees includes only employees 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, (M€)	2012	2011	2010
Interests paid	(694)	(679)	(470)
Interests received	73	277	132
Income tax paid[(a)]	(13,067)	(12,061)	(8,848)
Dividends received	2,419	2,133	1,722

(a) These amounts include taxes paid in kind under production-sharing contracts in the exploration-production.

Changes in working capital are detailed as follows:

For the year ended December 31, (M€)	2012	2011	2010
Inventories	372	(1,845)	(1,896)
Accounts receivable	767	(1,287)	(2,712)
Other current assets	(226)	(2,409)	911
Accounts payable	345	2,646	2,482
Other creditors and accrued liabilities	(174)	1,156	719
Net amount	**1,084**	**(1,739)**	**(496)**

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, (M€)	2012	2011	2010
Issuance of non-current debt	5,539	4,234	3,995
Repayment of non-current debt	(260)	(165)	(206)
Net amount	**5,279**	**4,069**	**3,789**

C) Cash and cash equivalents

Cash and cash equivalents are detailed as follows:

For the year ended December 31, (M€)	2012	2011	2010
Cash	6,202	4,715	4,679
Cash equivalents	9,267	9,310	9,810
Total	**15,469**	**14,025**	**14,489**

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 in the balance sheet are detailed as follows:

As of December 31, 2012 (M€)	Financial instruments related to financing and operational activities							Other financial instruments	Total	Fair value
	Amortized cost	Fair value								
Assets/(Liabilities)		Available for sale[(a)]	Held for trading	Financial debt[(b)]	Hedging of financial debt	Cash flow hedge	Net investment hedge and other			
Equity affiliates: loans	2,360	-	-	-	-	-	-	-	2,360	2,360
Other investments	-	1,190	-	-	-	-	-	-	1,190	1,190
Hedging instruments of non-current financial debt	-	-	-	-	1,566	60	-	-	1,626	1,626
Other non-current assets	2,207	-	-	-	-	-	-	-	2,207	2,207
Accounts receivable, net	-	-	-	-	-	-	-	19,206	19,206	19,206
Other operating receivables	-	-	707	-	-	-	-	5,451	6,158	6,158
Current financial assets	1,093	-	38	-	430	1	-	-	1,562	1,562
Cash and cash equivalents	-	-	-	-	-	-	-	15,469	15,469	15,469
Total financial assets	**5,660**	**1,190**	**745**	**-**	**1,996**	**61**	**-**	**40,126**	**49,778**	**49,778**
Total non-financial assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**122,051**	**-**
Total assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**171,829**	**-**
Non-current financial debt	(5,086)	-	-	(17,177)	(11)	-	-	-	(22,274)	(22,473)
Accounts payable	-	-	-	-	-	-	-	(21,648)	(21,648)	(21,648)
Other operating liabilities	-	-	(482)	-	-	(10)	-	(5,412)	(5,904)	(5,904)
Current borrowings	(6,787)	-	-	(4,229)	-	-	-	-	(11,016)	(11,016)
Other current financial liabilities	-	-	(88)	-	(84)	(4)	-	-	(176)	(176)
Total financial liabilities	**(11,873)**	**-**	**(570)**	**(21,406)**	**(95)**	**(14)**	**-**	**(27,060)**	**(61,018)**	**(61,217)**
Total non-financial liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(110,811)**	**-**
Total liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(171,829)**	**-**

(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, 2011 (M€)	Financial instruments related to financing and trading activities							Other financial instruments	Total	Fair value
	Amortized cost	Fair value								
Assets/(Liabilities)		Available for sale[a]	Held for trading	Financial debt[b]	Hedging of financial debt	Cash flow hedge	Net investment hedge and other			
Equity affiliates: loans	2,246	-	-	-	-	-	-	-	2,246	2,246
Other investments	-	3,674	-	-	-	-	-	-	3,674	3,674
Hedging instruments of non-current financial debt	-	-	-	-	1,971	5	-	-	1,976	1,976
Other non-current assets	2,055	-	-	-	-	-	-	-	2,055	2,055
Accounts receivable, net	-	-	-	-	-	-	-	20,049	20,049	20,049
Other operating receivables	-	-	1,074	-	-	-	-	6,393	7,467	7,467
Current financial assets	146	-	159	-	383	12	-	-	700	700
Cash and cash equivalents	-	-	-	-	-	-	-	14,025	14,025	14,025
Total financial assets	**4,447**	**3,674**	**1,233**	**-**	**2,354**	**17**	**-**	**40,467**	**52,192**	**52,192**
Total non-financial assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**111,857**	**-**
Total assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**164,049**	**-**
Non-current financial debt	(4,858)	-	-	(17,551)	(97)	(49)	-	(2)	(22,557)	(23,247)
Accounts payable	-	-	-	-	-	-	-	(22,086)	(22,086)	(22,086)
Other operating liabilities	-	-	(606)	-	-	-	-	(4,835)	(5,441)	(5,441)
Current borrowings	(6,158)	-		(3,517)	-	-	-	-	(9,675)	(9,675)
Other current financial liabilities	-	-	(87)	-	(40)	(14)	(26)	-	(167)	(167)
Total financial liabilities	**(11,016)**	**-**	**(693)**	**(21,068)**	**(137)**	**(63)**	**(26)**	**(26,923)**	**(59,926)**	**(60,616)**
Total non-financial liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(104,123)**	**-**
Total liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(164,049)**	**-**

(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, 2010 (M€)	Financial instruments related to financing and trading activities							Other financial instruments	Total	Fair value
	Amortized cost	Fair value								
Assets/(Liabilities)		Available for sale[a]	Held for trading	Financial debt[b]	Hedging of financial debt	Cash flow hedge	Net investment hedge and other			
Equity affiliates: loans	2,383	-	-	-	-	-	-	-	2,383	2,383
Other investments	-	4,590	-	-	-	-	-	-	4,590	4,590
Hedging instruments of non-current financial debt	-	-	-	-	1,814	56	-	-	1,870	1,870
Other non-current assets	1,596	-	-	-	-	-	-	-	1,596	1,596
Accounts receivable, net	-	-	-	-	-	-	-	18,159	18,159	18,159
Other operating receivables	-	-	499	-	-	-	-	3,908	4,407	4,407
Current financial assets	869	-	38	-	292	-	6	-	1,205	1,205
Cash and cash equivalents	-	-	-	-	-	-	-	14,489	14,489	14,489
Total financial assets	**4,848**	**4,590**	**537**	**-**	**2,106**	**56**	**6**	**36,556**	**48,699**	**48,699**
Total non-financial assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95,019**	**-**
Total assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**143,718**	**-**
Non-current financial debt	(3,186)	-	-	(17,419)	(178)	-	-	-	(20,783)	(21,172)
Accounts payable	-	-	-	-	-	-	-	(18,450)	(18,450)	(18,450)
Other operating liabilities	-	-	(559)	-	-	-	-	(3,015)	(3,574)	(3,574)
Current borrowings	(5,916)	-	-	(3,737)	-	-	-	-	(9,653)	(9,653)
Other current financial liabilities	-	-	(147)	-	(12)	-	-	-	(159)	(159)
Total financial liabilities	**(9,102)**	**-**	**(706)**	**(21,156)**	**(190)**	**-**	**-**	**(21,465)**	**(52,619)**	**(53,008)**
Total non-financial liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(91,099)**	**-**
Total liabilities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(143,718)**	**-**

(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, (M€)	2012	2011	2010
Assets available for sale (investments):			
– dividend income on non-consolidated subsidiaries	223	330	255
– gains (losses) on disposal of assets	516	103	60
– other	(60)	(29)	(17)
Loans and receivables	(20)	(34)	90
Impact on net operating income	**659**	**370**	**388**

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, non-consolidated 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, (M€)	2012	2011	2010
Loans and receivables	80	271	133
Financing liabilities and associated hedging instruments	(675)	(730)	(469)
Fair value hedge (ineffective portion)	4	17	4
Assets and liabilities held for trading	20	2	(2)
Impact on the cost of net debt	**(571)**	**(440)**	**(334)**

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, (M€)	2012	2011	2010
Revaluation at market value of bonds	321	(301)	(1,164)
Swap hedging of bonds	(317)	318	1,168
Ineffective portion of the fair value hedge	**4**	**17**	**4**

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, (M€)	As of January 1,	Variations	Disposals	As of December 31,
2012	**(104)**	**(187)**	**-**	**(291)**
2011	(243)	139	-	(104)
2010	25	(268)	-	(243)

As of December 31, 2012, the Group had no open forward hedging instruments. The fair value of open forward instruments was € (26) million in 2011 and €6 million in 2010.

Cash flow hedge

The impact on the statement of income and on equity of the hedging instruments qualified as cash flow hedges is detailed as follows:

For the year ended December 31, (M€)	2012	2011	2010
Profit (Loss) recorded in equity during the period	65	(84)	(80)
Recycled amount from equity to the income statement during the period	87	(47)	(115)

As of December 31, 2012, 2011 and 2010, 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, 2012 (M€) Assets/(Liabilities)	Fair value	Notional value[a] Total	2013	2014	2015	2016	2017	2018 and after
Fair value hedge								
Swaps hedging fixed-rates bonds (liabilities)	(11)	1,737	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (assets)	1,566	15,431	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	**1,555**	**17,168**	**-**	**4,205**	**3,537**	**2,098**	**3,075**	**4,253**
Swaps hedging fixed-rates bonds (current portion) (liabilities)	(84)	591	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (current portion) (assets)	430	3,614	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)	**346**	**4,205**	**4,205**	**-**	**-**	**-**	**-**	**-**
Cash flow hedge								
Swaps hedging fixed-rates bonds (liabilities)	-	-	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (assets)	60	1,683	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	**60**	**1,683**	**-**	**-**	**-**	**-**	**-**	**1,683**
Swaps hedging fixed-rates bonds (current portion) (liabilities)	(4)	148	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (current portion) (assets)	1	19	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)	**(3)**	**167**	**167**	**-**	**-**	**-**	**-**	**-**
Swaps hedging investments (liabilities)	(10)	518	-	-	-	-	-	-
Swaps hedging investments (assets)	-	-	-	-	-	-	-	-
Total swaps hedging investments (assets and liabilities)	**(10)**	**518**	**365**	**141**	**12**	**-**	**-**	**-**
Net investment hedge								
Currency swaps and forward exchange contracts (assets)	-	-	-	-	-	-	-	-
Currency swaps and forward exchange contracts (liabilities)	-	-	-	-	-	-	-	-
Total swaps hedging net investments	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Held for trading								
Other interest rate swaps (assets)	2	11,041	-	-	-	-	-	-
Other interest rate swaps (liabilities)	(2)	9,344	-	-	-	-	-	-
Total other interest rate swaps (assets and liabilities)	**-**	**20,385**	**19,962**	**133**	**88**	**85**	**64**	**53**
Currency swaps and forward exchange contracts (assets)	36	4,768	-	-	-	-	-	-
Currency swaps and forward exchange contracts (liabilities)	(86)	12,224	-	-	-	-	-	-
Total currency swaps and forward exchange contracts (assets and liabilities)	**(50)**	**16,992**	**16,776**	**186**	**(15)**	**16**	**16**	**13**

(a) These amounts set the levels of notional commitment and are not indicative of a contingent gain or loss.

As of December 31, 2011 (M€) Assets/(Liabilities)	Fair value	Notional value[(a)]						
		Total	2012	2013	2014	2015	2016	2017 and after
Fair value hedge								
Swaps hedging fixed-rates bonds (liabilities)	(97)	1,478	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (assets)	1,971	15,653	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	**1,874**	**17,131**	**-**	**4,204**	**4,215**	**3,380**	**1,661**	**3,671**
Swaps hedging fixed-rates bonds (current portion) (liabilities)	(40)	642	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (current portion) (assets)	383	2,349	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)	**343**	**2,991**	**2,991**	**-**	**-**	**-**	**-**	**-**
Cash flow hedge								
Swaps hedging fixed-rates bonds (liabilities)	(49)	967	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (assets)	5	749	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	**(44)**	**1,716**		**-**	**-**	**-**	**-**	**1,716**
Swaps hedging fixed-rates bonds (current portion) (liabilities)	(14)	582	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (current portion) (assets)	12	908	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)	**(2)**	**1,490**	**1,490**	**-**	**-**	**-**	**-**	**-**
Net investment hedge								
Currency swaps and forward exchange contracts (assets)	-	-	-	-	-	-	-	-
Currency swaps and forward exchange contracts (liabilities)	(26)	881	-	-	-	-	-	-
Total swaps hedging net investments	**(26)**	**881**	**881**	**-**	**-**	**-**	**-**	**-**
Held for trading								
Other interest rate swaps (assets)	1	3,605	-	-	-	-	-	-
Other interest rate swaps (liabilities)	(2)	14,679	-	-	-	-	-	-
Total other interest rate swaps (assets and liabilities)	**(1)**	**18,284**	**18,284**	**-**	**-**	**-**	**-**	**-**
Currency swaps and forward exchange contracts (assets)	158	6,984	-	-	-	-	-	-
Currency swaps and forward exchange contracts (liabilities)	(85)	4,453	-	-	-	-	-	-
Total currency swaps and forward exchange contracts (assets and liabilities)	**73**	**11,437**	**11,176**	**80**	**58**	**36**	**31**	**56**

(a) These amounts set the levels of notional commitment and are not indicative of a contingent gain or loss.

As of December 31, 2010 (M€) Assets/(Liabilities)	Fair value	Notional value(a)						
		Total	2011	2012	2013	2014	2015	2016 and after
Fair value hedge								
Swaps hedging fixed-rates bonds (liabilities)	(178)	2,244	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (assets)	1,814	13,939	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	**1,636**	**16,183**	**-**	**2,967**	**3,461**	**2,421**	**3,328**	**4,006**
Swaps hedging fixed-rates bonds (current portion) (liabilities)	(12)	592	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (current portion) (assets)	292	2,815	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (current portion) (assets and liabilities)	**280**	**3,407**	**3,407**	**-**	**-**	**-**	**-**	**-**
Cash flow hedge								
Swaps hedging fixed-rates bonds (liabilities)	-	-	-	-	-	-	-	-
Swaps hedging fixed-rates bonds (assets)	56	1,957	-	-	-	-	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	**56**	**1,957**	**-**	**295**	**-**	**-**	**-**	**1,662**
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	381	-	-	-	-	-	-
Currency swaps and forward exchange contracts (liabilities)	-	-	-	-	-	-	-	-
Total swaps hedging net investments	**6**	**381**	**381**	**-**	**-**	**-**	**-**	**-**
Held for trading								
Other interest rate swaps (assets)	1	6,463	-	-	-	-	-	-
Other interest rate swaps (liabilities)	(3)	11,395	-	-	-	-	-	-
Total other interest rate swaps (assets and liabilities)	**(2)**	**17,858**	**17,667**	**189**	**-**	**-**	**2**	**-**
Currency swaps and forward exchange contracts (assets)	37	1,532	-	-	-	-	-	-
Currency swaps and forward exchange contracts (liabilities)	(144)	6,757	-	-	-	-	-	-
Total currency swaps and forward exchange contracts (assets and liabilities)	**(107)**	**8,289**	**8,102**	**-**	**25**	**49**	**31**	**82**

(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, 2012 (M€)	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	-	1,901	-	1,901
Cash flow hedge instruments	-	47	-	47
Net investment hedge instruments	-	-	-	-
Assets and liablities held for trading	-	(50)	-	(50)
Assets available for sale	91	-	-	91
Total	**91**	**1,898**	**-**	**1,989**

As of December 31, 2011 (M€)	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	-	2,217	-	2,217
Cash flow hedge instruments	-	(46)	-	(46)
Net investment hedge instruments	-	(26)	-	(26)
Assets and liablities held for trading	-	72	-	72
Assets available for sale	2,575	-	-	2,575
Total	**2,575**	**2,217**	**-**	**4,792**

As of December 31, 2010 (M€)	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	-	1,916	-	1,916
Cash flow hedge instruments	-	56	-	56
Net investment hedge instruments	-	6	-	6
Assets and liablities held for trading	-	(109)	-	(109)
Assets available for sale	3,631	-	-	3,631
Total	**3,631**	**1,869**	**-**	**5,500**

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, 2012

(M€) Assets/(Liabilities)	Carrying amount	Fair value[b]
Crude oil, petroleum products and freight rates activities		
Petroleum products and crude oil swaps	(26)	(26)
Freight rate swaps	-	-
Forwards[a]	(2)	(2)
Options	(18)	(18)
Futures	(6)	(6)
Options on futures	5	5
Total crude oil, petroleum products and freight rates	**(47)**	**(47)**
Gas & Power activities		
Swaps	(17)	(17)
Forwards[a]	291	291
Options	(2)	(2)
Futures	-	-
Total Gas & Power	**272**	**272**
Total	**225**	**225**
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) 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 in the balance sheet, this fair value is set to zero.

As of December 31, 2011

(M€) Assets/(Liabilities)	Carrying amount	Fair value[b]
Crude oil, petroleum products and freight rates activities		
Petroleum products and crude oil swaps	3	3
Freight rate swaps	-	-
Forwards[a]	(16)	(16)
Options	(4)	(4)
Futures	(14)	(14)
Options on futures	(6)	(6)
Total crude oil, petroleum products and freight rates	**(37)**	**(37)**
Gas & Power activities		
Swaps	57	57
Forwards[a]	452	452
Options	(3)	(3)
Futures	-	-
Total Gas & Power	**506**	**506**
Total	**469**	**469**
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) 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 in the balance sheet, this fair value is set to zero.

As of December 31, 2010

(M€) Assets/(Liabilities)	Carrying amount	Fair value[b]
Crude oil, petroleum products and freight rates activities		
Petroleum products and crude oil swaps	(2)	(2)
Freight rate swaps	-	-
Forwards[a]	5	5
Options	51	51
Futures	(12)	(12)
Options on futures	(4)	(4)
Total crude oil, petroleum products and freight rates	**38**	**38**
Gas & Power activities		
Swaps	(1)	(1)
Forwards[a]	(102)	(102)
Options	5	5
Futures	-	-
Total Gas & Power	**(98)**	**(98)**
Total	**(60)**	**(60)**
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) 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 in 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, (M€)	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					
2012	**(37)**	**1,694**	**(1,705)**	**1**	**(47)**
2011	38	1,572	(1,648)	1	(37)
2010	(28)	1,556	(1,488)	(2)	38
Gas & Power activities					
2012	**506**	**588**	**(825)**	**3**	**272**
2011	(98)	899	(295)	0	506
2010	134	410	(648)	6	(98)

The fair value hierarchy for financial instruments related to commodity contracts is as follows:

As of December 31, 2012 (M€)	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	5	(52)	-	(47)
Gas & Power activities	(52)	324	-	272
Total	**(47)**	**272**	**-**	**225**

As of December 31, 2011 (M€)	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	(38)	1	-	(37)
Gas & Power activities	(44)	550	-	506
Total	**(82)**	**551**	**-**	**469**

As of December 31, 2010 (M€)	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	(10)	48	-	38
Gas & Power activities	50	(148)	-	(98)
Total	**40**	**(100)**	**-**	**(60)**

The description of each fair value level is presented in Note 1 paragraph M (v) to the Consolidated Financial Statements.

31) Financial risks management

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, power and coal. 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 re-evaluated 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, (M€)	High	Low	Average	Year end
2012	**13.0**	**3.8**	**7.4**	**5.5**
2011	10.6	3.7	6.1	6.3
2010	23.1	3.4	8.9	3.8

As part of its gas, power and coal 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, (M€)	High	Low	Average	Year end
2012	**20.9**	**2.6**	**7.4**	**2.8**
2011	21.0	12.7	16.0	17.6
2010	13.9	2.7	6.8	10.0

The Group has implemented strict policies and procedures to manage and monitor these market risks. These are based on the separation of control and front-office 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 mainly interest rate and currency swaps. The Group may also occasionally use futures contracts and options. These operations and their accounting treatment are detailed in Notes 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, deposit banks, or major companies 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 results of the Front Office. This unit also prepares marked-to-market valuations of used financial instruments 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 Canadian 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, in euros or in Canadian dollars, 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, in Canadian 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 minimize 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, in euros or in Canadian dollars 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, 2012, 2011 and 2010.

Assets/(Liabilities) (M€)	Carrying amount	Estimated fair value	Change in fair value due to a change in interest rate by: +10 basis points	-10 basis points
As of December 31, 2012				
Bonds (non-current portion, before swaps)	(21,346)	(21,545)	97	(97)
Swaps hedging fixed-rates bonds (liabilities)	*(11)*	*(11)*	-	-
Swaps hedging fixed-rates bonds (assets)	*1,626*	*1,626*	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	1,615	1,615	(58)	58
Current portion of non-current debt after swap (excluding capital lease obligations)	4,251	4,251	4	(4)
Other interest rates swaps	-	-	2	(2)
Currency swaps and forward exchange contracts	(50)	(50)	-	-
As of December 31, 2011				
Bonds (non-current portion, before swaps)	(21,402)	(22,092)	83	(83)
Swaps hedging fixed-rates bonds (liabilities)	*(146)*	*(146)*	-	-
Swaps hedging fixed-rates bonds (assets)	*1,976*	*1,976*	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	1,830	1,830	(49)	49
Current portion of non-current debt after swap (excluding capital lease obligations)	3,488	3,488	3	(3)
Other interest rates swaps	(1)	(1)	3	(3)
Currency swaps and forward exchange contracts	47	47	-	-
As of December 31, 2010				
Bonds (non-current portion, before swaps)	(20,019)	(20,408)	86	(84)
Swaps hedging fixed-rates bonds (liabilities)	*(178)*	*(178)*	-	-
Swaps hedging fixed-rates bonds (assets)	*1,870*	*1,870*	-	-
Total swaps hedging fixed-rates bonds (assets and liabilities)	1,692	1,692	(59)	59
Current portion of non-current debt after swap (excluding capital lease obligations)	3,483	3,483	4	(4)
Other interest rates swaps	(2)	(2)	3	(3)
Currency swaps and forward exchange contracts	(101)	(101)	-	-

The impact of changes in interest rates on the cost of net debt before tax is as follows:

For the year ended December 31, (M€)	2012	2011	2010
Cost of net debt	(571)	(440)	(334)
Interest rate translation of:			
+10 basis points	(11)	(10)	(11)
-10 basis points	11	10	11
+100 basis points	(106)	(103)	(107)
-100 basis points	106	103	107

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, the Norwegian krone and the Canadian dollar.

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/Dollar exchange rates	Euro/Pound sterling exchange rates
As of December 31, 2012	1.32	0.82
As of December 31, 2011	1.29	0.84
As of December 31, 2010	1.34	0.86

As of December 31, 2012 (M€)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates
Shareholders' equity at historical exchange rate	74,400	45,999	22,510	4,651	1,240
Currency translation adjustment before net investment hedge	(1,488)	-	(781)	(823)	116
Net investment hedge - open instruments	-	-	-	-	-
Shareholders' equity at exchange rate as of December 31, 2012	72,912	45,999	21,729	3,828	1,356

As of December 31, 2011 (M€)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates
Shareholders' equity at historical exchange rate	69,025	41,396	21,728	4,713	1,188
Currency translation adjustment before net investment hedge	(962)	-	127	(923)	(166)
Net investment hedge - open instruments	(26)	-	(25)	(1)	-
Shareholders' equity at exchange rate as of December 31, 2011	68,037	41,396	21,830	3,789	1,022

As of December 31, 2010 (M€)	Total	Euro	Dollar	Pound sterling	Other currencies and equity affiliates
Shareholders' equity at historical exchange rate	62,909	32,894	22,242	4,997	2,776
Currency translation adjustment before net investment hedge	(2,501)	-	(1,237)	(1,274)	10
Net investment hedge - open instruments	6	-	6	-	-
Shareholders' equity at exchange rate as of December 31, 2010	60,414	32,894	21,011	3,723	2,786

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 (a gain of €26 million in 2012, a gain of €118 million in 2011, nil result in 2010).

Stock market 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, 2012, these lines of credit amounted to $10,519 million, of which $10,463 million was 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, 2012, the aggregate amount of the principal confirmed lines of credit granted by international banks to Group companies, including TOTAL S.A., was $11,328 million, of which $10,921 million was 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, 2012, 2011 and 2010 (see Note 20 to the Consolidated Financial Statements).

As of December 31, 2012 Assets/(Liabilities) (M€)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	-	(3,832)	(3,465)	(2,125)	(3,126)	(8,100)	(20,648)
Current borrowings	(11,016)	-	-	-	-	-	(11,016)
Other current financial liabilities	(176)	-	-	-	-	-	(176)
Current financial assets	1,562	-	-	-	-	-	1,562
Assets and liabilities available for sale or exchange	(756)	-	-	-	-	-	(756)
Cash and cash equivalents	15,469	-	-	-	-	-	15,469
Net amount before financial expense	**5,083**	**(3,832)**	**(3,465)**	**(2,125)**	**(3,126)**	**(8,100)**	**(15,565)**
Financial expense on non-current financial debt	(746)	(625)	(519)	(405)	(352)	(1,078)	(3,725)
Interest differential on swaps	371	335	225	106	62	(37)	1,062
Net amount	**4,708**	**(4,122)**	**(3,759)**	**(2,424)**	**(3,416)**	**(9,215)**	**(18,228)**

As of December 31, 2011 Assets/(Liabilities) (M€)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	-	(4,492)	(3,630)	(3,614)	(1,519)	(7,326)	(20,581)
Current borrowings	(9,675)	-	-	-	-	-	(9,675)
Other current financial liabilities	(167)	-	-	-	-	-	(167)
Current financial assets	700	-	-	-	-	-	700
Cash and cash equivalents	14,025	-	-	-	-	-	14,025
Net amount before financial expense	**4,883**	**(4,492)**	**(3,630)**	**(3,614)**	**(1,519)**	**(7,326)**	**(15,698)**
Financial expense on non-current financial debt	(785)	(691)	(521)	(417)	(302)	(1,075)	(3,791)
Interest differential on swaps	320	331	221	120	55	44	1,091
Net amount	**4,418**	**(4,852)**	**(3,930)**	**(3,911)**	**(1,766)**	**(8,357)**	**(18,398)**

As of December 31, 2010 Assets/(Liabilities) (M€)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	-	(3,355)	(3,544)	(2,218)	(3,404)	(6,392)	(18,913)
Current borrowings	(9,653)	-	-	-	-	-	(9,653)
Other current financial liabilities	(159)	-	-	-	-	-	(159)
Current financial assets	1,205	-	-	-	-	-	1,205
Cash and cash equivalents	14,489	-	-	-	-	-	14,489
Net amount before financial expense	**5,882**	**(3,355)**	**(3,544)**	**(2,218)**	**(3,404)**	**(6,392)**	**(13,031)**
Financial expense on non-current financial debt	(843)	(729)	(605)	(450)	(358)	(1,195)	(4,180)
Interest differential on swaps	461	334	153	33	2	(78)	905
Net amount	**5,500**	**(3,750)**	**(3,996)**	**(2,635)**	**(3,760)**	**(7,665)**	**(16,306)**

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, 2012, 2011 and 2010 (see Note 28 to the Consolidated Financial Statements).

As of December 31 (M€) Assets/(Liabilities)	2012	2011	2010
Accounts payable	(21,648)	(22,086)	(18,450)
Other operating liabilities	(5,904)	(5,441)	(3,574)
including financial instruments related to commodity contracts	*(482)*	*(606)*	*(559)*
Accounts receivable, net	19,206	20,049	18,159
Other operating receivables	6,158	7,467	4,407
including financial instruments related to commodity contracts	*707*	*1,074*	*499*
Total	**(2,188)**	**(11)**	**542**

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 (M€) Assets/(Liabilities)	2012	2011	2010
Loans to equity affiliates *(note 12)*	2,360	2,246	2,383
Loans and advances *(note 14)*	2,207	2,055	1,596
Hedging instruments of non-current financial debt *(note 20)*	1,626	1,976	1,870
Accounts receivable *(note 16)*	19,206	20,049	18,159
Other operating receivables *(note 16)*	6,158	7,467	4,407
Current financial assets *(note 20)*	1,562	700	1,205
Cash and cash equivalents *(note 27)*	15,469	14,025	14,489
Total	**48,588**	**48,518**	**44,109**

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, 2012, the net amount received as part of these margin calls was €1,635 million (against €1,682 million as of December 31, 2011 and €1,560 million as of December 31, 2010).

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**

  Gas & Power deals with counterparties in the energy, industrial and financial sectors throughout the world. 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.

Marketing & Services segment

Internal procedures for the Supply & 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 subscription of credit insurance and/or 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 risk of credit loss.

Refining & Chemicals segment

- **Refining & Chemicals**

  Credit risk 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 (provisions may also be calculated based on statistics).

- **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.

32) Other risks and contingent liabilities

TOTAL is not currently aware of any exceptional event, dispute, 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

The principal antitrust proceedings in which the Group's companies are involved are described thereafter.

Refining & Chemicals segment

As part of the spin-off of Arkema[(1)] in 2006, TOTAL S.A. and certain other Group companies agreed to grant Arkema a guarantee for potential monetary consequences related to antitrust proceedings arising from events prior to the spin-off.

This guarantee covers, for a period of ten years from the date of the spin-off, 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 related to anti-competition violations in Europe applies to amounts above a €176.5 million threshold. 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 this guarantee, in Europe.

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, this guarantee will become void.

- In the United States, civil liability lawsuits, for which TOTAL S.A. has been named as the parent company, are closed without significant impact on the Group's financial position.
- In Europe, since 2006, the European Commission has fined companies of the Group in its configuration prior to the spin-off following five investigations launched by the European Commission between 2000 and 2004, four of which are closed, the fifth is on hold a pending decision following the appeal of Arkema and the concerned companies of the Group.

  In financial terms, the fines imposed by the European Commission following the five investigations reach an overall amount of €385.47 million, entirely settled as of today. As a result, once the threshold provided for by the guarantee is deducted, the overall amount assumed and paid by the Group since the spin-off in accordance with the guarantee amounted to €188.07 million[(2)], to which an amount of €31.31 million of interest has been added. These amounts were not modified during the 2012 financial year.
- In addition, civil proceedings against Arkema and other groups of companies were initiated in 2009 and 2011, respectively, before German and Dutch courts by third parties for alleged damages pursuant to two of the above mentioned legal proceedings. TOTAL S.A. was summoned to serve notice of the dispute before the German court. At this point, the probability to have a favorable verdict and the financial impacts of these proceedings remain uncertain due to the number of legal difficulties they give rise to, the lack of documented claims and evaluations of the alleged damages.

  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 regarding events prior to the spin-off, as well as Elf Aquitaine and/or TOTAL S.A. based on their status as parent company.

Within the framework of all of the legal proceedings described above, a €17 million reserve remains booked in the Group's Consolidated Financial Statements as of December 31, 2012.

Marketing & Services segment

- Pursuant to a statement of objections received by Total Nederland N.V. and TOTAL S.A. (based on its status as parent company) from the European Commission, Total Nederland N.V. was fined €20.25 million in 2006, for which TOTAL S.A. was held jointly liable for €13.5 million. TOTAL S.A. lodged an appeal against this decision that was dismissed end of September 2012.
- In addition, pursuant to a statement of objections received by Total Raffinage Marketing (formerly Total France) and TOTAL S.A. from the European Commission regarding a product line of the Marketing & Services segment, Total Raffinage Marketing was fined €128.2 million in 2008, which has been paid, and for which TOTAL S.A. was held jointly liable based on its status as parent company. The appeal against this decision lodged by the Group is still pending before the relevant European court.
- In addition, the civil proceedings against TOTAL S.A., Total Raffinage Marketing and other companies initiated before UK and Dutch courts by third parties for alleged damages in connection with the prosecutions brought by the European Commission are ongoing. At this point, the probability to have a favorable verdict and the financial impacts of these procedures remain uncertain due to the number of legal difficulties they gave rise to, the lack of documented claims and evaluations of the alleged damages.

Within the framework of the legal proceedings described above, a €30 million reserve is booked in the Group's Consolidated Financial Statements as of December 31, 2012.

Whatever the evolution of the proceedings described above, the Group believes that their outcome should not have a material adverse effect on the Group's financial situation or consolidated results.

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

(1) 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.
(2) This amount does not take into account a case that led to Arkema, prior to Arkema's spin-off from TOTAL, and Elf Aquitaine being fined jointly €45 million and Arkema being fined €13.5 million.

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 twenty-one 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 remediation 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.

After having articulated several hypotheses, the Court appointed experts did not maintain in their final report filed on May 11, 2006, 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.

On July 9, 2007, the investigating magistrate 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.

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 Mr. 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.

By its decision of September 24, 2012, the Court of Appeal of Toulouse (*Cour d'appel de Toulouse*) upheld the lower court verdict pursuant to which the summonses against TOTAL S.A. and Mr. Thierry Desmarest were determined to be inadmissible. This element of the decision has been appealed by certain third parties before the French Supreme Court (*Cour de cassation*).

The Court of Appeal considered, however, that the explosion was the result of the chemical accident described by the court-appointed experts. Accordingly, it convicted the former Plant Manager and Grande Paroisse. This element of the decision has been appealed by the former Plant Manager and Grande Paroisse before the French Supreme Court (*Cour de cassation*), which has the effect of suspending their criminal sentences.

A compensation mechanism for victims was set up immediately following the explosion. €2.3 billion was paid for the compensation of claims and related expenses amounts. As of December 31, 2012, a €17 million reserve was recorded in the Group's consolidated balance sheet.

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 was 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 injuries, most of which were 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 TOTAL's UK subsidiary liable for the accident and solely liable for indemnifying the victims. The subsidiary appealed the decision. The appeal trial took place in January 2010. The Court of Appeal, by a decision handed down on March 4, 2010, confirmed the prior judgment. The Supreme Court of United Kingdom has partially authorized TOTAL's UK subsidiary to contest the decision. TOTAL's UK subsidiary finally decided to withdraw from this recourse due to settlement agreements reached in mid-February 2011.

The Group carries insurance for damage to its interests in these facilities, business interruption and civil liability claims from third parties. The provision for the civil liability that appears in the Group's Consolidated Financial Statements as of December 31, 2012, stands at €1 million after taking into account the payments previously made.

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.

In addition, 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. By a judgment on July 16, 2010, the subsidiary was fined £3.6 million and paid it. The decision takes into account a number of elements that have mitigated 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, and ordering TOTAL S.A. to pay a fine of €375,000. The Court also ordered compensation to be paid to those affected by the 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 has appealed the verdict of January 16, 2008. In the meantime, it nevertheless proposed to pay third parties who so requested definitive compensation as determined by the Court. Forty-two third

parties have been compensated for an aggregate amount of €171.5 million.

By a decision dated March 30, 2010, the *Cour d'appel de Paris* upheld the lower Court verdict pursuant to which TOTAL S.A. was convicted of marine pollution and fined €375,000. TOTAL appealed this decision to the French Supreme Court (*Cour de cassation*).

However, the Court of Appeal ruled that TOTAL S.A. bears no civil liability according to the applicable international conventions and consequently ruled that TOTAL S.A. be not convicted.

TOTAL challenged the criminal law-related of this decision before the French Supreme Court (*Cour de cassation*).

By a decision dated September 25, 2012, the *Cour de cassation* has dismissed the appeal lodged by TOTAL S.A. and upheld the conviction of marine pollution. The *Cour de cassation* also quashed the appeal judgment and ruled that TOTAL S.A. bears civil liability. Consequently, TOTAL S.A. has been declared severally liable together with the Erika's inspection and classification firm, owner and manager to compensate the damages allocated to third parties by the *Cour d'appel de Paris* in 2010.

Nearly all the damages allocated to third parties have already been paid. Consequently, the decision of the *Cour de cassation* did not give rise to a significant financial impact for the Group.

Blue Rapid and the Russian Olympic Committee - Russian regions and Interneft

Blue Rapid, a Panamanian company, and the Russian Olympic Committee filed a claim for damages with the Paris Commercial Court against Elf Aquitaine, alleging a so-called non-completion by a former subsidiary of Elf Aquitaine of a contract related to an exploration and production project in Russia negotiated in the early 1990s. Elf Aquitaine believed this claim to be unfounded and opposed it. On January 12, 2009, the Commercial Court of Paris rejected Blue Rapid's claim against Elf Aquitaine and found that the Russian Olympic Committee did not have standing in the matter. Blue Rapid and the Russian Olympic Committee appealed this decision. On June 30, 2011, the Court of Appeal of Paris dismissed as inadmissible the claim of Blue Rapid and the Russian Olympic Committee against Elf Aquitaine, notably on the grounds of the contract's termination. Blue Rapid and the Russian Olympic Committee appealed this decision to the French Supreme Court.

In connection with the same facts, and fifteen years after the termination of the exploration and production contract, a Russian company, which was held not to be the contracting party to the contract, and two regions of the Russian Federation which were not even parties to the contract, have launched an arbitration procedure against the aforementioned former subsidiary of Elf Aquitaine that was liquidated in 2005, claiming alleged damages of U.S.$ 22.4 billion. For the same reasons as those successfully adjudicated by Elf Aquitaine against Blue Rapid and the Russian Olympic Committee, the Group considers this claim to be unfounded as to a matter of law or fact. The Group has lodged a criminal complaint to denounce the fraudulent claim which the Group believes it is a victim of and, has taken and reserved its rights to take other actions and measures to defend its interests.

Iran

In 2003, the United States Securities and Exchange Commission (SEC) followed by the Department of Justice (DoJ) issued a formal order directing an investigation in connection with the pursuit of business in Iran, by certain oil companies including, among others, TOTAL.

The inquiry concerns an agreement concluded by the Company with consultants concerning gas fields in Iran and aims to verify whether certain payments made under this agreement would have benefited Iranian officials in violation of the Foreign Corrupt Practices Act (FCPA) and the Company's accounting obligations. The Company fully cooperates with these investigations.

Since 2010, the Company has been in discussions with U.S. authorities (DoJ and SEC) to consider, as it is often the case in these kinds of proceedings, an out-of-court settlement, which would terminate the investigation in exchange for TOTAL respecting a number of obligations, including the payment of a fine and civil compensation, without admission of guilt.

U.S. authorities have proposed draft agreements that could be accepted by TOTAL. Consequently, and although discussions have not yet been finalized, a provision of $398 million, unchanged since its booking as of June 30, 2012, reflecting the best estimate of potential costs associated with the resolution of these proceedings, remains booked in the Group's Consolidated Financial Statements as of December 31, 2012.

In this same affair, TOTAL and its Chief Executive Officer, President of the Middle East at the time of the facts, have been placed under formal investigation, following a judicial inquiry initiated in France in 2006.

At this point, the Company considers that the resolution of these cases is not expected to have a significant impact on the Group's financial situation or consequences on its future planned operations.

Libya

In June 2011, the United States Securities and Exchange Commission (SEC) issued to certain oil companies - including, among others, TOTAL - a formal request for information related to their operations in Libya. TOTAL is cooperating with this non public investigation.

Oil-for-Food Program

Several countries have launched 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 Chairman and 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 to the investigating magistrate that the case against the Group's current and former employees and TOTAL's Chairman and Chief Executive Officer not be pursued.

In early 2010, despite the recommendation of the Prosecutor's office, a new investigating magistrate, having taken over the case, decided to indict TOTAL S.A. on bribery charges as well as complicity and influence peddling. The indictment was brought eight years after the beginning of the investigation without any new evidence being introduced.

In October 2010, the Prosecutor's office recommended to the investigating magistrate that the case against TOTAL S.A., the Group's current and former employees and TOTAL's Chairman and Chief Executive Officer not be pursued. However, by ordinance notified in early August 2011, the investigating magistrate on the matter decided to send the case to trial. The hearings began in late January 2013 and are expected to end in late February 2013.

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 Volcker 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 with respect to TOTAL.

Italy

As part of an investigation led by the Prosecutor of the Republic of the Potenza Court, Total Italia and certain Group's employees are the subject of an investigation related to certain calls for tenders that Total Italia 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 dated 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.

The criminal investigation was closed in the first half of 2010. In May 2012, the Judge of the preliminary hearing decided to dismiss the charges for some of the Group's employees and refer the case for trial for a reduced number of charges. The trial started on September 26, 2012.

In 2010, Total Italia's exploration and production operations were transferred to Total E&P Italia and refining and marketing operations were merged with those of Erg Petroli.

Rivunion

On July 9, 2012, the Swiss *Tribunal Fédéral* (Switzerland's Supreme Court) rendered its decision against Rivunion, a wholly-owned subsidiary of Elf Aquitaine, confirming a tax reassessment in the amount of CHF 171 million (excluding interest for late payment, yet to be calculated by the competent authorities). According to the *Tribunal*, Rivunion was held liable as tax collector of withholding taxes owed by the beneficiaries of taxable services. Rivunion, in liquidation since March 12, 2002, unable to recover the amounts corresponding to the withholding taxes in restitution from said beneficiaries in order to meet its fiscal obligations, has been subject to insolvency proceedings since November 1, 2012.

Elgin

Following a gas leak starting on March 25, 2012, on the G4 well from the well-platform of the Elgin field in the North Sea (United Kingdom), the production from the Elgin, Franklin and West Franklin fields was stopped and the site's personnel was evacuated. No injuries to personnel occurred and the environmental impact was very limited.

Total E&P UK Ltd immediately launched its emergency response plan and mobilized crisis management teams. The Group also mobilized international well control experts.

As from April 6, 2012, teams comprised of TOTAL experts and specialists engaged by the Group conducted numerous missions to the Elgin platform in order to prepare and implement the intervention plans for controlling the leak.

On May 21, 2012, Total E&P UK Ltd confirmed, following five days of close monitoring, the success of the intervention conducted on May 15, 2012 to stop the gas leak of the G4 well. Injecting heavy mud into the G4 well allowed the regaining of control over the well. Five cement plugs were placed in the well between June and October 2012.

The works continue for a restart of the production of Elgin, Franklin and West Franklin in the first quarter of 2013. The investigations of the British authorities and TOTAL to understand the reasons for the accident and draw the proper lessons from them are in progress.

The loss of production from these three fields (Group share) is approximately 39 kboe/d in 2012, equivalent to less than 2% of the Group's production.

The cost of actions taken to resolve the situation on the well G4 are mostly covered by insurance guarantees in place.

The wells that will not be restarted were totally written-off in 2012 and the provisions to hedge the costs of abandonments of these wells were updated.

These elements represent a charge of €256 million ($329 million) on the net operating income of the Group as of December 31, 2012.

Total E&P UK Ltd is the operator of the Elgin, Franklin and West Franklin fields and the Group holds an interest of 46.17% since the end of 2011 via the Elgin Franklin Oil & Gas (EFOG) company.

Nigeria (OML 58)

On April 3, 2012, Total E&P Nigeria Ltd (TEPNG), a subsidiary of the Group, was informed about water and gas resurgence points observed in an uninhabited area close to its onshore gas production facilities on the OML 58 license. This event was the consequence of a technical incident that occurred March 20, 2012 on the Ibewa gas production site: a gas producing well (IBW16) was intersected during the drilling operations of a new well (OB127b), which resulted in gas flowing from the production well into intermediate geological layers. The Obite treatment gas plant was stopped and the other wells shut down and secured.

In close collaboration with representatives of the local communities and the Nigerian authorities, all necessary means to ensure the protection of nearby communities and personnel and to limit the impact on the environment have been immediately mobilized. Very important technical means, as well as experts of the Group and specialized companies have also been mobilized on site to regain control of the well and stop the flow of gas.

On May 18, 2012, TEPNG confirmed the success of the intervention conducted on the Ibewa 16 well to stop the gas leak. Cement plugs have been set to ensure the isolation of the reservoir. The activity of the gas resurgences decreased in intensity immediately after this intervention, and stopped within a few days. TOTAL teams are still maintaining a regular monitoring of the water and air quality. A comprehensive review of the environmental impact is underway in liaison with the authorities.

The Obite gas treatment plant was restarted, with the exception of wells damaged by the incident, and gas production from the site was resumed, finding a level close to the pre-incident levels up until the October 7, 2012.

The actions taken to solve the situation on OML 58 led to a charge of €25 million ($32 million) in the net operating income of the Group at 31 December, 2012.

Severe flooding which has affected a large part of the Nigeria during the third term of the year have also affected the operations of Total E&P Nigeria Ltd. OML58 production facilities were shut-down from October 7 to November 11, 2012. Gas production was compensated from other fields (offshore). Total E&P Nigeria Ltd has mobilized important logistic means during this period in order to assist local communities.

The total impact of the loss of production generated by the above incidents (Group share) is approximately 13 kboe/d in 2012.

Total E&P Nigeria Ltd operates the OML 58 license as part of the joint venture between TOTAL and the Nigerian National Petroleum Corporation, and holds a 40% stake in this permit.

Yemen

The Yemen LNG company (39.62%) underwent since March 30, 2012 eight acts of sabotage on the 38 inch gas pipeline that links Block 18 to the Balhaf facility on the Gulf of Aden, resulting in production losses of almost 24% compared to the budget. These acts of sabotage have led to short-term production stops of LNG. Prompt repairs permitted to limit the number of shipments cancelled accordingly. Safety and monitoring measures were strengthened along the gas pipeline and around the LNG plant.

33) Other information

Research and development costs incurred by the Group in 2012 amounted to €805 million (€776 million in 2011 and €715 million in 2010), corresponding to 0.4% of the sales.

The staff dedicated in 2012 to these research and development activities are estimated at 4,110 people (3,946 in 2011 and 4,087 in 2010).

34) Changes in progress in the Group structure

Upstream

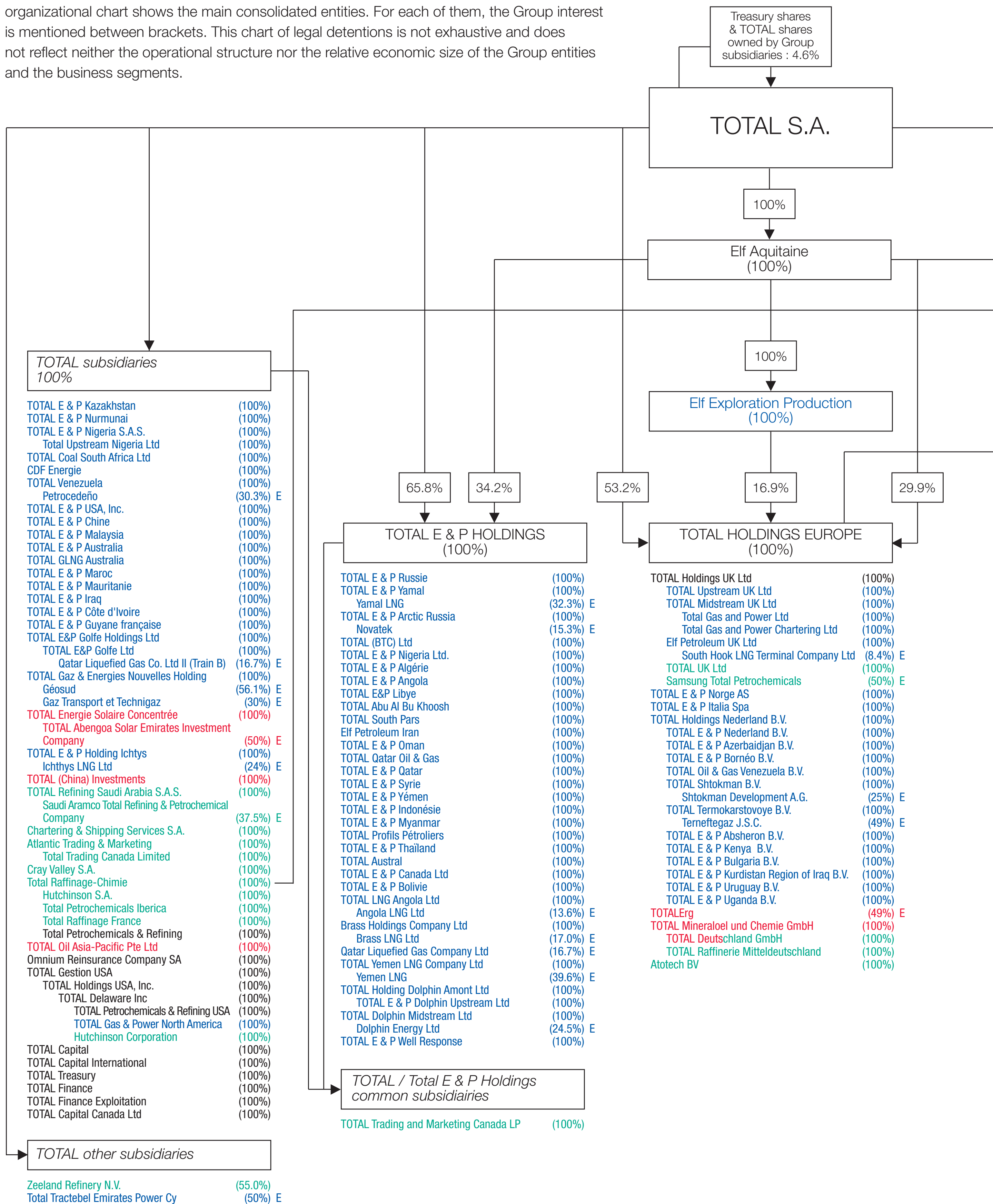
- TOTAL announced in July 2012 that it has acquired an additional 6% interest in the Ichthys Liquefied Natural Gas (LNG) project from its partner INPEX. TOTAL's overall equity stake in the Ichthys LNG project will increase from 24% to 30%. The transaction remains subject to approval by the relevant authorities.
- TOTAL announced in August 2012 the signature of an agreement with INPEX concerning the sale of a 9.99% indirect interest in offshore Angola Block 14. This transaction remains subject to agreement by the relevant authorities.
- TOTAL announced in February 2013 that it had entered into exclusive negotiations with a consortium comprising Snam, EDF and GIC (Government of Singapore Investment Corporation), having received a firm offer to acquire 100% of the outstanding shares of Transport et Infrastructures Gaz France (TIGF). In October TOTAL had announced to the representatives of the staff of TIGF the search for a potential buyer capable of assuring the development of TIGF. At December 31, 2012 the assets and liabilities of the company have been respectively classified in the consolidated balance sheet in "assets classified as held for sale" for an amount of €1,430 million and "liabilities directly associated with assets classified as held for sale" for an amount of €880 million. The assets and liabilities concerned mainly include tangible assets for an amount of €1,245 million and non-current financial debt for an amount of €793 million.
- TOTAL has put up for sale its interest in the Upstream in Trinidad & Tobago. At December 31, 2012 the assets and liabilities have been respectively classified in the consolidated balance sheet in "assets classified as held for sale" for an amount of €249 million and "liabilities directly associated with assets classified as held for sale" for an amount of €99 million. The assets concerned mainly include tangible assets for an amount of €228 million.
- TOTAL announced in November 2012 the finalization of an agreement for the sale in Nigeria of its 20% interest in Block OML 138 to a subsidiary of China Petrochemical Corporation (Sinopec). This transaction remains subject to the approval by the relevant authorities. At December 31, 2012 the assets and liabilities have been respectively classified in the consolidated balance sheet in "assets classified as held for sale" for an amount of €1,653 million and "liabilities directly associated with assets classified as held for sale" for an amount of €502 million. The assets concerned mainly include tangible assets for an amount of €1,303 million.
- TOTAL is engaged in a process to sell its 25% interest in the Tempa Rossa field in Italy. At December 31, 2012 the assets have been classified in the consolidated balance sheet in "assets classified as held for sale" for an amount of €465 million. The assets concerned include intangible assets for an amount of €249 million and tangible assets for an amount of €216 million.

Refining & Chemicals

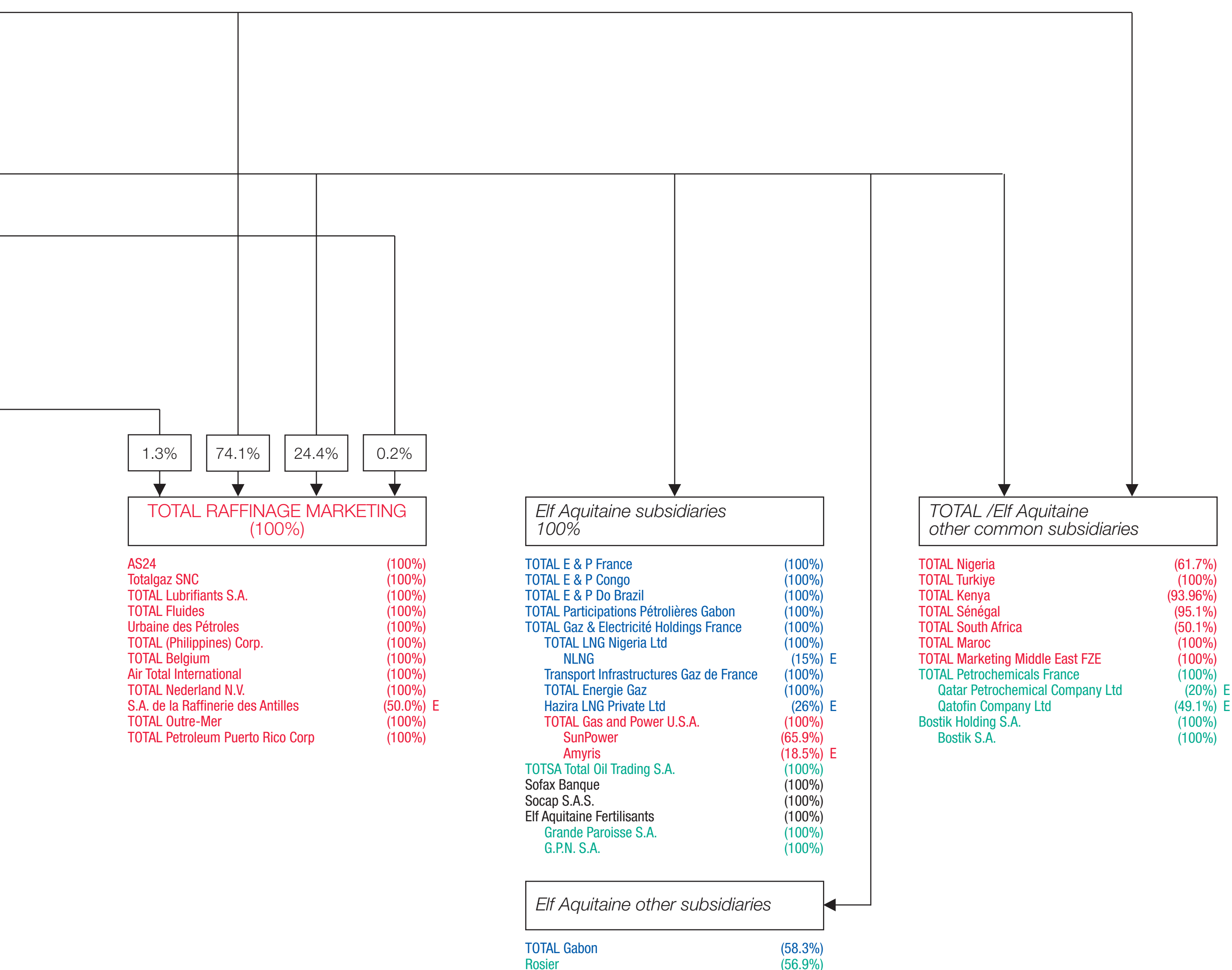
- TOTAL announced in February 2013 that it had received a firm offer from the Borealis Group for its fertilizing businesses in Europe. This offer will now be presented to the employee representatives concerned, as part of the information and consultation procedures.

35) Consolidation scope

As of December 31, 2012, 883 entities are consolidated of which 803 are fully consolidated, and 80 are accounted for under the equity method (identified with the letter E). This simplified organizational chart shows the main consolidated entities. For each of them, the Group interest is mentioned between brackets. This chart of legal detentions is not exhaustive and does not reflect neither the operational structure nor the relative economic size of the Group entities and the business segments.



The business segments are identified with the following colors:
Upstream
Marketing & Services
Refining & Chemicals
Holding



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1. Oil and gas information pursuant to FASB Accounting Standards Codification 932

As from 2009, the amendments to the 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 n° 33-8995) and the Financial Accounting Standard Board (FASB) Accounting Standards Update regarding Extractive Activities - Oil and Gas (ASC 932) change a number of reserves estimation and disclosure requirements. As a reminder, 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 2012, 2011 and 2010 year-end estimation of proved reserves.

1.1. 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 relies on a Technical Reserves 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 Technical Reserves Committee is appointed by the Senior Management of Exploration & Production and its members represent expertise in reservoir engineering, production geology, production geophysics, drilling, and development studies.

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 coherence 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 affiliates 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 Reserves Vice-President and composed of at least three Technical Reserves 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 Development Division, an SEC Reserves Committee chaired by the Exploration & Production Finance Senior Vice President and comprised of the Development, Exploration, Strategy and Legal Senior Vice Presidents, or their representatives, as well as the Chairman of the Technical Reserves Committee and the Reserves Vice-President, approves the SEC reserve booking proposals regarding criteria that are not dependent upon reservoir and geosciences 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's internal auditors who verify the effectiveness of the reserves evaluation process and control procedures.

The reserves Vice-President (RVP) is the technical person responsible for preparing the reserves estimates for the Group. Appointed by the President of Exploration & Production, the RVP supervises the Reserve Entity, chairs the annual review of reserves, and is a member of the Technical Reserves Committee and the SEC Reserves Committee. The RVP has over thirty years of experience in the oil & gas industry. He previously held several management positions in the Group in reservoir engineering and geosciences, and has more than fifteen years of experience in the field of reserves evaluation and control process. He holds an engineering degree from *Institut National des Sciences Appliquées*, Lyon, France, and a petroleum engineering degree from *École Nationale Supérieure du Pétrole et des Moteurs* (IFP School), France. He is a past member and past Chairman of the Society of Petroleum Engineering Oil and Gas Reserves Committee and a member of the UNECE (United Nations Economic Commission for Europe) Expert Group on Resource Classification.

1.2. Proved developed reserves

At the end of 2012, proved developed reserves of oil and gas were 5,789 Mboe and represented 51% of the proved reserves. At the end of 2011, proved developed reserves of oil and gas were 6,046 Mboe and represented 53% of the proved reserves. At the end of 2010, proved developed reserves of oil and gas were 5,708 Mboe and represented 53% of the proved reserves. Over the past three years, the level of proved developed reserves has remained above 5.7 Bboe, illustrating TOTAL's ability to consistently transfer proved undeveloped reserves into developed status.

1.3. Proved undeveloped reserves

As of December 31, 2012, TOTAL's combined proved undeveloped reserves of oil and gas were 5,579 Mboe as compared to 5,377 Mboe at the end of 2011. The net increase of 202 Mboe of proved undeveloped reserves is due to the addition of 579 Mboe of undeveloped reserves related to extensions and discoveries, the revision of 129 Mboe of previous estimates, a net decrease of 25 Mboe due to acquisitions/divestitures, and the transfer of 481 Mboe from proved undeveloped reserves to proved developed reserves. In 2012, the costs incurred to develop proved undeveloped reserves (PUDs) was €11.0 billion, which represents 80% of 2012 development costs incurred, and was related to projects located for the most part in Angola, Australia, Canada, Gabon, Indonesia, Kazakhstan, Nigeria, and Norway.

Approximately 53% of the Group's proved undeveloped reserves are associated with producing projects and are located for the most part in Angola, Canada, Nigeria, Norway, Russia, and Venezuela. 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.

The Group's portfolio of projects includes a few large scale and complex developments for which it anticipates that it may take more than five years from the time of recording proved reserves to the start of production. These specific projects represent approximately 25% of the Group's proved undeveloped reserves and include the development of a giant field in Kazakhstan, deep offshore developments in Angola, Nigeria and the United Kingdom and development of oil sands in Canada. These projects are highly complex to develop due to a combination of factors that include, among others, the nature of the reservoir rock and fluid properties, challenging operating environments and the size of the projects. In addition, some of these projects are generally designed and optimized for a given production capacity that controls the pace at which the field is developed and the wells are drilled. At production start-up, only a portion of the proved reserves are developed in order to deliver sufficient production potential to meet capacity constraints and contractual obligations. The remaining PUD's associated with the complete development plan will therefore remain undeveloped for more than five years following project approval and booking. Under these specific circumstances, the Group believes that it is justified to report as proved reserves the level of reserves used in connection with the approved project, despite the fact that some of these PUDs may remain undeveloped for more than five years. In addition, TOTAL has demonstrated in recent years the Group's ability to successfully develop and bring into production similar large scale and complex projects, including the development of deep-offshore fields in Angola, Nigeria, the Republic of Congo, HP/HT fields in the United Kingdom, heavy oil projects in Venezuela and LNG projects in Qatar, Yemen, Nigeria and Indonesia.

The tables provided below are presented by the following geographic areas: Europe, Africa, the Americas, Middle East and Asia (including CIS).

1.4. 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, bitumen and gas quantities by geographic areas as of December 31, 2012, 2011 and 2010. Quantities shown concern proved developed and undeveloped reserves together with changes in quantities for 2012, 2011 and 2010.

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.

1.4.1. Changes in oil, bitumen and gas reserves

(in million barrels of oil equivalent)						Consolidated subsidiaries
Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**1,665**	**3,466**	**1,090**	**544**	**1,166**	**7,931**
Revisions of previous estimates	92	200	82	(10)	1	365
Extensions, discoveries and other	182	-	18	96	30	326
Acquisitions of reserves in place	23	-	425	-	9	457
Sales of reserves in place	(45)	(26)	(5)	-	(8)	(84)
Production for the year	(211)	(269)	(70)	(56)	(99)	(705)
Balance as of December 31, 2010	**1,706**	**3,371**	**1,540**	**574**	**1,099**	**8,290**
Revisions of previous estimates	117	(61)	(36)	(68)	(19)	(67)
Extensions, discoveries and other	57	6	-	-	588	651
Acquisitions of reserves in place	44	-	309	-	2	355
Sales of reserves in place	-	(65)	-	-	-	(65)
Production for the year	(187)	(237)	(75)	(56)	(93)	(648)
Balance as of December 31, 2011	**1,737**	**3,014**	**1,738**	**450**	**1,577**	**8,516**
Revisions of previous estimates	64	65	7	(23)	15	128
Extensions, discoveries and other	67	173	110	29	43	422
Acquisitions of reserves in place	32	-	-	-	-	32
Sales of reserves in place	(38)	(71)	(8)	-	-	(117)
Production for the year	(156)	(261)	(77)	(34)	(90)	(618)
Balance as of December 31, 2012	**1,706**	**2,920**	**1,770**	**422**	**1,545**	**8,363**
Minority interest in proved developed and undeveloped reserves as of						
December 31, 2010	26	100	-	-	-	126
December 31, 2011	-	98	-	-	-	98
December 31, 2012	**-**	**99**	**-**	**-**	**-**	**99**

(in million barrels of oil equivalent)						Equity affiliates
Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**-**	**100**	**502**	**1,950**	**-**	**2,552**
Revisions of previous estimates	-	14	4	(2)	-	16
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	-	-
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	(7)	(20)	(136)	-	(163)
Balance as of December 31, 2010	**-**	**107**	**486**	**1,812**	**-**	**2,405**
Revisions of previous estimates	-	(1)	(8)	(20)	-	(29)
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	779	779
Sales of reserves in place	-	(24)	(4)	(11)	-	(39)
Production for the year	-	(4)	(18)	(152)	(35)	(209)
Balance as of December 31, 2011	**-**	**78**	**456**	**1,629**	**744**	**2,907**
Revisions of previous estimates	-	2	(39)	5	78	46
Extensions, discoveries and other	-	-	-	-	158	158
Acquisitions of reserves in place	-	-	-	-	118	118
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	-	(15)	(146)	(63)	(224)
Balance as of December 31, 2012	**-**	**80**	**402**	**1,488**	**1,035**	**3,005**

(in million barrels of oil equivalent)	Consolidated subsidiaries and equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Proved developed and undeveloped reserves	**1,706**	**3,478**	**2,026**	**2,386**	**1,099**	**10,695**
Consolidated subsidiaries	1,706	3,371	1,540	574	1,099	8,290
Equity affiliates	-	107	486	1,812	-	2,405
Proved developed reserves	**962**	**1,692**	**638**	**2,055**	**361**	**5,708**
Consolidated subsidiaries	962	1,666	505	427	361	3,921
Equity affiliates	-	26	133	1,628	-	1,787
Proved undeveloped reserves	**744**	**1,786**	**1,388**	**331**	**738**	**4,987**
Consolidated subsidiaries	744	1,705	1,035	147	738	4,369
Equity affiliates	-	81	353	184	-	618
As of December 31, 2011						
Proved developed and undeveloped reserves	**1,737**	**3,092**	**2,194**	**2,079**	**2,321**	**11,423**
Consolidated subsidiaries	1,737	3,014	1,738	450	1,577	8,516
Equity affiliates	-	78	456	1,629	744	2,907
Proved developed reserves	**894**	**1,660**	**647**	**1,869**	**976**	**6,046**
Consolidated subsidiaries	894	1,639	524	371	321	3,749
Equity affiliates	-	21	123	1,498	655	2,297
Proved undeveloped reserves	**843**	**1,432**	**1,547**	**210**	**1,345**	**5,377**
Consolidated subsidiaries	843	1,375	1,214	79	1,256	4,767
Equity affiliates	-	57	333	131	89	610
As of December 31, 2012						
Proved developed and undeveloped reserves	**1,706**	**3,000**	**2,172**	**1,910**	**2,580**	**11,368**
Consolidated subsidiaries	1,706	2,920	1,770	422	1,545	8,363
Equity affiliates	-	80	402	1,488	1,035	3,005
Proved developed reserves	**827**	**1,584**	**616**	**1,718**	**1,044**	**5,789**
Consolidated subsidiaries	827	1,563	475	349	313	3,527
Equity affiliates	-	21	141	1,369	731	2,262
Proved undeveloped reserves	**879**	**1,416**	**1,556**	**192**	**1,536**	**5,579**
Consolidated subsidiaries	879	1,357	1,295	73	1,232	4,836
Equity affiliates	-	59	261	119	304	743

1.4.2. Changes in oil reserves

The oil reserves include crude oil, condensates and natural gas liquids reserves.

(in million barrels) — Consolidated subsidiaries

Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**733**	**2,460**	**88**	**188**	**572**	**4,041**
Revisions of previous estimates	46	131	7	(2)	-	182
Extensions, discoveries and other	146	-	2	82	4	234
Acquisitions of reserves in place	2	-	-	-	-	2
Sales of reserves in place	(37)	(23)	(2)	-	(7)	(69)
Production for the year	(98)	(218)	(16)	(29)	(15)	(376)
Balance as of December 31, 2010	**792**	**2,350**	**79**	**239**	**554**	**4,014**
Revisions of previous estimates	49	(19)	9	(33)	(24)	(18)
Extensions, discoveries and other	17	6	-	-	58	81
Acquisitions of reserves in place	42	-	-	-	-	42
Sales of reserves in place	-	(57)	-	-	-	(57)
Production for the year	(88)	(185)	(15)	(25)	(15)	(328)
Balance as of December 31, 2011	**812**	**2,095**	**73**	**181**	**573**	**3,734**
Revisions of previous estimates	20	61	10	2	10	103
Extensions, discoveries and other	27	148	8	28	6	217
Acquisitions of reserves in place	7	-	-	-	-	7
Sales of reserves in place	(32)	(45)	(2)	-	-	(79)
Production for the year	(72)	(210)	(12)	(21)	(14)	(329)
Balance as of December 31, 2012	**762**	**2,049**	**77**	**190**	**575**	**3,653**
Minority interest in proved developed and undeveloped reserves as of						
December 31, 2010	11	89	-	-	-	100
December 31, 2011	-	88	-	-	-	88
December 31, 2012	**-**	**87**	**-**	**-**	**-**	**87**

(in million barrels) — Equity affiliates

Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**-**	**37**	**485**	**761**	**-**	**1,283**
Revisions of previous estimates	-	4	4	3	-	11
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	-	-
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	(7)	(19)	(84)	-	(110)
Balance as of December 31, 2010	**-**	**34**	**470**	**680**	**-**	**1,184**
Revisions of previous estimates	-	2	(6)	(12)	-	(16)
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	51	51
Sales of reserves in place	-	(22)	(4)	(12)	-	(38)
Production for the year	-	(4)	(17)	(91)	(3)	(115)
Balance as of December 31, 2011	**-**	**10**	**443**	**565**	**48**	**1,066**
Revisions of previous estimates	-	5	(40)	5	9	(21)
Extensions, discoveries and other	-	-	-	-	51	51
Acquisitions of reserves in place	-	-	-	-	11	11
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	-	(15)	(93)	(5)	(113)
Balance as of December 31, 2012	**-**	**15**	**388**	**477**	**114**	**994**

(in million barrels)	Consolidated subsidiaries and equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Proved developed and undeveloped reserves	**792**	**2,384**	**549**	**919**	**554**	**5,198**
Consolidated subsidiaries	792	2,350	79	239	554	4,014
Equity affiliates	-	34	470	680	-	1,184
Proved developed reserves	**394**	**1,250**	**180**	**662**	**58**	**2,544**
Consolidated subsidiaries	394	1,226	53	151	58	1,882
Equity affiliates	-	24	127	511	-	662
Proved undeveloped reserves	**398**	**1,134**	**369**	**257**	**496**	**2,654**
Consolidated subsidiaries	398	1,124	26	88	496	2,132
Equity affiliates	-	10	343	169	-	522
As of December 31, 2011						
Proved developed and undeveloped reserves	**812**	**2,105**	**516**	**746**	**621**	**4,800**
Consolidated subsidiaries	812	2,095	73	181	573	3,734
Equity affiliates	-	10	443	565	48	1,066
Proved developed reserves	**351**	**1,206**	**165**	**565**	**91**	**2,378**
Consolidated subsidiaries	351	1,202	48	116	50	1,767
Equity affiliates	-	4	117	449	41	611
Proved undeveloped reserves	**461**	**899**	**351**	**181**	**530**	**2,422**
Consolidated subsidiaries	461	893	25	65	523	1,967
Equity affiliates	-	6	326	116	7	455
As of December 31, 2012						
Proved developed and undeveloped reserves	**761**	**2,065**	**465**	**667**	**689**	**4,647**
Consolidated subsidiaries	761	2,050	77	190	575	3,653
Equity affiliates	-	15	388	477	114	994
Proved developed reserves	**289**	**1,145**	**179**	**506**	**110**	**2,229**
Consolidated subsidiaries	289	1,139	44	133	55	1,660
Equity affiliates	-	6	135	373	55	569
Proved undeveloped reserves	**472**	**920**	**286**	**161**	**579**	**2,418**
Consolidated subsidiaries	472	911	33	57	520	1,993
Equity affiliates	-	9	253	104	59	425

1.4.3. Changes in bitumen reserves

(in million barrels)	Consolidated subsidiaries					
Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**-**	**-**	**365**	**-**	**-**	**365**
Revisions of previous estimates	-	-	3	-	-	3
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	425	-	-	425
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	-	(4)	-	-	(4)
Balance as of December 31, 2010	**-**	**-**	**789**	**-**	**-**	**789**
Revisions of previous estimates	-	-	(109)	-	-	(109)
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	308	-	-	308
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	-	(4)	-	-	(4)
Balance as of December 31, 2011	**-**	**-**	**984**	**-**	**-**	**984**
Revisions of previous estimates	-	-	43	-	-	43
Extensions, discoveries and other	-	-	15	-	-	15
Acquisitions of reserves in place	-	-	-	-	-	-
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	-	(4)	-	-	(4)
Balance as of December 31, 2012	**-**	**-**	**1,038**	**-**	**-**	**1,038**
Proved developed reserves as of						
December 31, 2010	-	-	18	-	-	18
December 31, 2011	-	-	21	-	-	21
December 31, 2012	**-**	**-**	**18**	**-**	**-**	**18**
Proved undeveloped reserves as of						
December 31, 2010	-	-	771	-	-	771
December 31, 2011	-	-	963	-	-	963
December 31, 2012	**-**	**-**	**1,020**	**-**	**-**	**1,020**

There are no bitumen reserves for equity affiliates.

There are no minority interests for bitumen reserves.

1.4.4. Changes in gas reserves

(in billion cubic feet)						Consolidated subsidiaries
Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**5,047**	**5,246**	**3,597**	**2,028**	**3,466**	**19,384**
Revisions of previous estimates	271	346	415	(80)	15	967
Extensions, discoveries and other	193	-	88	70	138	489
Acquisitions of reserves in place	111	-	-	-	51	162
Sales of reserves in place	(43)	(20)	(16)	-	(4)	(83)
Production for the year	(617)	(258)	(278)	(151)	(472)	(1,776)
Balance as of December 31, 2010	**4,962**	**5,314**	**3,806**	**1,867**	**3,194**	**19,143**
Revisions of previous estimates	358	(216)	367	(180)	1	330
Extensions, discoveries and other	211	-	-	-	2,824	3,035
Acquisitions of reserves in place	11	-	7	-	13	31
Sales of reserves in place	-	(46)	-	-	-	(46)
Production for the year	(528)	(259)	(317)	(169)	(445)	(1,718)
Balance as of December 31, 2011	**5,014**	**4,793**	**3,863**	**1,518**	**5,587**	**20,775**
Revisions of previous estimates	268	31	(278)	(132)	15	(96)
Extensions, discoveries and other	216	127	478	6	195	1,022
Acquisitions of reserves in place	138	-	-	-	-	138
Sales of reserves in place	(30)	(173)	(35)	-	-	(238)
Production for the year	(462)	(257)	(337)	(75)	(433)	(1,564)
Balance as of December 31, 2012	**5,144**	**4,521**	**3,691**	**1,317**	**5,364**	**20,037**
Minority interest in proved developed and undeveloped reserves as of						
December 31, 2010	83	67	-	-	-	150
December 31, 2011	-	62	-	-	-	62
December 31, 2012	**-**	**57**	**-**	**-**	**-**	**57**

(in billion cubic feet)						Equity affiliates
Proved developed and undeveloped reserves	Europe	Africa	Americas	Middle East	Asia	Total
Balance as of December 31, 2009	**-**	**341**	**95**	**6,498**	**-**	**6,934**
Revisions of previous estimates	-	50	(2)	(52)	-	(4)
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	-	-
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	(1)	(2)	(282)	-	(285)
Balance as of December 31, 2010	**-**	**390**	**91**	**6,164**	**-**	**6,645**
Revisions of previous estimates	-	(16)	(10)	(31)	-	(57)
Extensions, discoveries and other	-	-	-	-	-	-
Acquisitions of reserves in place	-	-	-	-	3,865	3,865
Sales of reserves in place	-	(10)	-	-	-	(10)
Production for the year	-	(1)	(2)	(331)	(167)	(501)
Balance as of December 31, 2011	**-**	**363**	**79**	**5,802**	**3,698**	**9,942**
Revisions of previous estimates	-	(21)	5	(4)	366	346
Extensions, discoveries and other	-	-	-	-	578	578
Acquisitions of reserves in place	-	-	-	-	568	568
Sales of reserves in place	-	-	-	-	-	-
Production for the year	-	(1)	(2)	(287)	(304)	(594)
Balance as of December 31, 2012	**-**	**341**	**82**	**5,511**	**4,906**	**10,840**

(in billion cubic feet)	Consolidated subsidiaries and equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Proved developed and undeveloped reserves	**4,962**	**5,704**	**3,897**	**8,031**	**3,194**	**25,788**
Consolidated subsidiaries	4,962	5,314	3,806	1,867	3,194	19,143
Equity affiliates	-	390	91	6,164	-	6,645
Proved developed reserves	**3,089**	**2,240**	**2,474**	**7,649**	**1,790**	**17,242**
Consolidated subsidiaries	3,089	2,229	2,439	1,578	1,790	11,125
Equity affiliates	-	11	35	6,071	-	6,117
Proved undeveloped reserves	**1,873**	**3,464**	**1,423**	**382**	**1,404**	**8,546**
Consolidated subsidiaries	1,873	3,085	1,367	289	1,404	8,018
Equity affiliates	-	379	56	93	-	528
As of December 31, 2011						
Proved developed and undeveloped reserves	**5,014**	**5,156**	**3,942**	**7,320**	**9,285**	**30,717**
Consolidated subsidiaries	5,014	4,793	3,863	1,518	5,587	20,775
Equity affiliates	-	363	79	5,802	3,698	9,942
Proved developed reserves	**2,943**	**2,308**	**2,600**	**7,170**	**4,854**	**19,875**
Consolidated subsidiaries	2,943	2,216	2,567	1,450	1,594	10,770
Equity affiliates	-	92	33	5,720	3,260	9,105
Proved undeveloped reserves	**2,071**	**2,848**	**1,342**	**150**	**4,431**	**10,842**
Consolidated subsidiaries	2,071	2,577	1,296	68	3,993	10,005
Equity affiliates	-	271	46	82	438	837
As of December 31, 2012						
Proved developed and undeveloped reserves	**5,144**	**4,862**	**3,773**	**6,828**	**10,270**	**30,877**
Consolidated subsidiaries	5,144	4,521	3,691	1,317	5,364	20,037
Equity affiliates	-	341	82	5,511	4,906	10,840
Proved developed reserves	**2,927**	**2,192**	**2,356**	**6,656**	**5,115**	**19,246**
Consolidated subsidiaries	2,927	2,110	2,316	1,240	1,526	10,119
Equity affiliates	-	82	40	5,416	3,589	9,127
Proved undeveloped reserves	**2,217**	**2,670**	**1,417**	**172**	**5,155**	**11,631**
Consolidated subsidiaries	2,217	2,411	1,375	77	3,838	9,918
Equity affiliates	-	259	42	95	1,317	1,713

1.5. 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.

(M€)	Consolidated subsidiaries					
	Europe	Africa	Americas	Middle East	Asia	Total
2010						
Non-Group sales	2,839	2,639	628	1,038	2,540	9,684
Group sales	5,599	9,894	540	644	683	17,360
Total Revenues	**8 438**	**12 533**	**1 168**	**1 682**	**3 223**	**27 044**
Production costs	(1,281)	(1,187)	(222)	(259)	(279)	(3,228)
Exploration expenses	(266)	(275)	(216)	(8)	(99)	(864)
Depreciation, depletion and amortization and valuation allowances	(1,404)	(1.848)	(368)	(264)	(830)	(4,714)
Other expenses[(a)]	(299)	(1,014)	(218)	(241)	(72)	(1,844)
Pre-tax income from producing activities	**5,188**	**8,209**	**144**	**910**	**1,943**	**16,394**
Income tax	(3,237)	(5,068)	(83)	(402)	(950)	(9,740)
Results of oil and gas producing activities	**1,951**	**3,141**	**61**	**508**	**993**	**6,654**
2011						
Non-Group sales	3,116	3,188	776	1,159	3,201	11,440
Group sales	7,057	11,365	764	737	712	20,635
Total Revenues	**10,173**	**14,553**	**1,540**	**1,896**	**3,913**	**32,075**
Production costs	(1,235)	(1,179)	(250)	(286)	(304)	(3,254)
Exploration expenses	(343)	(323)	(48)	(11)	(294)	(1,019)
Depreciation, depletion and amortization and valuation allowances	(1,336)	(1,845)	(352)	(278)	(791)	(4,602)
Other expenses[(a)]	(307)	(1,181)	(274)	(276)	(95)	(2,133)
Pre-tax income from producing activities	**6,952**	**10,025**	**616**	**1,045**	**2,429**	**21,067**
Income tax	(5,059)	(6,484)	(293)	(465)	(1,302)	(13,603)
Results of oil and gas producing activities	**1,893**	**3,541**	**323**	**580**	**1,127**	**7,464**
2012						
Non-Group sales	1,986	4,388	968	723	3,509	11,574
Group sales	6,857	13,440	639	1,010	790	22,736
Total Revenues	**8,843**	**17,828**	**1,607**	**1,733**	**4,299**	**34,310**
Production costs	(1,318)	(1,442)	(297)	(340)	(395)	(3,792)
Exploration expenses	(483)	(365)	(339)	(18)	(241)	(1,446)
Depreciation, depletion and amortization and valuation allowances	(1,986)	(2,574)	(1,558)	(458)	(938)	(7,514)
Other expenses[(a)]	(326)	(1,356)	(386)	(159)	(128)	(2,355)
Pre-tax income from producing activities	**4,730**	**12,091**	**(973)**	**758**	**2,597**	**19,203**
Income tax	(3,478)	(7,383)	226	(386)	(1,264)	(12,285)
Results of oil and gas producing activities	**1,252**	**4,708**	**(747)**	**372**	**1,333**	**6,918**

(a) Included production taxes and accretion expense as provided for by IAS 37 (€326 million in 2010 and €338 million in 2011, €391 million in 2012).

(M€)						Equity affiliates
	Europe	Africa	Americas	Middle East	Asia	Total
2010						
Non-Group sales	-	148	120	596	-	864
Group sales	-	3	565	4,646	-	5,214
Total Revenues	**-**	**151**	**685**	**5,242**	**-**	**6,078**
Production costs	-	(44)	(53)	(195)	(1)	(293)
Exploration expenses	-	(7)	(23)	-	-	(30)
Depreciation, depletion and amortization and valuation allowances	-	(44)	(89)	(259)	-	(392)
Other expenses	-	-	(268)	(4,034)	-	(4,302)
Pre-tax income from producing activities	**-**	**56**	**252**	**754**	**(1)**	**1,061**
Income tax	-	-	(44)	(142)	-	(186)
Results of oil and gas producing activities	**-**	**56**	**208**	**612**	**(1)**	**875**
2011						
Non-Group sales	-	26	15	1,080	256	1,377
Group sales	-	-	831	6,804	-	7,635
Total Revenues	**-**	**26**	**846**	**7,884**	**256**	**9,012**
Production costs	-	(7)	(48)	(250)	(28)	(333)
Exploration expenses	-	-	-	-	(4)	(4)
Depreciation, depletion and amortization and valuation allowances	-	(7)	(44)	(225)	(109)	(385)
Other expenses	-	-	(550)	(6,101)	(36)	(6,687)
Pre-tax income from producing activities	**-**	**12**	**204**	**1,308**	**79**	**1,603**
Income tax	-	-	(95)	(285)	(34)	(414)
Results of oil and gas producing activities	**-**	**12**	**109**	**1,023**	**45**	**1,189**
2012						
Non-Group sales	-	-	-	1,085	780	1,865
Group sales	-	-	1,234	7,850	(323)	8,761
Total Revenues	**-**	**-**	**1,234**	**8,935**	**457**	**10,626**
Production costs	-	-	(125)	(289)	(88)	(502)
Exploration expenses	-	-	-	-	(3)	(3)
Depreciation, depletion and amortization and valuation allowances	-	-	(60)	(299)	(227)	(586)
Other expenses	-	-	(754)	(6,924)	(54)	(7,732)
Pre-tax income from producing activities	**-**	**-**	**295**	**1,423**	**85**	**1,803**
Income tax	-	-	(63)	(303)	(51)	(417)
Results of oil and gas producing activities	**-**	**-**	**232**	**1,120**	**34**	**1,386**

1.6. Cost incurred

The following tables set forth the costs incurred in the Group's oil and gas property acquisition, exploration and development activities, including both capitalized and expensed amounts. They do not include costs incurred related to oil and gas transportation and LNG liquefaction and transportation activities.

(M€)	Consolidated subsidiaries					
	Europe	Africa	Americas	Middle East	Asia	Total
2010						
Proved property acquisition	162	137	26	139	21	485
Unproved property acquisition	5	124	1,186	8	619	1,942
Exploration costs	361	407	276	17	250	1,311
Development costs[(a)]	1,565	3,105	718	247	2,007	7,642
Total cost incurred	**2,093**	**3,773**	**2,206**	**411**	**2,897**	**11,380**
2011						
Proved property acquisition	298	10	413	2	251	974
Unproved property acquisition	1	397	1,692	3	14	2,107
Exploration costs	505	384	239	17	417	1,562
Development costs[(a)]	2,352	3,895	1,329	329	2,823	10,728
Total cost incurred	**3,156**	**4,686**	**3,673**	**351**	**3,505**	**15,371**
2012						
Proved property acquisition	202	27	-	-	12	241
Unproved property acquisition	40	1,362	384	176	26	1,988
Exploration costs	598	578	542	35	340	2,093
Development costs[(a)]	3,183	4,330	1,859	307	3,331	13,010
Total cost incurred	**4,023**	**6,297**	**2,785**	**518**	**3,709**	**17,332**

(M€)	Equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
2010						
Proved property acquisition	-	-	-	-	-	-
Unproved property acquisition	-	-	-	-	-	-
Exploration costs	-	4	30	4	-	38
Development costs[(a)]	-	20	99	476	73	668
Total cost incurred	**-**	**24**	**129**	**480**	**73**	**706**
2011						
Proved property acquisition	-	-	-	-	2,691	2,691
Unproved property acquisition	-	-	-	-	1,116	1,116
Exploration costs	-	-	2	-	-	2
Development costs[(a)]	-	2	106	314	939	1,361
Total cost incurred	**-**	**2**	**108**	**314**	**4,746**	**5,170**
2012						
Proved property acquisition	-	-	-	-	238	238
Unproved property acquisition	-	-	-	-	(22)	(22)
Exploration costs	-	-	-	-	-	-
Development costs[(a)]	-	-	167	380	202	749
Total cost incurred	**-**	**-**	**167**	**380**	**418**	**965**

(a) Including asset retirement costs capitalized during the year and any gains or losses recognized upon settlement of asset retirement obligation during the year.

1.7. Capitalized costs related to oil and gas producing activities

The following tables do not include capitalized costs related to oil and gas transportation and LNG liquefaction and transportation activities.

(M€)	Consolidated subsidiaries					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Proved properties	31,735	32,494	7,588	5,715	12,750	90,282
Unproved properties	402	1,458	2,142	49	1,433	5,484
Total capitalized costs	**32,137**	**33,952**	**9,730**	**5,764**	**14,183**	**95,766**
Accumulated depreciation, depletion and amortization	(23,006)	(16,716)	(2,302)	(3,849)	(4,092)	(49,965)
Net capitalized costs	**9,131**	**17,236**	**7,428**	**1,915**	**10,091**	**45,801**
As of December 31, 2011						
Proved properties	34,308	37,032	8,812	6,229	17,079	103,460
Unproved properties	460	1,962	4,179	62	911	7,574
Total capitalized costs	**34,768**	**38,994**	**12,991**	**6,291**	**17,990**	**111,034**
Accumulated depreciation, depletion and amortization	(24,047)	(18,642)	(2,294)	(4,274)	(5,066)	(54,323)
Net capitalized costs	**10,721**	**20,352**	**10,697**	**2,017**	**12,924**	**56,711**
As of December 31, 2012						
Proved properties	35,456	40,562	10,108	6,408	20,463	112,997
Unproved properties	543	3,184	4,324	248	612	8,911
Total capitalized costs	**35,999**	**43,746**	**14,432**	**6,656**	**21,075**	**121,908**
Accumulated depreciation, depletion and amortization	(23,660)	(20,364)	(3,219)	(4,648)	(5,872)	(57,763)
Net capitalized costs	**12,339**	**23,382**	**11,213**	**2,008**	**15,203**	**64,145**

(M€)	Equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Proved properties	-	639	887	3,110	-	4,636
Unproved properties	-	25	168	-	138	331
Total capitalized costs	**-**	**664**	**1,055**	**3,110**	**138**	**4,967**
Accumulated depreciation, depletion and amortization	-	(462)	(307)	(2,029)	-	(2,798)
Net capitalized costs	**-**	**202**	**748**	**1,081**	**138**	**2,169**
As of December 31, 2011						
Proved properties	-	-	731	3,496	3,973	8,200
Unproved properties	-	-	-	-	1,146	1,146
Total capitalized costs	**-**	**-**	**731**	**3,496**	**5,119**	**9,346**
Accumulated depreciation, depletion and amortization	-	-	(96)	(2 337)	(213)	(2 646)
Net capitalized costs	**-**	**-**	**635**	**1,159**	**4,906**	**6,700**
As of December 31, 2012						
Proved properties	-	-	1,049	3,637	4,074	8,760
Unproved properties	-	-	-	-	1,118	1,118
Total capitalized costs	**-**	**-**	**1,049**	**3,637**	**5,192**	**9,878**
Accumulated depreciation, depletion and amortization	-	-	(177)	(2,540)	(457)	(3,174)
Net capitalized costs	**-**	**-**	**872**	**1,097**	**4,735**	**6,704**

1.8 Standardized measure of discounted future net cash flows (excluding transportation)

The standardized measure of discounted future net cash flows relating to proved oil and gas reserve quantities was developed as follows:

- estimates of proved reserves and the corresponding production profiles are based on existing technical and economic conditions;
- the estimated future cash flows are determined based on prices used in estimating the Group's proved oil and gas reserves;
- 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
- future net cash flows are discounted at a standard discount rate of 10 percent.

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.

(M€)	Consolidated subsidiaries					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Future cash inflows	65,644	142,085	42,378	14,777	41,075	305,959
Future production costs	(16,143)	(29,479)	(19,477)	(4,110)	(6,476)	(75,685)
Future development costs	(18,744)	(25,587)	(8,317)	(3,788)	(8,334)	(64,770)
Future income taxes	(20,571)	(51,390)	(3,217)	(2,541)	(7,281)	(85,000)
Future net cash flows, after income taxes	**10,186**	**35,629**	**11,367**	**4,338**	**18,984**	**80,504**
Discount at 10%	(5,182)	(16,722)	(8,667)	(2,106)	(11,794)	(44,471)
Standardized measure of discounted future net cash flows	**5,004**	**18,907**	**2,700**	**2,232**	**7,190**	**36,033**
As of December 31, 2011						
Future cash inflows	85,919	167,367	53,578	14,297	67,868	389,029
Future production costs	(18,787)	(31,741)	(22,713)	(3,962)	(12,646)	(89,849)
Future development costs	(21,631)	(22,776)	(11,548)	(3,110)	(11,044)	(70,109)
Future income taxes	(28,075)	(71,049)	(4,361)	(2,794)	(12,963)	(119,242)
Future net cash flows, after income taxes	**17,426**	**41,801**	**14,956**	**4,431**	**31,215**	**109,829**
Discount at 10%	(9,426)	(17,789)	(12,298)	(2,186)	(20,717)	(62,416)
Standardized measure of discounted future net cash flows	**8,000**	**24,012**	**2,658**	**2,245**	**10,498**	**47,413**
As of December 31, 2012						
Future cash inflows	93,215	177,392	58,140	16,474	70,985	416,206
Future production costs	(20,337)	(39,091)	(25,824)	(5,213)	(15,218)	(105,683)
Future development costs	(24,490)	(28,896)	(12,949)	(3,807)	(10,954)	(81,096)
Future income taxes	(27,393)	(68,017)	(4,456)	(2,732)	(12,641)	(115,239)
Future net cash flows, after income taxes	**20,995**	**41,388**	**14,911**	**4,722**	**32,172**	**114,188**
Discount at 10%	(10,549)	(17,731)	(11,608)	(2,227)	(19,969)	(62,084)
Standardized measure of discounted future net cash flows	**10,446**	**23,657**	**3,303**	**2,495**	**12,203**	**52,104**
Minority interests in future net cash flows as of (M€)						
As of December 31, 2010	273	344	-	-	-	617
As of December 31, 2011	-	558	-	-	-	558
As of December 31, 2012	**-**	**501**	**-**	**-**	**-**	**501**

(M€)	Equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
As of December 31, 2010						
Future cash inflows	-	1,814	22,293	59,472	-	83,579
Future production costs	-	(765)	(8,666)	(40,085)	-	(49,516)
Future development costs	-	(26)	(2,020)	(3,006)	-	(5,052)
Future income taxes	-	(349)	(5,503)	(2,390)	-	(8,242)
Future net cash flows, after income taxes	**-**	**674**	**6,104**	**13,991**	**-**	**20,769**
Discount at 10%	-	(203)	(3,946)	(7,386)	-	(11,535)
Standardized measure of discounted future net cash flows	**-**	**471**	**2,158**	**6,605**	**-**	**9,234**
As of December 31, 2011						
Future cash inflows	-	210	29,887	64,977	7,116	102,190
Future production costs	-	(95)	(17,393)	(39,800)	(2,683)	(59,971)
Future development costs	-	-	(1,838)	(2,809)	(1,297)	(5,944)
Future income taxes	-	(29)	(5,152)	(3,942)	(2,280)	(11,403)
Future net cash flows, after income taxes	**-**	**86**	**5,504**	**18,426**	**856**	**24,872**
Discount at 10%	-	(36)	(3,652)	(9,757)	(196)	(13,641)
Standardized measure of discounted future net cash flows	**-**	**50**	**1,852**	**8,669**	**660**	**11,231**
As of December 31, 2012						
Future cash inflows	-	2,103	27,439	64,234	9,390	103,166
Future production costs	-	(99)	(17,250)	(35,830)	(3,265)	(56,444)
Future development costs	-	-	(2,360)	(2,967)	(3,906)	(9,233)
Future income taxes	-	(392)	(3,353)	(5,430)	(648)	(9,823)
Future net cash flows, after income taxes	**-**	**1,612**	**4,476**	**20,007**	**1,571**	**27,666**
Discount at 10%	-	(1,087)	(2,978)	(10,316)	(955)	(15,336)
Standardized measure of discounted future net cash flows	**-**	**525**	**1,498**	**9,691**	**616**	**12,330**

1.9. Changes in the standardized measure of discounted future net cash flows

Consolidated subsidiaries

(M€)	2010	2011	2012
Beginning of year	**25,802**	**36,033**	**47,413**
Sales and transfers, net of production costs	(22,297)	(27,026)	(28,552)
Net change in sales and transfer prices and in production costs and other expenses	30,390	44,315	7,382
Extensions, discoveries and improved recovery	716	1,680	1,357
Changes in estimated future development costs	(7,245)	(4,798)	(6,503)
Previously estimated development costs incurred during the year	7,896	9,519	11,809
Revisions of previous quantity estimates	5,523	1,288	2,719
Accretion of discount	2,580	3,603	4,741
Net change in income taxes	(6,773)	(16,925)	13,992
Purchases of reserves in place	442	885	299
Sales of reserves in place	(1,001)	(1,161)	(2,553)
End of year	**36,033**	**47,413**	**52,104**

Equity affiliates

(M€)	2010	2011	2012
Beginning of year	**7,295**	**9,234**	**11,231**
Sales and transfers, net of production costs	(1,583)	(1,991)	(1,885)
Net change in sales and transfer prices and in production costs and other expenses	2,366	3,715	(743)
Extensions, discoveries and improved recovery	-	-	(25)
Changes in estimated future development costs	195	(383)	(495)
Previously estimated development costs incurred during the year	651	635	809
Revisions of previous quantity estimates	308	(749)	984
Accretion of discount	730	923	1,123
Net change in income taxes	(728)	(1,341)	1,314
Purchases of reserves in place	-	1,812	17
Sales of reserves in place	-	(624)	-
End of year	**9,234**	**11,231**	**12,330**

2. Other information

2.1. Net gas production, production prices and production costs

Consolidated subsidiaries	Europe	Africa	Americas	Middle East	Asia	Total
2010						
Natural gas production available for sale (Mcf/d)[a]	**1,603**	**608**	**732**	**375**	**1,234**	**4,552**
Production prices[b]						
Oil (€/b)	55.70	56.18	45.28	55.83	52.33	55.39
Bitumen (€/b)	-	-	33.19	-	-	33.19
Natural gas (€/kcf)	5.17	1.55	1.83	0.63	5.67	3.94
Production costs per unit of production (€/boe)[c]						
Total liquids and natural gas	6.23	4.53	3.29	4.82	2.93	4.72
Bitumen	-	-	17.49	-	-	17.49

Equity affiliates	Europe	Africa	Americas	Middle East	Asia	Total
2010						
Natural gas production available for sale (Mcf/d)[a]	**-**	**-**	**-**	**650**	**-**	**650**
Production prices[b]						
Oil (€/b)	-	53.96	43.81	57.03	-	54.95
Bitumen (€/b)	-	-	-	-	-	-
Natural gas (€/kcf)	-	-	-	2.30	-	2.30
Production costs per unit of production (€/boe)[c]						
Total liquids and natural gas	-	6.31	2.76	1.54	-	1.91
Bitumen	-	-	-	-	-	-

Consolidated subsidiaries	Europe	Africa	Americas	Middle East	Asia	Total
2011						
Natural gas production available for sale (Mcf/d)[a]	**1,350**	**607**	**839**	**424**	**1,162**	**4,382**
Production prices[b]						
Oil (€/b)	74.24	74.72	55.13	73.73	68.76	73.34
Bitumen (€/b)	-	-	31.36	-	-	31.36
Natural gas (€/kcf)	6.58	1.81	2.06	0.54	7.45	4.72
Production costs per unit of production (€/boe)[c]						
Total liquids and natural gas	6.86	5.14	3.41	5.36	3.40	5.20
Bitumen	-	-	20.70	-	-	20.70

Equity affiliates	Europe	Africa	Americas	Middle East	Asia	Total
2011						
Natural gas production available for sale (Mcf/d)[a]	**-**	**-**	**-**	**891**	**457**	**1,348**
Production prices[b]						
Oil (€/b)	-	66.21	61.15	77.07	30.75	73.61
Bitumen (€/b)	-	-	-	-	-	-
Natural gas (€/kcf)	-	-	-	1.29	0.95	1.23
Production costs per unit of production (€/boe)[c]						
Total liquids and natural gas	-	1.99	2.75	1.66	0.79	1.61
Bitumen	-	-	-	-	-	-

	Consolidated subsidiaries					
	Europe	Africa	Americas	Middle East	Asia	Total
2012						
Natural gas production available for sale (Mcf/d)[(a)]	**1,167**	**593**	**901**	**171**	**1,123**	**3,955**
Production prices[(b)]						
Oil (€/b)	79.82	82.65	61.85	81.05	75.49	80.84
Bitumen (€/b)	-	-	35.27	-	-	35.27
Natural gas (€/kcf)	7.10	2.19	2.23	0.90	8.35	5.31
Production costs per unit of production (€/boe)[(c)]						
Total liquids and natural gas	8.78	5.69	3.92	10.76	4.61	6.36
Bitumen	-	-	24.00	-	-	24.00

	Equity affiliates					
	Europe	Africa	Americas	Middle East	Asia	Total
2012						
Natural gas production available for sale (Mcf/d)[(a)]	**-**	**-**	**-**	**769**	**814**	**1,583**
Production prices[(b)]						
Oil (€/b)	-	-	105.12	83.26	28.27	83.27
Bitumen (€/b)	-	-	-	-	-	-
Natural gas (€/kcf)	-	-	-	1.35	0.95	1.23
Production costs per unit of production (€/boe)[(c)]						
Total liquids and natural gas	-	-	8.84	1.98	1.44	2.27
Bitumen	-	-	-	-	-	-

(a) The reported volumes are different from those shown in the reserves table due to gas consumed in operations.
(b) The volumes used for calculation of the average sales prices are the ones sold from the Group's own production.
(c) 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.

TOTAL S.A.

The Statutory Financial Statements were approved by the Board of Directors on February 12, 2013 and have not been updated with subsequent events.

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1. Statutory auditors' report on regulated agreements and commitments

This is a free translation into English of a report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction and construed in accordance with French law and the relevant professional auditing standards applicable in France.

Shareholders' meeting on the approval of the financial statements for the year ended December 31, 2012

To the Shareholders,

In our capacity as statutory auditors of your Company, we hereby present to you our report on the regulated agreements and commitments.

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements and commitments indicated to us or those that we have found in the course of our engagement. We are not required to comment as to whether they are beneficial or appropriate nor to ascertain whether any other agreements and commitments exist. It is your responsibility, in accordance with Article R.225-31 of the French Commercial Law ("Code de commerce"), to evaluate the benefits resulting from these agreements and commitments prior to their approval.

In addition, we are required, if applicable, in accordance with Article R.225-31 of the French Commercial Law ("Code de commerce"), to inform you of the agreements and commitments, which were approved during previous years and which were applicable during the period.

We performed the procedures we considered necessary in accordance with professional guidance issued by the national institute of auditors ("Compagnie nationale des commissaires aux comptes"), relating to this engagement. Our work consisted in verifying that the information provided to us is in agreement with the underlying documentation from which it was extracted.

1. Agreements and commitments to be approved by the Shareholders' meeting

Agreements and commitments approved during the period

We have not been advised of any agreements and commitments to be approved by the Shareholders' meeting in accordance with Article L.225-38 of the French Commercial Law ("Code de commerce").

2. Agreements and commitments already approved by the Shareholders' meeting

Agreements and commitments already approved in previous years

In accordance with Article R.225-30 of the French Commercial Law ("Code de commerce"), we have been informed of the following agreement, which was already approved in previous years by the Shareholders' meeting, and which was applicable during the period.

Engagement concerning specific resources made available to the Honorary Chairman

- Director affected by the agreement or commitment:
  Mr Thierry Desmarest, director and Honorary Chairman of your Company.
- Purpose of the agreement or commitment:
  Company resources made available for use by the Honorary Chairman.
- Terms and conditions of the agreement or commitment:
  In consideration of the representation missions of the Group which are entrusted to him, the following company resources are made available to the Honorary Chairman: an office, an administrative assistant, and a company vehicle with a driver.

Agreements and commitments approved during the year

In addition, we have been informed of the continuance of the commitments, regarding the retirement benefit, the supplementary pension plan and, under certain conditions, the severance benefit of Mr Christophe de Margerie if his contract was terminated or if his term of office was not renewed. These commitments were already approved by the Shareholders' meeting held on May 11, 2012 and were not applicable during the period.

a) Agreements concerning the pension plan

- Director affected by the agreement or commitment:
  Mr Christophe de Margerie, Chairman and Chief Executive Officer.
- Purpose of the agreement or commitment:
  The Chairman and Chief Executive Officer is entitled to the same retirement benefit and supplementary pension plan, as the concerned employees of TOTAL S.A.
- Terms and conditions of the agreement or commitment:
  - Retirement benefit:

The Chairman and Chief Executive Officer is entitled to retirement benefit 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 twelve-month period preceding the retirement of the Chairman and Chief Executive Officer.

The payment of this benefit is 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 the four following companies: ExxonMobil, Shell, BP and Chevron.

- Defined supplementary pension plan:

This supplementary pension plan is applicable to the Chairman and Chief Executive Officer and employees of the Group TOTAL whose annual compensation is greater than the annual social security threshold multiplied by eight. There are no French legal or collective bargaining provisions that apply to remuneration above this social security ceiling.

To be eligible for this supplementary pension plan, financed by TOTAL S.A., participants must meet specific age and length of service (5years) criteria. They must also still be employed by the Company upon retirement, unless they retire due to disability or had taken early retirement at the Group's initiative after the age of 55.

The plan provides participants with a pension equal to the sum of 1.8% of the portion of the reference compensation between eight and forty times the annual ceiling for calculating French social security contributions, and 1% of the reference compensation between forty and sixty times the annual ceiling for calculating French social security contributions, which is multiplied by the number of years of service (up to twenty years).This pension is indexed to the French Association for Complementary Pensions Schemes (ARRCO) index.

The sum of the supplementary pension plan benefits and external pension plan benefits (other than those constituted individually and on a voluntary basis) may not exceed 45% of the last three years average compensation. In the event this percentage is exceeded, the supplementary pension is reduced accordingly.

For the Chairman and Chief Executive Officer, the Group's pension obligations are, as of December 31, 2012, the equivalent of an annual pension of 18.85% of his 2012 gross annual compensation.

b) Agreement in case of termination of the Chairman and Chief Executive Officer's employment or in case his term of office is not renewed

– Director affected by the agreement or commitment:
  Mr Christophe de Margerie, Chairman and Chief Executive Officer.
– Purpose of the agreement or commitment:
  If the Chairman and Chief Executive Officer's employment is terminated or if his term of office is not renewed, he is eligible for a severance benefit.
– Terms and conditions of the agreement or commitment:
  This severance benefit is equal to two times an individual's gross annual pay.

The calculation will be based on the gross compensation (including both fixed and variable) in the twelve-month period preceding the termination or the no renewal of the Chief Executive Officer's term.

The severance benefits that may be paid upon a change of control or a change of strategy decided by the Company are cancelled in the case of gross negligence or willful misconduct or if the Chairman and Chief Executive Officer leaves the Company of his own volition, accepts new responsibilities within the Group TOTAL, or may claim full retirement benefits within a short time period.

The payment of this severance benefit is 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 Chairman and Chief Executive 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 Chairman and Chief Executive 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 Chairman and Chief Executive Officer retires is greater than or equal to the average production growth of the four following companies: ExxonMobil, Shell, BP, and Chevron.

Paris La Défense, March 27, 2013

The statutory auditors

French original signed by

KPMG Audit
A division of KPMG S.A.
Jay Nirsimloo
Partner

ERNST & YOUNG Audit
Pascal Macioce
Partner
Laurent Vitse
Partner

2. Statutory auditor's report on the annual financial statements

This is a free translation into English of the statutory auditors' report on the financial statements issued in French and it is provided solely for the convenience of English-speaking users.
The statutory auditors' report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the audit opinion on the financial statements and includes an explanatory paragraph discussing the auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the financial statements taken as a whole and not to provide separate assurance on individual account balances, transactions or disclosures.
This report also includes information relating to the specific verification of information given in the Management Report and in the documents addressed to the shareholders.
This report should be read in conjunction with and construed in accordance with French law and professional auditing standards applicable in France.

TOTAL S.A.

Year ended December 31, 2012

To the Shareholders,

In compliance with the assignment entrusted to us by your annual general meeting, we hereby report to you, for the year ended December 31, 2012, on:

– the audit of the accompanying financial statements of TOTAL S.A.;
– the justification of our assessments;
– the specific verifications and information required by law.

These financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements based on our audit.

I. Opinion on the financial statements

We conducted our audit in accordance with professional standards applicable in France; 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 involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at December 31, 2012 and of the results of its operations for the year then ended in accordance with French accounting principles.

II. Justification of our assessments

In accordance with the requirements of Article L. 823-9 of the French commercial code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

We assessed the approaches used by your company to value investments in subsidiaries and affiliates as described in note 1 to the financial statements, and performed tests to verify the application of those methods. As part of our assessments and based on the information available to date, we also verified the reasonable nature of the estimates derived from these methods.

These assessments were made as part of our audit of the financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

III. Specific verifications and information

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Management Report of the Board of Directors, and in the documents addressed to the shareholders with respect to the financial position and the financial statements.

Concerning the information given in accordance with the requirements of Article L. 225-102-1 of the French commercial code (*Code de commerce*) relating to remunerations and benefits received by the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your company from companies controlling your company or controlled by it. Based on this work, we attest the accuracy and fair presentation of this information.

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders and holders of the voting rights has been properly disclosed in the Management Report.

Paris-La Défense, March 27, 2013

The statutory auditors

French original signed by

KPMG Audit
Département de KPMG S.A.
Jay Nirsimloo

ERNST & YOUNG Audit
Pascal Macioce
Laurent Vitse

3. Statutory Financial Statements of TOTAL S.A. as parent company

3.1. Statement of income

For the year ended (K€)		2012	2011	2010
Sales	*(note 12)*	16,446,200	14,246,392	10,307,170
Net operating expenses	*(note 13)*	(13,012,996)	(10,907,658)	(8,179,634)
Operating depreciation, amortization and allowances	*(note 14)*	(43,328)	(260,650)	(141,174)
Operating income		**3,389,876**	**3,078,084**	**1,986,362**
Financial expenses and income	*(note 15)*	(434,272)	(428,098)	(448,084)
Dividends	*(note 16)*	8,083,928	10,599,281	6,497,082
Net depletion		(954,020)	(839,231)	(489,911)
Other financial expenses and income	*(note 17)*	10,956	(8,656)	(7,945)
Financial income		**6,706,592**	**9,323,296**	**5,551,142**
Current income		**10,096,468**	**12,401,380**	**7,537,504**
Gains (Losses) on sales of marketable securities and loans		(695)	435,924	(34,976)
Gains (Losses) on sales of fixed assets		8,647	43	239
Non-recurring items		(294,985)	31,866	(75,259)
Non-recurring income	*(note 18)*	**(287,033)**	**467,833**	**(109,996)**
Employee profit-sharing plan		(58,002)	(52,073)	(54,613)
Taxes		(3,231,651)	(3,050,856)	(1,532,807)
Net income		**6,519,782**	**9,766,284**	**5,840,088**

3.2. Balance sheet

As of December 31, (K€) ASSETS		2012	2011	2010
Non-current assets				
Intangible assets	*(note 2)*	943,112	864,554	817,999
Depreciation, depletion and amortization and valuation allowances		(381,620)	(310,388)	(245,031)
Intangible assets, net		**561,492**	**554,166**	**572,968**
Property, plant and equipment	*(note 2)*	650,563	585,783	535,475
Depreciation, depletion and amortization and valuation allowances		(450,118)	(406,249)	(361,610)
Property, plant and equipment, net		**200,445**	**179,534**	**173,865**
Subsidiaries and affiliates: investments and loans	*(note 3)*	89,228,333	87,744,158	84,934,902
Depreciation, depletion and amortization and valuation allowances		(699,995)	(574,296)	(565,561)
Other non-current assets	*(note 4)*	45,084	63,008	52,535
Investments and other non-current assets, net		**88,573,422**	**87,232,870**	**84,421,876**
Total non-current assets		**89,335,359**	**87,966,570**	**85,168,709**
Current assets				
Inventories		12,832	9,137	4,832
Operating receivables	*(note 5)*	2,356,568	3,495,789	2,141,796
Marketable securities		315,697	363,533	476,610
Cash/cash equivalents and short-term deposits		**12,498**	**38,047**	**141,131**
Total current assets		**2,697,595**	**3,906,506**	**2,764,369**
Prepaid expenses		9,950	15,649	5,782
Translation adjustments	*(note 11)*	5	4	12
Total assets		**92,042,909**	**91,888,729**	**87,938,872**

As of December 31, (K€) LIABILITIES & SHAREHOLDERS' EQUITY		2012	2011	2010
Shareholders' equity	*(note 6)*			
Share capital		5,914,833	5,909,418	5,874,102
Paid-in surplus		27,684,290	27,655,005	27,208,151
Reserves	*(note 6B)*	3,958,588	3,986,875	3,986,382
Retained earnings		9,314,000	4,916,078	4,425,753
Net income		6,519,782	9,766,284	5,840,088
Interim dividends		(4,161,373)	(4,058,442)	(2,664,730)
Total shareholders' equity		**49,230,120**	**48,175,218**	**44,669,746**
Contingency reserves	*(notes 7 and 8)*	5,812,262	4,736,302	3,771,567
Debts				
Long-term loans	*(note 9)*	25,588,764	28,296,453	15,929,648
Short-term loans	*(note 9)*	7,375,394	6,541,883	21,715,905
Operating liabilities	*(note 10)*	3,923,987	3,839,704	1,790,981
Total debts		**36,888,145**	**38,678,040**	**39,436,534**
Accrued income		806	250	-
Translation adjustments	*(note 11)*	111,576	298,919	61,025
Total liabilities and Shareholders' equity		**92,042,909**	**91,888,729**	**87,938,872**

3.3. Statement of cash flow

For the year ended (M€)	2012	2011	2010
Cash flow from operating activities			
Net income	6,520	9,766	5,840
Depreciation, depletion and amortization	122	110	102
Accrued expenses of investments	140	7	24
Other provisions	1,076	965	571
Funds generated from operations	**7,858**	**10,848**	**6,537**
(Gains) Losses on disposal of assets	(15)	(436)	35
(Increase) Decrease in working capital	782	(789)	(266)
Other, net	(18)	(4)	126
Cash flow from operating activities	**8,607**	**9,619**	**6,432**
Cash flow used in investing activities			
Purchase of property, plant and equipment and intangible assets	(160)	(82)	(64)
Purchase of investments and long-term loans	(1,875)	(4,361)	(6,317)
Investments	**(2,035)**	**(4,443)**	**(6,381)**
Proceeds from disposal of marketable securities and loans	662	2,419	782
Total divestitures	**662**	**2,419**	**782**
Cash flow used in investing activities	**(1,373)**	**(2,024)**	**(5,599)**
Cash flow from financing activities			
Capital increase	31	482	41
Share buybacks	-	-	-
Balance of cash dividends paid	(2,684)	(2,685)	(2,662)
Cash interim dividends paid	(2,735)	(2,684)	(2,665)
Repayment of long-term debt	-	-	(63)
Increase (Decrease) in short-term borrowings and bank overdrafts	**(1,872)**	**(2,811)**	**4,432**
Cash flow from financing activities	**(7,260)**	**(7,698)**	**(917)**
Increase (Decrease) in cash and cash equivalents	**(26)**	**(103)**	**(84)**
Cash and cash equivalents at beginning of year	**38**	**141**	**225**
Cash and cash equivalents at year-end	**12**	**38**	**141**

3.4. Statement of changes in shareholders' equity

(M€)	Common shares issued			General reserves and retained earnings	Revaluation reserve	Total
	Number	Amount	Issue premiums			
As of January 1, 2010	**2,348,422,884**	**5,871**	**27,170**	**11,027**	**37**	**44,105**
Balance of cash dividends paid[(a)]	-	-	-	(2,662)	-	(2,662)
Net income 2010	-	-	-	5,840	-	5,840
Cash interim dividends paid for 2010[(b)]	-	-	-	(2,665)	-	(2,665)
Capital decrease	-	-	-	-	-	-
Issuance of common shares	1,218,047	3	38	-	-	41
Changes in revaluation differences	-	-	-	-	11	11
As of December 31, 2010	**2,349,640,931**	**5,874**	**27,208**	**11,540**	**48**	**44,670**
Balance of cash dividends paid[(c)]	-	-	-	(2,685)	-	(2,685)
Net income 2011	-	-	-	9,766	-	9,766
Cash interim dividends paid for 2011[(d)(e)]	-	-	-	(4,058)	-	(4,058)
Issuance of common shares	5,223,665	13	160	-	-	173
Capital increase reserved for Group Employees	8,902,717	22	288	-	-	310
Changes in revaluation differences	-	-	-	-	-	-
Expenses related to the capital increase reserved for employees	-	-	(1)	-	-	(1)
As of December 31, 2011	**2,363,767,313**	**5,909**	**27,655**	**14,563**	**48**	**48,175**
Balance of cash dividends paid[(f)]	-	-	-	(1,311)	-	(1,311)
Net income 2012	-	-	-	6,520	-	6,520
Cash interim dividends paid for 2012[(g)(h)]	-	-	-	(4,161)	-	(4,161)
Issuance of common shares	798,883	2	29	-	-	31
Capital increase reserved for Group Employees[(i)]	1,366,950	4	-	(4)	-	-
Changes in revaluation differences	-	-	-	-	(24)	(24)
Expenses related to the capital increase reserved for employees	-	-	-	-	-	-
As of December 31, 2012	**2,365,933,146**	**5,915**	**27,684**	**15,607**	**24**	**49,230**

(a) Balance of the 2009 dividend paid in 2010: €2,662 million (€1.14 per share).
(b) Interim dividend paid in 2010: €2,665 million (€1.14 per share).
(c) Balance of the 2010 dividend paid in 2011: €2,685 million (€1.14 per share).
(d) Interim dividend paid in 2011 for the 1st and 2nd quarters 2011: €2,684 million (€0.57 per share per dividend).
(e) Interim dividend not paid in 2011 for the 3rd quarter 2011: €1,374 million (€0.57 per share).
(f) Balance of the 2011 dividend paid in 2012: €1,342 million (€0.57 per share) reduced by €31 million for accounting adjustment, according to the Shareholders' Meeting on May 11, 2012.
(g) Interim dividend paid in 2012 for the 1st and 2nd quarters 2012: €2,735 million (€0.57 and €0.59 per share respectively).
(h) Interim dividend not paid in 2012 for the 3rd quarter 2012: €1,426 million (€0.59 per share).
(i) See note 6.

4. Notes to the Statutory Financial Statements

1) Accounting policies

The 2012 financial statements have been prepared in accordance with French Generally Accepted Accounting Principles ("French GAAP").

Property, plant and equipment

Property, plant and equipment are carried at cost with the exception of assets that were acquired before 1976 for which the basis has been revalued pursuant to French regulations. They are depreciated by the straight-line method over their estimated useful life, as follows:

Buildings	20 - 30 years
Furniture and fixtures	5 - 10 years
Transportation equipment	2 - 5 years
Office equipment and furniture	5 - 10 years
Computer equipment	3 - 5 years

Investments and loans to consolidated subsidiaries and equity affiliates

Investments in consolidated subsidiaries and equity affiliates are accounted for at the acquisition cost, or the appraised value for investments affected by the 1976 legal revaluation.

Loans to consolidated subsidiaries and equity affiliates are stated at their nominal value.

In the Upstream segment, in the absence of a development decision, allowances are recorded against investments and loans for an amount corresponding to the exploration costs incurred. When the existence of proved reserves is established, the value of the investments and loans is limited to the subsidiary expected pay-back evaluated at year-end.

For other segments, allowances for impairment in value are calculated by reference to the Company's equity in the underlying net assets, the fair value and usefulness of the investment.

Inventories

Inventories are valued at either the historical cost or the market value, whichever is lower. Cost for crude oil and refined product inventories is determined according to the First-In, First-Out (FIFO) method.

Receivables and payables

Receivables and payables are stated at nominal value. Allowances for doubtful debts are recorded when the actual value is inferior to the book value.

Foreign currency transactions

Receivables and payables denominated in foreign currencies are translated into euros at the year-end exchange rate. Translation differences for non-hedged items are recorded under "Translation adjustment" on the assets or liabilities side of the balance sheet. Unrealized exchange losses are recorded as provisions.

Translation differences related to other foreign receivables and payables are recorded in the Statement of Income and offset by unrealized gains or losses from off-balance sheet hedging.

Financial instruments

TOTAL S.A. uses financial instruments for hedging purposes only in order to manage its exposure to changes in interest rates and foreign exchange rates.

As part of this policy, the Company enters into interest rate swap agreements and forward transactions. The difference between interest to be paid and interest to be received on these swaps or premiums and discounts on these forward transactions is recognized as interest expense or interest income on a prorated basis, over the life of the instruments.

2) Intangible assets and property, plant and equipment

As of December 31, (M€)	2012			2011
	Cost	Depreciation, depletion and amortization and valuation allowances	Net	Net
Headquarters[(a)]	463	(296)	167	130
Branch (A.D.G.I.L.)[(b)]	480	(86)	394	424
Total intangible assets	**943**	**(382)**	**561**	**554**
Land	36	-	36	36
Buildings	95	(54)	41	43
Other	520	(396)	124	101
Total property, plant and equipment	**651**	**(450)**	**201**	**180**
Total[(c)]	**1,594**	**(832)**	**762**	**734**

(a) Including ongoing DD&A for €15 million in 2012 and €13 million in 2011, software for a gross amount of €284 million in 2012 and €206 million in 2011, and other for a gross amount of €164 million in 2012 and €156 million in 2011.
(b) The subsidiaries' depreciation, depletion and amortization related to commercial activity are accounted for as purchase cost of goods sold.
(c) As of December 31, 2011, aggregate cost, depreciation and valuation allowance amounted respectively to €1,450 million and €716 million.

3) Subsidiaries and affiliates: investments and loans

A) Changes in investments and loans

As of December 31, (M€)	2012						
	Gross amount at beginning of year	Increases		Decreases		Translation adjustment	Gross amount at year-end
		Monetary	Non monetary	Monetary	Non monetary		
Investments	77,966	86	411	(46)	(426)	-	77,991
Receivables[a]	9,778	2,224	-	(577)	(2)	(186)	11,237
Total	**87,744**	**2,310**	**411**	**(623)**	**(428)**	**(186)**	**89,228**
Analysis by segment[b]							
Upstream	5,727	243	2	(96)	(2)	1	5,875
Marketing & Services	4,367	22	354	(5)	(1)	(1)	4,736
Refining & Chemicals	14,116	124	55	(48)	(423)	(1)	13,823
Corporate	63,534	1,921	-	(474)	(2)	(185)	64,794
Total	**87,744**	**2,310**	**411**	**(623)**	**(428)**	**(186)**	**89,228**

(a) Changes in receivables mainly result from flows of funds with Total Finance and Total Treasury.
(b) Information by business segment for comparative periods has been adjusted according to the new organization in force as from July 1, 2012.

B) Allowances for investments and loans

As of December 31, (M€)	2012			2011
	Cost	Valuation allowance	Net	Net
Investments	77,991	(505)	77,486	77,501
Receivables[a][b]	11,237	(195)	11,042	9,669
Total[c]	**89,228**	**(700)**	**88,528**	**87,170**
Analysis by segment[d]				
Upstream	5,876	(361)	5,515	5,453
Marketing & Services	4,737	(83)	4,654	4,310
Refining & Chemicals	13,823	(232)	13,591	13,887
Corporate	64,792	(24)	64,768	63,520
Total	**89,228**	**(700)**	**88,528**	**87,170**

(a) As of December 31, 2012, the gross amount included €10,655 million related to affiliates.
(b) As of December 31, 2012, the net amount was split into €2,691 million, due in 12 months or less, and, €8,351 million, due in 12 months or more.
(c) As of December 31, 2011, aggregate cost and valuation allowance amounted respectively to €87,744 million and €574 million.
(d) Information by business segment for comparative periods has been adjusted according to the new organization in force as from July 1, 2012.

4) Other non-current assets

A) Changes in other non-current assets

As of December 31, (M€)	2012						
	Gross amount at beginning of year	Increases		Decreases		Translation adjustment	Gross amount at year-end
		Monetary	Non monetary	Monetary	Non monetary		
Investment portfolio	4	-	-	-	-	-	4
Other non-current assets	44	3	-	(23)	-	-	24
Deposits and guarantees	15	2	-	-	-	-	17
Total	**63**	**5**	**-**	**(23)**	**-**	**-**	**45**

B) Allowances for non-current assets

As of December 31 (M€)	2012			2011
	Cost	Valuation allowance	Net	Net
Investment portfolio	4	-	4	4
Other non-current assets[(a)]	24	-	24	44
Deposits and guarantees	17	-	17	15
Total[(b)]	**45**	**-**	**45**	**63**

(a) As of December 31, 2012, net amount due in 12 months or less.
(b) As of December 31, 2011, aggregate cost and net amounts were equivalent.

5) Accounts receivable

As of December 31, (M€)	2012			2011
	Cost	Valuation allowance	Net	Net
Accounts receivable	1,270	-	1,270	1,285
Other operating receivables	1,087	-	1,087	2,211
Total[(a)(b)]	**2,357**	**-**	**2,357**	**3,496**

(a) Including €1,352 million related to affiliates as of December 31, 2012.
(b) Due in 12 months or less.

6) Shareholders' equity

A) Common shares

Share capital transactions are detailed as follows:

		Variation of the share capital
As of January 1, 2010		**2,348,422,884**
Shares issued in connection with:	Exercise of TOTAL share subscription options	1,218,047
As of January 1, 2011		**2,349,640,931**
Shares issued in connection with:	Capital increase reserved for Group Employees	8,902,717
	Exercise of TOTAL share subscription options	5,223,665
As of December 31, 2011		**2,363,767,313**
Shares issued in connection with:	Capital increase under the TOTAL global free share plan reserved for employees	1,366,950
	Exercise of TOTAL share subscription options	798,883
As of December 31, 2012[(a)]		**2,365,933,146**

(a) Including 108,391,639 treasury shares deducted from consolidated shareholders' equity.

Capital increase reserved for Group Employees

By the seventeenth resolution of the Combined Shareholders' Meeting held on May 11, 2012, 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, reserving subscriptions for such issuance to the Group Employees participating in a company savings plan.

At the same Shareholders' Meeting, the shareholders also delegated to the Board of Directors powers to increase the share capital of the Company in one or more transactions and within a maximum period of eighteen months from the date of the meeting, in view of giving the employees of foreign subsidiaries similar advantages as those granted to employees covered by the seventeenth resolution.

Pursuant to these delegations, the Board of Directors at its meeting on September 18, 2012 decided to proceed with a capital increase reserved for employees of the Group, including a standard subscription offer and a leveraged offer at the discretion of the employees, within the limit of 18 million shares with dividend rights as of January 1, 2012. It also delegated to the Chairman and Chief Executive Officer all powers to determine the opening and closing dates of the subscription period and the subscription price. This capital increase, opened in 2013, should be closed prior to the 2013 Shareholders' Meeting.

The previous capital increase reserved for employees of the Group had been decided by the Board of Directors at its meeting on October 28, 2010 pursuant to the authorization of the Combined Shareholders' Meeting on May 21, 2010 and had resulted in the subscription of 8,902,717 shares, each with a par value of €2.5 at the unit price of €34.80, the issuance of which had been recognized on April 28, 2011.

Capital increase from the global free share plan for employees of the Group

The Shareholders' Meeting on May 16, 2008 delegated to the Board of Directors the authority to proceed with the free grant of Company shares to employees of the Group as well as to Corporate executive officers of the Company or Group companies, for a period of 38 months, within the limit of 0.8% of the outstanding share capital at the date of the decision of the Board of Directors to grant such shares.

Pursuant to this delegation of authority, the Board of Directors at its meeting on May 21, 2010 decided on the terms and conditions of the global free plan for TOTAL shares in favor of the employees of the Group and delegated to the Chairman and Chief Executive Officer of the Company all powers necessary for implementing this plan.

In this respect, on July 2, 2012, the Chairman and Chief Executive Officer of the Group acknowledged the issue and definitive grant of 1,366,950 common shares each with a par value of €2.5 to the designated beneficiaries, in application of the grant conditions approved by the Board of Directors at its meeting on May 21, 2010.

As of December 31, 2012, 974,900 shares were still issuable under this plan.

Share cancellation

The Company did not carry out any capital reduction by share cancellation during the fiscal years 2010, 2011 and 2012.

Treasury shares (TOTAL shares held by TOTAL S.A.)

As of December 31, 2012, TOTAL S.A. holds 8,060,371 of its own shares, representing 0.34% of its share capital, detailed as follows:

- 7,994,470 shares allocated to TOTAL free share grant plans for Group Employees; and
- 65,901 shares intended to be allocated to new TOTAL share purchase option plans or to new share grant plans.

These shares are deducted from the consolidated shareholders' equity.

As of December 31, 2011, TOTAL S.A. held 9,222,905 of its own shares, representing 0.39% of its share capital, detailed as follows:

- 6,712,528 shares allocated to TOTAL free share grant plans for Group Employees; and

– 2,510,377 shares intended to be allocated to new TOTAL share purchase option plans or to new share grant plans.

These shares were deducted from the consolidated shareholders' equity.

As of December 31, 2010, TOTAL S.A. held 12,156,411 of its own shares, representing 0.52% of its share capital, detailed as follows:

– 6,012,460 shares allocated to TOTAL free share grant plans for Group Employees; and

– 6,143,951 shares intended to be allocated to new TOTAL share purchase option plans or to new share grant plans.

These shares were deducted from the consolidated shareholders' equity.

TOTAL shares held by the Group subsidiaries

As of December 31, 2012, 2011 and 2010, TOTAL S.A. held indirectly through its subsidiaries 100,331,268 of its own shares, representing 4.24% of its share capital as of December 31, 2012, 4.24% of its share capital as of December 31, 2011, 4.27% of its share capital as of December 31, 2010 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), 100% indirectly controlled by TOTAL S.A.

These shares are deducted from the consolidated shareholders' equity.

B) Reserves

As of December 31, (M€)	2012	2011	2010
Revaluation reserves	24	48	48
Legal reserves	740	740	740
Untaxed reserves	2,808	2,808	2,808
General Reserves	387	390	390
Total	**3,959**	**3,986**	**3,986**

7) Contingency reserves

As of December 31, (M€)	2012				
	Gross amount at beginning of year	Increases	Decreases		Gross amount at year-end
			Used	Unused	
Reserves for financial risks	4,299	829	-	-	5,128 (a)
Reserves for operating risks (including note 8) and compensation expense	437	140	(195)	-	382 (b)
Reserves for non-recurring items(c)	-	302	-	-	302
Total	**4,736**	**1,271**	**(195)**	**-**	**5,812**

(a) Reserves for financial risks are mainly comprised of a guarantee granted to an Upstream financing subsidiary for €5,023 million.
(b) Reserves for operating risks are primarily comprised of:
- €237 million for retirement benefits, pension plans and special termination plans, €10 million for long-service awards;
- and €129 million for restricted share grant. The calculation is based on the value of the shares bought to cover such plan and prorated basis based on the 2-year vesting period following which grant of these restricted shares becomes final, subject to a performance condition (see Note 23).
(c) See Note 18.

8) Employee benefits obligations

TOTAL S.A. enters into employee benefit and pension plans, pre-retirement and special termination benefits. Expenses for defined contribution and multi-employers plans correspond to the contributions paid.

Provisions as of December 31, are as follows:

(M€)	2012	2011
Pension benefits and other benefits	237	325
Restructuring reserves	-	-
Provisions as of December 31,	**237**	**325**

For defined benefit plans, commitments are determined using a prospective methodology called “projected unit credit method”. The commitment actuarial value depends on various factors such as the length of service, life expectancy, employee turnover rate, salaries revalorization and actualization assumptions.

For the fiscal year 2012, pre-financing was obtained from outside insurance companies for pension plans.

The actuarial assumptions used as of December 31, are the following:

	2012	2011
Discount rate	2.96%	4.07%
Average expected rate of salary increase	4.61%	4.61%
Average expected rate of return on plan assets	3.79%	4.95%
Average residual life expectancy of operations	10-20 years	10-20 years

TOTAL S.A. records a provision in its accounts for the net actuarial liability of the plan assets and the actuarial gains and losses to be amortized when this sum represents a pension liability.

Actuarial gains and losses resulting from changes in actuarial assumptions are amortized using the straight-line method over the estimated remaining length of service of employees involved.

The reconciliation between the total commitment for pension plans not covered through insurance companies and the provision booked is as follows:

(M€)	2012	2011
Actuarial liability as of December 31,	394	480
Actuarial gains and losses to be amortized	(157)	(157)
Provision for pension benefits and other benefits as of December 31,	**237**	**323**

The total commitment for pension plans covered through insurance companies amounts to:

(M€)	2012	2011
Actuarial liability as of December 31,	561	257
Plan assets	(518)	(191)
Net commitment as of December 31,	**43**	**66**
Provision for pension benefits and other benefits as of December 31,	**0**	**2**

9) Loans

Due date as of December 31, (M€)	2012	Within one year	1 to 5 years	Beyond 5 years	2011
Debenture loans					
5% Bonds 1998 2013 (FRF 1,000 million)[(a)]	127	127	-	-	129
Accrued interest	-	-	-	-	-
Total debenture loans	**127**	**127**	**-**	**-**	**129**
Other loans[(b)]	26,205	616	24,642	947	28,739
Current accounts[(c)]	6,632	6,632	-	-	5,970
Total	**32,964**	**7,375**	**24,642**	**947**	**34,838**

(a) Through the use of issue swaps, this debenture loan becomes equivalent to a dollar floating rate debt.
(b) Including €26,199 million related to affiliates.
(c) Including €6,632 million related to affiliates.

10) Liabilities

As of December 31, (M€)	2012	2011
Suppliers	1,310 [(a)]	1,253 [(b)]
Other operating liabilities	2,614	2,587
Total[(c)(d)]	**3,924**	**3,840**

(a) Excluding invoices not yet received (€602 million), the outstanding liability amounts to €708 million, of which:
- €670 million for invoices of foreign suppliers to foreign branches for which the payment schedule is as follows: €437 million within 30 days and €233 million payable no later than 180 days;
- €36 million non-Group for which the payment schedule is as follows: €1 million paid on December 31, 2012 and €35 million payable no later than January 31, 2013;
- €2 million paid for invoices outstanding to the Group on December 31, 2012.

(b) Excluding invoices not yet received (€550 million), the outstanding liability amounts to €703 million, of which:
- €626 million for invoices of foreign suppliers to foreign branches for which the payment schedule is as follows:
- €393 million within 30 days and €233 million payable no later than 180 days;
- €8 million non-Group payable no later than January 31, 2012;
- €69 million to the Group for which the payment schedule is as follows: €11 million paid on December 31, 2011 and €58 million payable no later than January 31, 2012.

(c) Including €263 million in 2012 and €192 million in 2011 related to affiliates.
(d) Due in 12 months or less.

11) Translation adjustment

The application of the foreign currency translation method outlined in Note 1 resulted in a net translation adjustment of €112 million as of December 31, 2012, mainly due to dollar-denominated loans.

12) Sales

(M€)	France	Rest of Europe	North America	Africa	Middle East & Rest of world	Total
For the year ended December 31, 2012	**340**	**14,172**	**138**	**971**	**825**	**16,446**
Hydrocarbon and oil products	-	13,984	-	-	143	14,127
Technical support fees	340	188	138	971	682	2,319
For the year ended December 31, 2011	**310**	**453**	**32**	**934**	**12,517**	**14,246**
Hydrocarbon and oil products	-	227	-	-	11,875	12,102
Technical support fees	310	226	32	934	642	2,144

13) Net operating expenses

(M€)	2012	2011
Purchase cost of goods sold	(9,690)	(8,149)
Other purchases and external expenses	(1,952)	(1,487)
Taxes	(40)	(37)
Personnel expenses	(1,331)	(1,235)
Total	**(13,013)**	**(10,908)**

14) Operating depreciation, amortization and allowances

(M€)	2012	2011
Depreciation, valuation allowance and amortization on		
- Property, plant and equipment and intangible assets	(98)	(85)
- Employee benefits	(140)	(282)
Subtotal 1	**(238)**	**(367)**
Reversals		
- Property, plant and equipment and intangible assets	-	-
- Employee benefits	195	106
Subtotal 2	**195**	**106**
Total (1+2)	**(43)**	**(261)**

15) Financial expenses and income

(M€)	2012	2011
Financial expenses[a]		
Interest expenses and other	(461)	(548)
Depreciation on investments and loans to subsidiaries and affiliates	-	-
Subtotal 1	**(461)**	**(548)**
Financial income[b]		
Net gain on sales of marketable securities and interest on loans to subsidiaries and affiliates	1	1
Interest on short-term deposits and other	26	119
Subtotal 2	**27**	**120**
Total (1+2)	**(434)**	**(428)**
(a) Including, related to affiliates:	450	526
(b) Including, related to affiliates:	27	5

16) Dividends

(M€)[a]	2012	2011
Upstream	116	3,075
Marketing & Services	81	47
Refining & Chemicals	24	5
Corporate	7,863	7,472
Total	**8,084**	**10,599**

(a) Information by business segment for comparative periods has been adjusted according to the new organization in force as from July 1, 2012.

17) Other financial income and expenses

Net income of €11 million is comprised entirely of foreign exchange income.

18) Non-recurring income

Non-recurring income is a loss of €287 million. It is detailed as follows:

- a reserve of €302 million, exchange value of $398 million as on December 31, 2012, following the investigation initiated by the United States Securities and Exchange Commission (SEC) and monitored by the U.S. Department of Justice (DoJ) in connection with the pursuit of business in Iran, by certain oil companies including, among others, TOTAL S.A.;
- an income on disposal of investments and intangible assets representing a profit of €8 million;
- scholarships and grants payments amounting to €18 million;
- reversal of reserve for €25 million primarily following the reevaluation of Total Outre Mer shares as part of its disposal.

19) Basis of taxation

TOTAL S.A. is subject to French corporation tax according to the ordinary rules of law, *i.e.* based on the principle of territoriality of tax stipulated in the French Tax Code (Article 209-I). It is also taxed outside France on income from its direct operations abroad.

Moreover, since January 1, 1992, TOTAL S.A. has elected the 95%-owned French subsidiaries tax regime provided for by Articles 223 A and following of the French Tax Code (*Régime de l'intégration fiscale*). In accordance with the integration agreement signed between TOTAL S.A. and its consolidated subsidiaries, the deficits realized by the consolidated companies during the period of integration are definitively acquired by the parent company.

Lastly, an additional Corporate tax contribution of 3% payable on amounts distributed by French or foreign companies and organizations subject to Corporate Tax in France has been created by the amending finance law for 2012. This new contribution is payable for amounts distributed paid on or after August 17, 2012, when the law came into force.

20) Foreign exchange and counterparty risk

The commercial foreign exchange positions are systematically covered by the purchase or sale of the corresponding currencies, mainly with cash transactions and sometimes on forward market. Regarding long-term assets in foreign currencies, the Company tries to reduce the corresponding exchange risk by associating them, as far as possible, with financing in the same currency.

In terms of interest rates, most of the long-term debt is brought back to a variable rate through the use of issue swaps (long-term interest rate and foreign currency swaps). Day to day treasury management operates on the basis of the daily rates, for instance by using short-term interest rate swaps.

An independent department monitors the status of the financial instruments, especially through marked-to-market valuations and sensitivity estimations. Counterparty risk is monitored on a regular basis against limits set by the Group's senior management.

21) Commitments

As of December 31, (M€)	2012	2011
Commitments given		
Guarantees on custom duties	1,021	1,021
Bank guarantees[(a)]	5,679	6,738
Guarantees given on other commitments	9,441	10,203
Guarantees related to confirmed lines of credit	126	81
Short term financing plan[(b)]	17,739	17,964
Bond issue plan[(b)]	35,227	35,690
Total commitments given	**69,233**	**71,697**
Commitments received		
Guarantees related to confirmed lines of credit	8,973	8,836
Guarantees on confirmed authorized bank overdrafts	7,071	7,611
Other commitments received	998	1,183
Total of commitments received	**17,042**	**17,630**

(a) The variation is due primarily to our operations in Yemen and Canada.
(b) TOTAL S.A. guarantees the short-term financing plan and the bond issue incurred by Total Capital and Total Capital Canada Ltd. On the overall plan amount of €52,966 million, €26,112 million were incurred as of December 31, 2012 against €23,448 million as of December 31, 2011.

Portfolio of financial derivative instruments

The off-balance sheet commitments related to financial derivative instruments are set forth below.

As of December 31, (M€)	2012	2011
Issue swaps		
Notional amount, accrued coupon interest[(a)]	127	129
Fair value, accrued coupon interest[(b)]	30	32
Short term swaps		
Lender at fixed rate[(a)]	947	-
Fair value, accrued coupon interest[(b)]	-	-
Forward contract of currencies		
Notional value[(a)]	34	912
Fair value[(b)]	(1)	(29)

(a) These amounts set the levels of notional commitment and are not indicative of a contingent gain or loss.
(b) This value was determined by estimating future cash flows on a borrowing-by-borrowing basis and discounting these future cash flows using the zero coupon interest rate curves at year-end and taking into account a spread that corresponds to the average risk classification of the Company.

22) Average number of employees

As of December 31,	2012	2011
Managers	5,203	5,101
Supervisors	1,420	1,452
Technical and administrative staff	453	448
Total	**7,076**	**7,001**

23) Stock option, restricted share and free share plans

A) TOTAL share subscription option plans

	2003 Plan	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plan	2011 Plan	Total	Weighted average exercise price
Date of the Shareholders' Meeting	05/17/2001	05/14/2004	05/14/2004	05/14/2004	05/11/2007	05/11/2007	05/11/2007	05/21/2010	05/21/2010		
Grant date[a]	07/16/2003	07/20/2004	07/19/2005	07/18/2006	07/17/2007	10/09/2008	09/15/2009	09/14/2010	09/14/2011		
Exercise price until May 23, 2006 included[b]	33.30	39.85	49.73	-	-	-	-	-	-	-	-
Exercise price since May 24, 2006[b]	32.84	39.30	49.04	50.60	60.10	42.90	39.90	38.20	33.00	-	-
Expiry date	07/16/2011	07/20/2012	07/19/2013	07/18/2014	07/17/2015	10/09/2016	09/15/2017	09/14/2018	09/14/2019	-	
Number of options[c]											
Existing options as of January 1, 2010	**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**
Notified	-	-	-	-	-	-	-	4,788,420	-	4,788,420	38.20
Canceled[d]	(1,420)	(15,660)	(6,584)	(4,800)	(5,220)	(92,472)	(4,040)	(1,120)	-	(131,316)	43.50
Exercised	(1,075,765)	(141,202)	-	-	-	-	(1,080)	-	-	(1,218,047)	33.60
Existing options as of January 1, 2011	**5,734,444**	**12,338,847**	**6,178,856**	**5,640,886**	**5,866,445**	**4,349,158**	**4,371,890**	**4,787,300**	**-**	**49,267,826**	**43.80**
Notified	-	-	-	-	-	-	-	-	1,518,840	1,518,840	33.00
Canceled[e]	(738,534)	(28,208)	(16,320)	(17,380)	(16,080)	(13,260)	(14,090)	(85,217)	(1,000)	(930,089)	34.86
Exercised	(4,995,910)	(216,115)	-	-	-	(200)	-	(2,040)	(9,400)	(5,223,665)	33.11
Existing options as of January 1, 2012	**-**	**12,094,524**	**6,162,536**	**5,623,506**	**5,850,365**	**4,335,698**	**4,357,800**	**4,700,043**	**1,508,440**	**44,632,912**	**44.87**
Notified	-	-	-	-	-	-	-	-	-	-	-
Canceled[f]	-	(11,351,931)	(2,516)	(1,980)	(1,380)	(3,600)	(2,700)	(4,140)	(3,400)	(11,371,647)	39.31
Exercised	-	(742,593)	-	-	-	(1,630)	(20,200)	(34,460)	-	(798,883)	39.28
Existing options as of December 31, 2012	**-**	**-**	**6,160,020**	**5,621,526**	**5,848,985**	**4,330,468**	**4,334,900**	**4,661,443**	**1,505,040**	**32,462,382**	**46.96**

(a) The grant date is the date of the Board meeting awarding the share subscription options, except for the grant of October 9, 2008, decided by the Board on September 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 effective as of May 24, 2006.
(c) The number of options awarded, outstanding, canceled or exercised before May 23, 2006 included, was multiplied by four to take into account the four-for-one stock split approved by the shareholders' meeting on May 12, 2006.
(d) Out of 92,472 options awarded under the 2008 Plan that were canceled, 88,532 options were canceled due to the performance condition. The acquisition rate applicable to the subscription options that were subject to the performance condition of the 2008 Plan was 60%.
(e) Out of the 930,089 options canceled in 2011, 738,534 options that were not exercised expired due to the expiry of the 2003 subscription option Plan on July 16, 2011.
(f) Out of the 11,371,647 options canceled in 2012, 11,351,931 options that were not exercised expired due to the expiry of the 2004 subscription option Plan on July 20, 2012.

Options are exercisable, subject to a continuous employment condition, after a 2-year period from the date of the Board meeting awarding the options and expire eight years after this date. The underlying shares may not be transferred during four years from the date of grant. For the 2007 to 2011 Plans, 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 from the date of the grant.

No decisions were taken in 2012 on a new TOTAL share subscription option plan.

2011 Plan

For the 2011 Plan, the Board of Directors decided that for each grantee other than the Chairman and Chief Executive Officer, the options will be finally granted to their beneficiary provided that the performance condition is fulfilled. The performance condition states that the number of options finally granted is based on the average of the Return on Equity (ROE) of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012.

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%.

In addition, as part of the 2011 Plan, the Board of Directors decided that the number of share subscription options finally awarded to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share subscription 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 by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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 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 by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2011 and 2012. 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%.

2010 Plan

For the 2010 Plan, the Board of Directors decided that:

– For each grantee of up to 3,000 options, other than the Chairman and Chief Executive Officer, the options will be finally granted to their beneficiary;

– For each grantee of more than 3,000 options and less or equal to 50,000 options (other than the Chairman and Chief Executive Officer):

  - The first 3,000 options and two-thirds above the first 3,000 options will be finally granted to their beneficiary;
  - The outstanding options, that is one-third of the options above the first 3,000 options, will be finally granted provided that the performance condition described below is fulfilled.

– For each grantee of more than 50,000 options (other than the Chairman and Chief Executive Officer):

  - The first 3,000 options, two-thirds of the options above the first 3,000 options and below the first 50,000 options, and one-third of the options above the first 50,000 options, will be finally granted to their beneficiary;
  - The outstanding options, that is one-third of the options above the first 3,000 options and below the first 50,000 options and two-thirds of the options above the first 50,000 options, will be finally granted provided that the performance condition is fulfilled.

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 by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011.

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%.

In addition, as part of the 2010 Plan, the Board of Directors decided that the number of share subscription options finally awarded to the Chairman and Chief Executive Officer will be subject to two performance conditions:

– For 50% of the share subscription 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 by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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 performance condition states that the number of options finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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%.

Due to the application of the performance condition, the acquisition rates were 100% for the 2010 Plan.

B) TOTAL share purchase option plans

	2002 Plan[a]	Total	Weighted average exercise price
Date of the Shareholders' Meeting	05/17/2001		
Grant date[b]	07/09/2002		
Exercise price until May 23, 2006 included[c]	39.58	-	-
Exercise price since May 24, 2006[c]	39.03	-	-
Expiry date	07/09/2010		
Number of options[d]			
Existing options as of January 1, 2010	**5,935,261**	**5,935,261**	**39.03**
Notified	-	-	-
Canceled[e]	(4,671,989)	(4,671,989)	39.03
Exercised	(1,263,272)	(1,263,272)	39.03
Existing options as of January 1, 2011	**-**	**-**	**-**
Notified	-	-	-
Canceled	-	-	-
Exercised	-	-	-
Existing options as of January 1, 2012	**-**	**-**	**-**
Notified	-	-	-
Canceled	-	-	-
Exercised	-	-	-
Outstanding as of December 31, 2012	**-**	**-**	**-**

(a) Options are exercisable, subject to a continuous employment condition, after a 2-year period from the date of the Board meeting awarding the options and expire eight years after this date. The underlying shares may not be transferred during four years from the date of grant. This plan expired on July, 9, 2010.
(b) The grant date is the date of the Board meeting awarding the options.
(c) 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 effective as of May 24, 2006.
(d) The number of options awarded, outstanding, canceled or exercised before May 23, 2006 included, was multiplied by four to take into account the four-for-one stock split approved by the shareholders' meeting on May 12, 2006.
(e) Out of the 4,671,989 options canceled in 2010, 4,671,145 options that were not exercised expired due to the expiry of the 2002 purchase option Plan on July, 9, 2010.

C) TOTAL performance shares

	2008 Plan	2009 Plan	2010 Plan	2011 Plan	2012 Plan	Total
Date of the Shareholders' Meeting	05/16/2008	05/16/2008	05/16/2008	05/13/2011	05/13/2011	
Grant date[(a)]	10/09/2008	09/15/2009	09/14/2010	09/14/2011	07/26/2012	
Final grant date (end of vesting period)	10/10/2010	09/16/2011	09/15/2012	09/15/2013	07/27/2014	
Transfer authorized as from	10/10/2012	09/16/2013	09/15/2014	09/15/2015	07/27/2016	
Number of restricted shares						
Existing options as of January 1, 2010	**2,762,476**	**2,966,036**	**-**	**-**	**-**	**5,728,512**
Notified	-	-	3,010,011	-	-	3,010,011
Canceled[(d)]	(1,113,462)	(9,796)	(8,738)	-	-	(1,131,996)
Finally granted[(b)(c)]	(1,649,014)	(1,904)	(636)	-	-	(1,651,554)
Existing options as of January 1, 2011	**-**	**2,954,336**	**3,000,637**	**-**	**-**	**5,954,973**
Notified	-	-	-	3,649,770	-	3,649,770
Canceled	356	(26,214)	(10,750)	(19,579)	-	(56,187)
Finally granted[(b)(c)(e)]	(356)	(2,928,122)	(1,836)	-	-	(2,930,314)
Existing options as of January 1, 2012	**-**	**-**	**2,988,051**	**3,630,191**	**-**	**6,618,242**
Notified	-	-	-	-	4,295,930	4,295,930
Canceled	96	832	(32,650)	(18,855)	-	(50,577)
Finally granted[(b)(c)(f)]	(96)	(832)	(2,955,401)	(5,530)	-	(2,961,859)
Outstanding as of December 31, 2012	**-**	**-**	**-**	**3,605,806**	**4,295,930**	**7,901,736**

(a) The grant date is the date of the Board of Directors meeting that awarded the shares, except for the shares awarded by the Board of Directors at their meeting of September 9, 2008, and granted on October 9, 2008.
(b) Performance shares finally granted following the death of their beneficiaries (Plan 2008 during the year 2009, Plan 2009 and Plan 2010 during the year 2010, Plan 2010 during the year 2011, Plan 2011 during the year 2012).
(c) Including performance shares finally granted for which the entitlement right had been canceled erroneously.
(d) Out of the 1,113,462 canceled rights to the grant share under the 2008 Plan, 1,094,914 entitlement rights were canceled due to the performance condition. The acquisition rate for the 2008 Plan was 60%.
(e) The acquisition rate for the 2009 Plan was 100%.
(f) The acquisition rate for the 2010 Plan was 100%.

The performance shares, which are 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. The final grant is subject to a continued employment condition and a performance condition. Moreover, the transfer of the performance shares finally granted will not be permitted until the end of a 2-year mandatory holding period from the date of the final grant.

2012 Plan

For the 2012 Plan, the Board of Directors decided that, for each senior executives (other than the Chairman and Chief Executive Officer), the shares will be finally granted subject to a performance condition. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2012 and 2013. The acquisition rate:

- is equal to zero if the average ROE is less than or equal to 8%;
- varies on a straight-line basis between 0% and 100% if the average ROE is greater than 8% and less than 16%; and
- is equal to 100% if the average ROE is greater than or equal to 16%.

The Board of Directors decided also that, for each beneficiary (other than the Chairman and Chief Executive Officer and the senior executives) of more than 100 shares, the shares in excess of this number will be finally granted subject to the performance condition mentioned before.

In addition, as part of the 2011 plan, the Board of Directors decided that the number of performance share finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the shares granted, the performance condition states that the number of shares finally granted is based on the average ROE of the Group. The average ROE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2012 and 2013. The acquisition rate is equal to zero if the average ROE is less than or equal to 8%, varies on a straight-line basis between 0% and 100% if the average ROE is more than 8% and less than 16%, and is equal to 100% if the average ROE is more than or equal to 16%.
- For 50% of the shares granted, the performance condition states that the number of shares finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group from the consolidated balance sheet and statement of income of the Group for fiscal years 2012 and 2013. The acquisition rate is equal to zero if the average ROACE is less than or equal to 7%, varies on a straight-line basis between 0% and 100% if the average ROACE is more than 7% and less than 15%, and is equal to 100% if the average ROACE is more than or equal to 15%.

2011 Plan

For the 2011 Plan, the Board of Directors decided that, for each senior executives (other than the Chairman and Chief Executive Officer), the shares will be finally granted subject to a performance condition. This condition is based on the average ROE as published by the Group and calculated based on the Group's consolidated balance sheet and statement of income for fiscal years 2011 and 2012. 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%.

The Board of Directors decided also that, for each beneficiary (other than the Chairman and Chief Executive Officer and the senior executives) of more than 100 shares, the shares in excess of this number will be finally granted subject to the performance condition mentioned before.

In addition, as part of the 2011 plan, the Board of Directors decided that the number of performance share finally granted to the Chairman and Chief Executive Officer will be subject to two performance conditions:

- For 50% of the share subscription options granted, the performance condition states that the the number of options finally granted is based on the average ROE of the Group. The average ROE is calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2011 and 2012. 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 performance condition states that the the number of options finally granted is based on the average ROACE of the Group. The average ROACE is calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2011 and 2012. 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%.

2010 Plan

For the 2010 Plan, the Board of Directors decided 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 calculated by the Group based on TOTAL's consolidated balance sheet and statement of income for fiscal years 2010 and 2011. 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%.

Due to the application of the performance condition, the acquisition rate was 100% for the 2010 Plan.

D) TOTAL global free share plan

The Board of Directors approved at its meeting on May 21, 2010 the implementation and conditions of a global free share plan intended for the Group Employees. On June 30, 2010, entitlement rights to 25 free shares were granted to every employee.

The final grant is subject to a continued employment condition during the plan's vesting period. Depending on the countries in which the Group companies are located, the acquisition period is either 2 years, followed by a vesting period of 2 years in countries with a 2+2 structure, or 4 years, without a vesting period in countries with a 4+0 structure. Moreover, the granted shares are not subject to any performance condition.

After the acquisition period, the granted shares will become new shares derived from an increase in the capital of TOTAL S.A., further to the incorporation of reserves or issue premiums.

On July 2, 2012, the Chairman and Chief Executive Officer acknowledged the creation and definitive grant of 1,366,950 shares to the beneficiaries designated after the two-year vesting period.

	2010 Plan (2 + 2)	2010 Plan (4 + 0)	Total
Date of the Shareholders' Meeting	05/16/2008	05/16/2008	
Grant date[(a)]	06/30/2010	06/30/2010	
Date of the final award	07/01/2012	07/01/2014	
Transfer authorized as from	07/01/2014	07/01/2014	
Number of restricted shares			
Outstanding options as of January 1, 2010	**-**	**-**	**-**
Notified	1,508,850	1,070,650	2,579,500
Canceled	(125)	(75)	(200)
Finally granted[(b)]	(75)	-	(75)
Outstanding options as of January 1, 2011	**1,508,650**	**1,070,575**	**2,579,225**
Notified	-	-	-
Canceled	(29,175)	(54,625)	(83,800)
Finally granted[(b)]	(475)	(425)	(900)
Outstanding options as of January 1, 2012	**1,479,000**	**1,015,525**	**2,494,525**
Notified	-	-	-
Canceled	(111,725)	(40,275)	(152,000)
Finally granted[(b)(c)]	(1,367,275)	(350)	(1,367,625)
Outstanding as of December 31, 2012	**-**	**974,900**	**974,900**

(a) The June 30, 2010, grant was decided by the Board of Directors on May 21, 2010.
(b) Final grant following the death or disability of the beneficiary of the shares.
(c) 1,366,950 shares awarded finally to the beneficiaries designated after the two-year vesting period.

24) Others

Compensation for the administration and management bodies

The aggregate amount of direct and indirect compensation accounted for by the French and foreign affiliates of the Company for the executive officers of TOTAL (the members of the Management Committee and the Treasurer) and for the members of the Board of Directors who are employees of the Group, is detailed as follows:

For the year ended (M€)	2012	2011	2010
Number of people	34	30	26
Direct or indirect compensation received	21.3	20.4	20.8
Share-based payments expense (IFRS 2)	5.9	2.2	1.6
Pension expenses[(a)]	11.4	9.4	12.2
Other long-term benefits expenses	-	-	-
Termination benefits expenses	-	4.8	-

(a) 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 €181.3 million provisioned as of December 31, 2012 (against €139.7 million as of December 31, 2011 and €113.8 million as of December 31, 2010).

The compensation allocated to members of the Board of Directors for directors' fees totaled €1.10 million in 2012 (€1.07 million in 2011 and €0.96 million in 2010).

Legal proceedings

All legal proceedings involving TOTAL S.A. are included in Note 32 – Other risks and commitments – to the Consolidated Financial Statements attached to the Registration Document.

5. Other financial information concerning the parent company

5.1. Subsidiaries and affiliates

As of December 31, 2012 (M€)	% of share capital owned by the company	Share capital	Other shareholders' equity	Book value of investments		Loans & avances	Sales	Net income	Dividends paid	Commitments & contingencies
				gross	net					
Subsidiaries										
Elf Aquitaine	100.0	2,166	22,523	45,787	45,787	-	-	3,889	7,685	-
Omnium Reinsurance CIE	100.0	30	428	114	114	-	54	5	77	-
Total China Investment Ltd	100.0	157	40	140	140	4	472	33	-	-
Total E&P Golfe Holdings Ltd	100.0	-	186	2,855	2,855	-	-	193	-	-
Total E&P Holdings	65.8	6	7,954	1,118	1,118	-	-	3,405	-	-
Total E&P Holdings Ichthys	100.0	84	(1)	84	84	-	-	(1)	-	-
Total E&P Ichthys	100.0	298	(4)	298	298	-	-	(2)	-	-
Total E&P Iraq	100.0	13	(14)	67	67	-	86	(16)	-	-
Total Energie Développement	100.0	63	(72)	79	4	-	1	13	-	-
Total Gaz & Power Actifs Industriels	100.0	330	82	330	330	-	-	9	-	-
Total Gasandes S.A.	100.0	2	60	150	20	-	-	12	24	-
Total Gestion USA	100.0	3,969	-	3,969	3,969	-	-	-	-	-
Total Holdings Europe	53.2	65	10,744	4,446	4,446	-	-	1,875	-	-
Total Raffinage Chimie	100.0	934	12,119	13,171	13,171	-	60	(3)	-	-
Total Raffinage Marketing	74.1	319	4,283	4,487	4,487	-	21,091	598	-	1,000
Total Refining Saudi Arabia S.A.S	100.0	80	14	80	80	170	-	(1)	-	-
Other	-	-	-	821	521	11,063(a)	-	-	298	58,790
Total	**-**	**-**	**-**	**77,996**	**77,491**	**11,237**	**-**	**-**	**8,084**	**59,790**

(a) Including Total Finance for €7,485 million and Total Treasury for €2,729 million.
(b) Including €52,966 million concerning Total Capital for debenture loan emission program and short-term financing.

5.2. Five-year financial data

Share capital at year-end

(K€)	2012	2011	2010	2009	2008
Share capital	5,914,833	5,909,418	5,874,102	5,871,057	5,929,520
Number of common shares outstanding[a]	2,365,933,146	2,363,767,313	2,349,640,931	2,348,422,884	2,371,808,074
Number of future shares to issue:					
- share subscription options[a]	32,462,382	44,632,912	49,267,826	45,828,769	42,965,666
- Elf Aquitaine options and shares covered by the exchange guarantee[a]	-	-	-	-	610,086
- global free share plan	974,900	2,494,525	2,579,225	-	-

Operation and income for the year

(K€)	2012	2011	2010	2009	2008
Net commercial sales	14,127,247	12,102,415	8,347,108	6,246,165	9,970,955
Employee profit sharing	55,000	51,000	48,000	35,000	42,000
Net income	6,519,782	9,766,284	5,840,088	5,633,681	6,007,609
Retained earnings before appropriation	9,314,000	4,916,078	4,425,753	4,114,277	3,416,997
Income available for appropriation	15,833,782	14,682,362	10,265,841	9,747,958	9,424,606
Dividends (including interim dividends)	5,581,925	5,392,829	5,384,541	5,354,404	5,407,722
Retained earnings	10,251,857	9,289,533	4,881,300	4,393,554	4,016,884

Earnings per share

(€)	2012	2011	2010	2009	2008
Income after tax, before depreciation, amortization and provisions[a][b]	3.44	4.80	2.90	2.68	2.87
Income after tax and depreciation, amortization and provisions[a][b]	2.88	4.33	2.60	2.52	2.67
Net dividend per share[a]	2.34	2.28	2.28	2.28	2.28

Employees

(K€)	2012	2011	2010	2009	2008
Average number of employees during the year[c]	7,076	7,001	6,809	6,595	6,311
Total payroll for the year	954,487	910,707	815,269	881,515	666,686
Social security and other staff benefits	383,844	331,248	311,114	312,973	282,040

(a) On May 18, 2006, the share par value was divided by four.
(b) Earnings per share are calculated based on the fully-diluted weighted-average number of common shares outstanding during the year, excluding treasury shares and shares held by subsidiaries.
(c) Including employees in end-of-career holiday or early retirement (Exemption from activity: 50 people in 2008, 74 people in 2009, 79 people in 2010, 89 people in 2011 and 96 people in 2012).

5.3. Allocation of 2012 income

(Net dividend proposed: €2.34 per share)

(€)	
Income of the year	6,519,781,836.03
Retained earnings before appropriation	9,313,999,767.81
Total available for allocation	**15,833,781,603.84**
Interim dividends:	
- paid in 2012[(a)]	2,735,119,289.56
- to be paid in 2013 including interim dividend approved in 2012[(b)]	1,426,253,222.37
Balance of dividends to be paid in 2013	1,420,552,843.31
2012 dividends	5,581,925,355.24
Retained earnings	10,251,856,248.60
Total allocated	**15,833,781,603.84**

(a) 2,357,856,883 x €0.57 +2,357,865,875 x €0.59.
(b) 2,417,378,343 x €0.59.

5.4. Statement of changes in share capital for the past five years

For the year ended (K€)		Cash contributions		Successive amounts of nominal capital	Cumulative number of common shares of the Company
		Par value	Issue/ conversion premium		
2008	**Changes in capital**				
	Options covered by the exchange guarantee	569	9,631	5,989,399	2,395,759,521
	Exercise of share subscription options	2,945	38,166	5,992,344	2,396,937,688
	Capital increase reserved for Group Employees	12,176	203,521	6,004,520	2,401,808,074
	Capital decrease	(75,000)	(1,565,629)	5,929,520	2,371,808,074
2009	**Changes in capital**				
	Options covered by the exchange guarantee	1,200	17,179	5,930,720	2,372,288,104
	Exercise of share subscription options	2,337	29,996	5,933,057	2,373,222,884
	Capital decrease	(62,000)	(1,160,212)	5,871,057	2,348,422,884
2010	**Changes in capital**				
	Exercise of share subscription options	3,045	37,875	5,874,102	2,349,640,931
2011	**Changes in capital**				
	Exercise of share subscription options	13,059	159,896	5,887,161	2,354,864,596
	Capital increase reserved for Group Employees	22,257	287,558	5,909,418	2,363,767,313
2012	**Changes in capital**				
	Exercise of share subscription options	1,997	29,285	5,911,415	2,364,566,196
	Capital increase reserved for Group Employees[(a)]	3,417	-	5,914,833	2,365,933,146

(a) See Note 6.

6. Consolidated financial information for the last five years

6.1. Summary consolidated balance sheet for the last five years

As of December 31, (M€)	2012	2011	2010	2009	2008
ASSETS					
Non-curret assets	**104,312**	**100,386**	**85,512**	**77,996**	**71,252**
Intangible assets	12,858	12,413	8,917	7,514	5,341
Property, plant and equipment	69,332	64,457	54,964	51,590	46,142
Other non-current assets	22,122	23,516	21,631	18,892	19,769
Current assets	**67,517**	**63,663**	**58,206**	**49,757**	**47,058**
Inventories	17,397	18,122	15,600	13,867	9,621
Other current assets	46,323	45,541	41,336	35,890	37,437
Assets classified as held for sale	3,797	-	1,270	-	-
Total assets	**171,829**	**164,049**	**143,718**	**127,753**	**118,310**
LIABILITIES					
Shareholder's equity, Group share	72,912	68,037	60,414	52,552	48,992
Non-controlling interests	1,281	1,352	857	987	958
Provisions and other non-current liabilities	26,343	25,401	21,216	20,369	17,842
Non-curent financial debt	22,274	22,557	20,783	19,437	16,191
Current debt	47,538	46,702	40,251	34,408	34,327
Liabilities directly associated with the assets classified as held for sale	1,481	-	197	-	-
Total liabilities	**171,829**	**164,049**	**143,718**	**127,753**	**118,310**

6.2. Consolidated statement of income for the last five years

As of December 31, (M€)	2012	2011	2010	2009	2008
Sales	200,061	184,693	159,269	131,327	179,976
Operating expenses	(168,674)	(152,897)	(131,963)	(109,521)	(150,534)
Depreciation and amortization of tangible assets	(9,525)	(7,506)	(8,421)	(6,682)	(5,755)
Other income and expense	547	699	496	(286)	(185)
Cost of net debt	(571)	(440)	(334)	(398)	(527)
Other financial income and expense	59	180	35	298	403
Equity share of net income from affiliates	2,010	1,925	1,953	1,642	1,721
Income tax	(13,066)	(14,073)	(10,228)	(7,751)	(14,146)
Consolidated net income	**10,841**	**12,581**	**10,807**	**8,629**	**10,953**
Group share	10,694	12,276	10,571	8,447	10,590
Non-controlling interests	**147**	**305**	**236**	**182**	**363**

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TOTAL puts Corporate Social Responsibility (CSR) at the heart of its activities and adheres to the following principles:

– to protect the safety of people and its facilities;
– to limit its environmental footprint;
– to ensure that its Code of Conduct is applied to all of its activities;
– to incorporate the challenges of sustainable development in the exercise of its activities;
– to increase its local integration by placing dialog with its stakeholders at the heart of its policy and contributing to the economic and social development of the regions where the Group has operations;
– to promote equal opportunities and foster diversity among its personnel.

The note on reporting scope and method concerning the information provided in Chapter 12 is available on the Company's website (total.com, heading CSR Analysts).

TOTAL refers to the IPIECA (the global oil and gas industry association for environmental and social issues) specific reporting guidance for the oil industry, and to the Global Reporting Initiative (GRI). More details on these reporting frameworks can be found on the Group's website (total.com, heading CSR Analysts).

1. Employee policy

The quantitative information set out below about TOTAL's employees worldwide relates to all the subsidiaries consolidated under the global integration method. Some of the data comes from the Worldwide Human Resources Survey (WHRS), which uses almost one hundred indicators measuring important factors of the Group's employee policy. This annual survey is performed on a sample of employees from the consolidated companies, representative of their distribution by business segment and region; when such WHRS data is mentioned in this document, reference is made to this sample, which represents 82% of the Group headcount in 2012, compared with 77% in 2011.

1.1. Group Employees

1.1.1. Group Employees as of December 31, 2012[1]

As of December 31, 2012, the Group had 97,126 employees belonging to 359 companies and subsidiaries located in 107 countries. The tables below show, at year-end 2010, 2011 and 2012, the breakdown of employees by the following categories: gender, nationality, business segment, region, and age bracket:

Group Employees as of December 31,	2012	2011	2010
Total number of employees	**97,126**	**96,104**	**92,855**
Women	30.0%	29.7%	29.4%
Men	70.0%	70.3%	70.6%
French	35.6%	36.1%	37.4%
Other nationalities	64.4%	63.9%	62.6%
Breakdown by business segment			
Upstream			
Exploration & Production	16.9%	16.7%	16.7%
Gas & Power	1.7%	1.7%	1.5%
Refining & Chemicals			
Refining & Chemicals	52.5%	51.9%	53.8%
Trading & Shipping	0.6%	0.5%	0.6%
Marketing & Services			
Marketing & Services	21.6%	21.6%	25.7%
New Energies	5.2%	6.2%	0.2%
Corporate	1.5%	1.5%	1.5%

Group Employees as of December 31,	2012	2011	2010
Breakdown by region			
Mainland France	36.0%	36.5%	37.9%
French Overseas Departments and Territories	0.4%	0.4%	0.3%
Rest of Europe	23.5%	23.4%	26.8%
Africa	9.6%	9.6%	9.4%
North America	6.4%	6.8%	6.7%
South America	8.9%	7.5%	7.3%
Asia	13.2%	14.1%	10.1%
Middle East	1.3%	1.1%	0.9%
Oceania	0.5%	0.6%	0.6%
Breakdown by age bracket			
< 25	5.7%	5.9%	6.4%
25 to 34	29.2%	30.0%	27.4%
35 to 44	28.5%	28.1%	28.7%
45 to 54	23.7%	24.0%	25.5%
> 55	12.9%	12.0%	12.0%

The workforce increased by 1.1% between 2011 and 2012. After France, at year-end 2012 the country with the most employees was the United States, followed by China, Germany and Belgium.

The breakdown by gender and nationality of managers or equivalent positions (≥ 300 Hay points) is as follows:

Breakdown of managers or equivalent as of December 31,	2012	2011	2010
Total number of managers	**27,639**	**26,836**	**25,998**
Women	23.5%	23.1%	22.7%
Men	76.5%	76.9%	77.3%
French	40.7%	41.1%	41.6%
Other nationalities	59.3%	58.9%	58.4%

(1) The number of employees includes only employees of fully consolidated entities.

In 2012, the Worldwide Human Resources Survey covered 80,003 employees belonging to 145 subsidiaries.

Group included in WHRS	2012	2011	2010
Employees surveyed	**80,003**	**73,654**	**66,644**
% of Group Employees	82%	77%	72%

1.1.2. Employees joining and leaving TOTAL

As of December 31,	2012	2011	2010
Total number hired on open-ended contracts	**9,787**	**9,295**	**8,792**
Women	31.0%	29.4%	30.7%
Men	69.0%	70.6%	69.3%
French	11.8%	12.8%	8.7%
Other nationalities	88.2%	87.2%	91.3%

The number of employees hired on open-ended contracts in 2012 in the consolidated companies increased by 5.3% compared with 2011. The regions in which the largest number of employees on open-ended contracts was hired were Latin America (32%) – Brazil (17.1%) and Mexico (13.6%) – followed by Asia (25.5%) and Europe (24.6%) and the business that hired most was Refining & Chemicals (63.7%).

The consolidated Group companies also hired 3,302 employees on fixed-term contracts. Over 500,000 job applications were received by the subsidiaries covered by the WHRS.

As of December 31,	2012	2011	2010
Departures excluding retirement/transfers/early retirement/ voluntary departures and expiry of short-term contracts	**8,324**	**6,892**	**7,939**
Death	155	119	146
Resignations	4,946	4,332	4,957
Redundancies/negotiated departures[a]	3,006	2,199	2,619
Negotiated departures (France)	217	242	217
Total departures/Total employees	**8.6%**	**7.2%**	**8.5%**

(a) The increase between 2011 and 2012 is principally due to the reduction of employees at SunPower (essentially in the Philippines).

1.1.3. Compensation

TOTAL's approach to overall compensation (salary and employee benefits) is guided by the twin imperatives of external competitiveness, with salaries and social protection schemes positioned relative to local reference markets, and internal fairness. These shared principles are adapted in line with local factors such as labor laws, the economic context and the job market in the various countries where the Group operates.

Most of the subsidiaries that implement annual individual pay reviews attempt to position their compensation at least at the mid-point of the comparative external reference (market average).

General and merit-based increases take place regularly. Group companies may also use tools that reward collective performance (for example, in France, incentives and profit-sharing), together with base salary supplements, such as bonuses or variable portions, to acknowledge individual performance.

The HSE (Health, Safety and Environment) aspect is now also increasingly taken into account when evaluating individual and collective performance. A policy is pursued that recognizes HSE performance by assessing the individual performance of managers (targets and achievements assessed during the annual performance review) and collective team performance. As part of this policy, the three-yearly incentive and profit-sharing agreement for 2012-2014 applying to the oil and petrochemicals[1] industry in France, for the first time includes a component of remuneration that is conditional on reaching an HSE target assessed by the sector of activity.

Moreover, 90% of the employees in the scope of the 2012 WHRS are employed in countries where the law guarantees a minimum wage. In the absence of legislation for the remaining 10%, the Group, at the very least, complies with the local agreements on pay (company agreements or collective conventions) or builds its own structure. The minimum compensation is always set in accordance with the above policy, which is based on external benchmarks, thereby guaranteeing compensation above the locally applicable minimum.

The development of employee shareholding is another cornerstone of the Group's compensation policy. It is used to foster a good understanding of the Company's core values and to create a direct link with company performance. TOTAL thus grants performance shares to a significant number of employees on the basis of the Group's achievement of overall economic goals (see point 5. in Chapter 5).

In July 2012, the Board of Directors approved a performance share plan relating to approximately 10,000 employees. This is the 8th plan implemented by the Group since the granting of free shares to employees has been permitted by French law, and provides a significant rate of renewal with 39% of new beneficiaries.

(1) Including twelve Upstream, Refining & Chemicals and Marketing & Services companies in France.

The Group regularly invites its employees to subscribe to capital increases reserved for employees, the latest of which was launched in 2011, attracting 33,000 subscribers in 103 countries. In September 2012, the Board of Directors decided on a new operation that will be launched in the first half of 2013. In addition to a conventional scheme, this latest offer proposes a scheme that secures the employee's investment with a guaranteed minimum return. The reservation phase took place in January 2013, when almost 25% of employees in the eligible worldwide scope placed reservation orders. The definitive results will be made known after the period of subscription/withdrawal in March.

Moreover, TOTAL places the development of employee savings, wherever possible, and the social protection (health insurance, life insurance) of its employees at the heart of its Human Resources policy. Therefore, a life insurance program paying a minimum of two years' salary has been set up in a large majority of Group companies. In 2012, this proportion reached 89% of the headcount included in the WHRS.

The pension and employee benefit programs in the Group's subsidiaries improve every year. Since 2011, such improvements include the gradual introduction of a supplementary pension scheme in certain subsidiaries of Refining & Chemicals and Marketing & Services, and the benchmarking and introduction of supplementary health and life insurance schemes in eight Asian countries. Additional improvements were made in 2012 in other countries, in line with the Group standard of life insurance amounting to two years of minimum compensation if an employee dies, irrespective of the cause.

For more detailed information, see points 5. and 6. of Chapter 5 of this Registration Document.

1.2. Organization of work time

The average work week is determined by applicable local law. It is less than forty hours in most of the subsidiaries in Europe and Japan, and forty hours in most of the Asian and African countries. It is longer in the United States and India.

The sickness absenteeism rate is one of the indicators monitored in the WHRS:

	WHRS 2012	WHRS 2011	WHRS 2010
Sickness absenteeism rate	2.6%	2.7%	2.8%

Depending on current local law, there are several programs that aim to create a better balance between work and private life and/or to encourage equal career opportunities. A project was launched in France in 2012 to test teleworking in certain Group companies.

	WHRS 2012	WHRS 2011	WHRS 2010
% of companies offering the option of working part-time[(a)]	69%	63%	70%
% of employees working part-time of those given the option	5%	5%	5%
% of companies offering the option of teleworking	19%	15%	NA
% of employees involved in teleworking of those given the option	2%	3%	NA

(a) The reduction in this percentage in 2010 and that of 2011is explained by the differences in the scope of the WHRS.

1.3. Dialog with employees

TOTAL's employees and their representatives have a privileged position and role among the numerous stakeholders with which the Group has and intends to develop regular dialogue (see also paragraph 3.1. of this Chapter). In France, thirty-two agreements were signed with employee representatives in 2012, covering in particular retirement conditions, compensation systems, geographical relocations and teleworking. In countries where employee representation is not required by law, TOTAL strives to set up such representation (for example in Myanmar and Nigeria).

There are therefore employee representatives in the majority of Group companies, most of whom are elected. The subjects covered by dialogue with employees vary from company to company, but there are common major themes such as work time, health and safety, compensation, training and equal opportunity.

The internal reorganization of the Group in 2012, which saw the creation of the Refining & Chemicals and Marketing & Services sectors, was successfully completed without any redundancies.

	WHRS 2012	WHRS 2011	WHRS 2010
Percentage of companies with employee representation[(a)]	79.9%	77.4%	86.2%
Percentage of employees covered by collective agreements	67.7%	70.3%	73.4%

(a) The reduction in this percentage in 2010 and that of 2011 is explained by the differences in the scope of the WHRS.

TOTAL continues to develop dialog with employees on a European scale through negotiations with European trade union federations.

Several agreements have been signed, including the convention on labor relations and equal opportunities that aims to set up a common social platform applicable to all the Group's European entities. Negotiations on contingency - life insurance and safety are scheduled in 2013.

A single European Work Committee representing the personnel has been set up at the Group-wide level in order to inform employees and hold discussions on the Group's strategy, its social, economic and financial situation, as well as questions of Sustainable Development, CSR and safety on a European scale.

In addition, every other year TOTAL carries out an internal survey amongst all its employees to gather their views and expectations with regard to their work situation and perception of the Company, locally and as a Group.

1.4. Training

The Group has four priority goals in the field of training:

- sharing TOTAL's Corporate values, in particular with respect to ethics and health, safety and the environment;
- increasing key skills in all our business areas and maintaining a high level of operating performance;
- promoting employees' integration and career development through induction, management and personal development training;
- supporting the policy of diversity and mobility within the Group through language and intercultural training.

The Group's efforts in the field of training continued in 2012 (87% of employees followed at least one training course) with, within the scope of the WHRS, 428,000 days of training, for a total training budget of about €276 million (mentoring represents approximately 22%). Priorities for technical training or training that meets the specific needs of the activities are implemented by the operational business divisions in order to better meet the needs of the personnel.

In 2012, particularly close attention was paid to Health Safety and Environment training, with the arrival of new programs designed to reinforce the HSE culture amongst managers and executives.

Average number of days' training/year per employee (including mentoring, excluding e-learning)	WHRS 2012	WHRS 2011	WHRS 2010
Group average	**5.5**	**5.8**	**6.6**
By sector			
Upstream	8.9	9.5	11.5
Exploration & Production	9.2	9.8	12.5
Gas & Power	5.1	5.3	4.2
Refining & Chemicals	4.9	5.0	5.4
Refining & Chemicals	4.9	5.0	5.5
Trading & Shipping	1.9	2.1	2.1
Marketing & Services	4.2	4.4	4.4
Marketing & Services	4.7	4.4	4.4
New Energies	2.0	6.2	5.6
Corporate	2.9	2.4	2.5
By region			
Africa	9.2	8.3	8.8
North America	8.3	7.9	11.2
Latin America	4.1	6.2	5.3
Asia-Pacific	6.0	9.4	13.2
Europe	4.6	4.5	4.7
Middle East	11.6	13.9	35.3
Oceania	3.4	1.5	N/A
French Overseas Departments and Territories	2.4	1.5	N/A
Breakdown by type of training given (including mentoring, excluding e-learning)			
Technical	42%	42%	47%
Safety	27%	29%	27%
Language	11%	8%	8%
Other[a]	20%	21%	18%

(a) Other: management, personal development, intercultural.

1.5. Equal opportunity

TOTAL strives to offer equal opportunities to all its employees throughout their professional careers. An action plan was launched in 2004 to ensure that not only recruiters and career managers, but also business unit managers comply with the principle of equal opportunities.

Since 2004, the Group's Diversity Council, chaired by a member of the Executive Committee, has been overseeing activities with a view to increasing the number of women employees, international employees and local employees up to the highest levels of management. Promoting diversity goes hand-in-hand with combating all forms of discrimination within the Group, whether in relation to openness to different social background, equal opportunities for men and women or the hiring and retaining of employees with disabilities.

1.5.1. Equal treatment for men and women

In addition to the various collective agreements embodying its commitment to equal treatment of men and women, TOTAL signed in 2010 the Women's Empowerment Principles - Equality Means Business (unglobalcompact.org), set out by the United Nations Global Compact.

The Group intends to continue to foster gender diversity in all the Group's professions and to enable women to gain access to all levels of responsibility on equal terms with their male counterparts. In this regard, the Diversity Council monitors the following indicators:

% of women	2012	2011	2010
In recruitment on open-ended contracts	32%	29%	31%
Employees in management recruitment/JL [(1)] ≥10	27%	28%	27%
Employees	30%	30%	29%
Employees in management/JL [(1)] ≥10	24%	23%	23%
Employees in senior management	16%	15%	13%

TOTAL also participates in the BoardWomen Partners program, which aims to significantly increase the proportion of women in the boardrooms of large companies throughout Europe. Following the 2012 Shareholders' Meeting, 33% of TOTAL's Board of Directors were women, compared with 26% before the meeting. Refer to paragraph 1.1. in Chapter 5 for more details.

The Group also shows its commitment through agreements or provisions relating to access to employment, maternity and paternity leave, childcare facilities, working conditions, balancing work and family responsibilities, and managing dual careers.

1.5.2. Internationalization of management

With employees representing over 130 nationalities, TOTAL enjoys great cultural diversity, and it is important that this be reflected at all levels of the Company and across all business segments.

The Group's companies recruit for a highly varied portfolio of business segments, usually with a large technical component, and strive to prioritize local recruitment.

In 2012, 72% of managers recruited were non-French, representing almost seventy-four nationalities. Several measures have been put in place so that the internationalization of management reflects this diversity, including harmonizing Human Resources practice (for example with regard to hiring and annual appraisals), increasing numbers of foreign postings for non-French employees, and decentralizing training.

% of non-French	2012	2011	2010
In recruitment on open-ended contracts	88%	87%	91%
Employees in management recruitment/JL [(1)] ≥10	71%	75%	74%
Employees	64%	64%	63%
Employees in management/JL [(1)] ≥10	59%	59%	58%
Employees in senior management	25%	23%	23%

1.5.3. Measures promoting the employment and integration of people with disabilities

For over twenty years, TOTAL has set out its disability policy through successive agreements signed with employee representatives in France to promote the employment of workers with disabilities.

While promoting the direct recruitment of disabled people and cooperation with the sheltered employment sector, TOTAL also takes various types of action:

– in-house: leaflets, awareness sessions organized for senior and Human Resources managers, etc.

– externally: cooperation with recruitment agencies, information and advertising aimed at students, attendance at specialized recruitment forums, etc.

The Group also supports the integration, professional training and retaining of workers with disabilities.

Two three-year framework agreements (2010-2011-2012) with the French representative unions, set out TOTAL's policy in France with regard to integrating people with disabilities into the work world. The renewal of these agreements will be negotiated in the first half of 2013.

1.5.4. Measures promoting non-discrimination and diversity

In addition to basing its recruitment policy on the principle of non-discrimination on the grounds of ethnicity, TOTAL is involved in a number of initiatives to promote diversity. In France, the Group is in particular a partner in the action taken by IMS-Entreprendre pour la Cité (Institut Mécénat-Solidarité), with a view to facilitating the integration of young graduates into the workplace.

The TOTAL Foundation also works alongside several associations that help young graduates from disadvantaged backgrounds to find jobs or support them in further education.

(1) JL: The level of the job position according to the Hay method. The Hay method is a unique reference framework used to classify and assess jobs. JL10 corresponds to junior managers.

2. Safety, health and environment information

TOTAL's safety, health and environment policy is based on the charter below, which was adopted in 2000 and updated in 2009. This charter represents the common framework of the Group's HSE and Quality management systems. Group directives define the minimum requirements expected in the different HSE areas and are implemented in the business segments, which subsequently factor in the specific characteristics of their operations. Recommendations, guides and manuals are regularly published and made available to the different business segments. They provide invaluable guidance and support for implementing and managing the Group's policies.

Safety Health Environment Quality Charter

Total has based its policy in matters pertaining to health, safety, the environment and quality on the following 10 principles:

Article 1

Total considers personal health and safety, operational safety, respect for the environment, customer satisfaction and listening to stakeholders as paramount priorities.

Article 2

Total strives to comply with applicable laws and regulations wherever it conducts its business and supplements them, when appropriate, with its own specific requirements.

Article 3

Total promotes among its employees a shared culture the core components of which are skills management, incident feedback, information and dialogue. This process is driven by the leadership and exemplary conduct of management.

Article 4

Total favors the selection of its industrial and business partners on the basis of their ability to comply with its health, safety, environment and quality policy.

Article 5

Total implements, for all its operations, appropriate management policies regarding health, safety, environment and quality risks which are regularly assessed. No project development or product launch may be undertaken without a risk assessment covering the entire life of the project or product.

Article 6

Appropriate health, safety, environment and quality management systems for each line of business undergo regular assessment involving measuring the performance, setting milestones, formulating relevant action plans and instituting suitable control procedures.

Article 7

In order to respond effectively in the event of accidents, Total equips itself appropriately and establishes emergency procedures that are periodically reviewed and regularly tested during exercises.

Article 8

All employees, at all levels, must be aware of their role and personal responsibility in performing their duties, giving due consideration to the prevention of risks of accidents, harm to health, environmental damage or adverse impacts on product and service quality. Vigilance and professionalism in these fields are important criteria in evaluating the performance of each member of personnel, in particular for those in positions of responsibility.

Article 9

In matters of health, safety, environment and quality, Total adopts a constructive attitude based on open dialogue with stakeholders and outside parties. Through its social commitment, it focuses on developing its business in harmony with the neighboring communities.

Article 10

Total monitors and controls the Group's energy consumption, greenhouse gas emissions, production of ultimate waste and impact on biodiversity. The Group develops new processes, products and customer services in order to enhance energy efficiency and reduce environmental footprints. The Group is engaged in research and development for additional energy resources. Total thus actively contributes to Sustainable Development.

The Industrial Safety, Sustainable Development and Environment departments, together with the Security department, report to Corporate Affairs and provide support to the segments and ensure that they implement policies that reflect the principles of the charter in a concrete, effective manner.

In accordance with oil and gas industry best practices (set out in the IPIECA reporting guidance), the following information relates to the activities, sites and industrial assets that TOTAL operates or for which it has been given contractual responsibility for managing operations, directly or through one of its subsidiaries. This is with the exception of information about greenhouse gases, which is also expressed as a Group share of all assets in which TOTAL has a stake. The data presented in this section are provided on a current basis. For instance, data relating to SunPower, in which the Group holds a 66% interest, were taken into account from 2012.

2.1. Occupational health and safety

TOTAL's occupational health and safety requirements for the personnel working on its sites are set out in Health, Safety and Industrial hygiene directives.

Indicators are used to measure the main results in these areas, and monthly reporting of occupational incidents (LTIR: Lost Time Incident Rate; TRIR: Total Recordable Incident Rate) is used to monitor performance at both the global and site level. The Group does not differentiate between the safety of its employees and that of external contractors. The indicators below include incidents and hours worked by Group Employees and contractors working on its sites.

	2012	2011	2010
LTIR: number of lost time incidents per million hours worked	1.0	1.3	1.6
TRIR: number of recorded incidents per million hours worked	1.8	2.2	2.6
SIR: average number of days lost per lost time incident	27.2	23.9	23.5

The incident severity rate in 2012 has risen from the previous year, but it still lies within the variation range seen over the last six years. This negative trend is mostly apparent in the Upstream and Marketing & Services segments. The impact on the incident severity rate arising from the increase in Upstream business and security events, especially in Marketing & Services, is being closely monitored.

In 2012, the Group experienced fourteen occupational fatalities. The number of fatalities per million hours worked (Fatality Incident Rate) calculated over a three-year rolling basis shows a downward trend: 0.034 in 2010, 0.030 in 2011, and 0.025 in 2012.

Since 2010, the basic rules to be scrupulously followed by all personnel, employees and contractors alike, in all of the Group's lines of business worldwide, have been set out in a safety document entitled "Twelve golden rules of occupational safety". The Group's internal statistics show that in over 90% of severe or high potential severity incidents in the workplace at least one of the golden rules had not been followed. The roll-out of the golden rules was accompanied by an awareness campaign in 2011 and 2012 to ensure that all employees know and understand the rules. Regular site visits, presentations and seminars are organized with the employee representatives on the European Works Council to promote the golden rules and, more generally, raise awareness on occupational safety issues.

The Group's safety culture approach provides a strong incentive to report all anomalies and near misses, which are considered to be important for the correct performance of the continuous improvement loop and an excellent means of measuring the safety culture level within the business units. An investigation is generally launched in response to any type of safety incident whatsoever. The method and depth of investigation depend on the actual or potential severity level. For example, a near miss with a potentially high severity level is treated in the same way as a serious incident: it is considered to be a key driving force for progress and, depending on its relevance to the other business units within the Group or business segment, triggers a safety alert and even the dissemination of a feedback report.

The Group's directives are equally demanding with regard to employee health. In particular, the Group's companies are expected to prepare a formal occupational risk assessment (chemical, physical, biological, ergonomic or psychosocial), create a risk management action plan and ensure medical monitoring of staff in line with the risks to which they are exposed. Two main indicators are monitored yearly:

	2012	2011	2010
Percentage of companies included in WHRS offering employees regular medical monitoring	98%	96%	98%
Number of occupational illnesses recorded in the year (in accordance with local regulations) per million hours worked	0.86	0.87	0.75

The main occupational illnesses identified at TOTAL are as follows:

- Musculoskeletal disorders, which are the main cause of occupational illness in over half of all recorded illnesses.
- Pathologies related to exposure to asbestos (almost solely in France due to the specific nature of legislation in this regard).

In a bid to support the Group's policy on preventing occupational illnesses and complement the periodic medical surveillance scheme currently in place, TOTAL recently set up an employee health forum. The forum is responsible for keeping track of any medical conditions potentially affecting employees and, if applicable, suggesting and overseeing the appropriate preventive actions. By late 2012, thirteen of the Group's sites in Europe had signed up for the forum. The forum monitors approximately 10% of the Group's employees.

At the same time, eight French sites give their employees a questionnaire to complete when they have periodic medical check-ups, which are used to measure the impact of the reaction to the stress factors to which they may be exposed.

On a broader level, TOTAL is associated with promoting individual and collective health in the countries where it operates (including flu vaccination campaigns, and prevention and screening programs for certain diseases, such as AIDS, cancer and malaria, for employees, their families and local communities). Awareness campaigns relating to lifestyle risks in particular have also been in place for several years (including anti-smoking and anti-drinking campaigns, musculoskeletal disorder prevention programs, etc.).

2.2. Environmental protection

2.2.1. General policy

The main Group entities have Health, Safety and Environment (HSE) departments or units that ensure compliance with both relevant local regulations and internal requirements. In all, over 870 full-time equivalent positions dedicated to environmental matters were identified within the Group in 2012.

The Group steering bodies, led by the Sustainable Development and Environment Department, have a threefold task:

- Monitoring TOTAL's environmental performances, which are reviewed annually by the Management Committee and presented before the Executive Committee, for which multi-annual improvement targets are set.
- In conjunction with the business segments, handling the various environment-related areas under their responsibility.
- Promoting the internal standards to be applied by the Group's business units as set out in the charter.

With some targets expiring in 2012, new targets have been set until 2017.

In-house, TOTAL also promotes compliance of its environmental management systems with ISO 14001. In 2012, 305 sites operated by the Group (compared with 284 in 2011) were ISO 14001-certified, out of a total of 867 operated sites (compared with 860 in 2011). Sixty-two of those sites are the most significant contributors to the emissions of their respective segments; for TOTAL, these sixty-two sites account for approximately 90% of the Group's emissions of greenhouse gases, nitrous oxide, sulfur oxide, and freshwater withdrawal. Of the sixty-two sites, fifty-eight had an ISO 14001-certified management system as of the end of 2012. Two sites recently entered into production, and their certification is scheduled for 2013 in accordance with internal rules and regulations (certification within two years of start-up). The old Flanders refinery site has decided not to renew its certification, since it is changing activity as an oil storage depot. The Obagi site (onshore, Nigeria) was unable to undergo certification, since flooding in the Niger Delta in the fall of 2012 caused the certification audit to be postponed until 2013. Apart from these two exceptions, TOTAL has therefore reached its objective of achieving ISO 14001 certification for all of its main contributing sites. The new goal for 2017 is to achieve certification for all sites producing over 10 kt of CO_2 eq emissions a year. The policy of allowing new or recently acquired sites two years to achieve certification will continue to apply.

The environmental risks and impacts of any planned investment, disposal or acquisition subject to Executive Committee approval are assessed and reviewed before the final decision is made (refer to point 1.10. of Chapter 5).

TOTAL ensures that all employees are aware of its environmental protection requirements. Employees are given training in the required skills. TOTAL also raises employee awareness through internal campaigns (in-house magazines, intranet, posters, etc.) and provides annual information about the Group's environmental performance through circulation of the CSR report.

Two three-day training courses on all aspects of HSE are also made available to the business units. "HSE Implementation" sessions are aimed at employees whose job is specifically to handle one or more HSE areas within a business unit. "HSE for Managers" is aimed at senior managers who are currently or will in the future be responsible for a Group business unit. An "HSE for Executives" course focusing on management styles was organized in 2012 for Group executives.

2.2.2. Environmental footprint

TOTAL implements an active policy of monitoring, managing and reducing the environmental footprint of its operations. As part of this policy, emissions are identified and quantified by environment (water, air and soil), so that the appropriate measures for their control can be implemented.

Water, air

The Group's operations generate chronic emissions, such as fumes at combustion plants, emissions into the atmosphere from the various conversion processes and discharges in wastewater. In addition to complying with applicable legislation, the Group's companies actively pursue a policy aimed at reducing the amount of emissions. Sites use various treatment systems that include different types of measures:

- Organizational measures (for example, controlling peaks in SO_2 emissions in accordance with weather forecast data, managing combustion processes, etc.).
- Technical measures (such as building wastewater treatment plants).

These measures can be preventive to avoid generating pollutants (such as low-NOx burners for combustion plants) or curative (such as biological treatment of process water to reduce the hydrocarbon content of the final effluent).

To ensure the quality of its wastewater discharge, TOTAL has set a target of complying with the hydrocarbon concentration requirements (less than 30 mg/l) set out in the OSPAR standard, which is only mandatory in the North Sea, for all of its offshore exploration and production operations. For the fourth consecutive applicable year, the Group achieved this goal on yearly average in 2012.

The table below shows changes in chronic emissions into the atmosphere and discharged water quality:

	2012	2011	2010
SO_2 emissions (thousands of metric tons)	79	91	99
NOx emissions (thousands of metric tons)	88	84	87
Hydrocarbons in discharged water (metric tons, excluding exploration and production, and specialty chemicals)	51	50	74
Hydrocarbon concentration in water discharged by exploration and production (mg/l)	23	20	22
Chemical oxygen demand (COD) in water discharged by specialty chemicals (metric tons)	275	320	771

The decrease in SO_2 emissions is mainly driven by improved operational performance in the refineries, lower business levels at the Lacq platform and the sulfur rate decrease of the field operated by the Group in Abu Dhabi. The rise in NOx emissions is primarily due to the increase in Exploration & Production logistics activities for drilling and production operations and cannot be offset by the improvements to operational performance in refining and chemicals facilities. The higher concentration of hydrocarbons in aqueous effluents from exploration and production is mainly due to increased concentrations offshore.

In early 2013, the Group set the following targets:

- a decrease of hydrocarbon spills by 40% in coastal and onshore waters between 2011 and 2017;
- a decrease of SO_2 emissions by 20% between 2010 and 2017.

Soil

The risks of soil pollution related to TOTAL's operations come mainly from accidental spills (refer to paragraph 2.2.3. of this Chapter) and waste storage (see below). The Group's approach to preventing and controlling these types of pollution is based on four cornerstones:

- leak prevention, by implementing industry best practices in engineering and operations;
- maintenance at appropriate intervals to minimize the risk of leaks;
- overall monitoring of the environment to identify any increase in soil pollution; and
- controlling pollution from previous activities by means of containment or reduction operations.

Decommissioned Group facilities (chemical plants, service stations, mud pits or lagoons resulting from hydrocarbon extraction operations, wasteland on the site of decommissioned refinery units, etc.) scar the landscape and may, despite all of the precautions taken, be sources of chronic or accidental pollution. TOTAL remediates sites when it leaves in order to allow new operations to be set up once the future use of the land has been determined in agreement with the authorities. This continuous task is performed by various teams within the Group, some of which form subsidiaries, and has been governed by a "Polluted soil and site reclamation" policy since 2012.

Waste

The Group's companies are focused on controlling the waste produced at every stage in their operations. This commitment is based on the following four principles, listed in decreasing order of priority:

1. reducing waste at source, by designing products and processes that generate as little waste as possible, as well as minimizing the quantity of waste produced by the Group's operations;
2. reusing products for a similar purpose in order to prevent them from becoming waste;
3. recycling residual waste; and
4. recovering energy, wherever possible, from non-recycled products.

To this end, TOTAL has entered into a variety of partnerships:

- With Veolia, the Group is involved in the Osilub project, which culminated in the construction of a used motor oil recycling plant in Le Havre, France. The plant, of which TOTAL holds a 35% share, entered production in 2012 and boasts a processing capacity of 120,000 metric tons per year (50% of all the used motor oil collected in France); the recycled oil is used to make Vacuum Gas Oil (VGO) for refinery production of lubricants and fuels.
- In 2011, Total Energy Ventures (Group's vehicle for investing in new energy and environmental protection technologies) acquired a stake in Agilyx, an American start-up that has developed an innovative process to convert waste plastic into crude oil, for which it already has a unit in production.

Waste management, which was set out in a Group directive in 2012, is carried out at the production sites in four basic stages:

- waste identification (technical and regulatory);
- waste storage (soil protection and discharge management);
- waste traceability, from production through to disposal (notes, logs, statements, etc.); and
- waste processing, with technical and regulatory knowledge of the relevant channels, under site responsibility.

TOTAL is especially committed to managing and treating waste classified as hazardous:

	2012	2011	2010
Volume of hazardous waste treated outside the Group (kt)	237	217	263

Since 2012, TOTAL has also been monitoring the different waste treatment technologies used for the following categories:

Recycling	28%
Waste-to-energy recovery	8%
Incineration	10%
Landfill	17%

Environmental nuisance

TOTAL's operations may cause environmental nuisances for residents near its industrial sites. These may be noise and odors, but can also be vibrations and road, sea or river traffic.

Most sites have a system for receiving and handling residents' complaints, the aim being to take account of and gain a clearer insight into the different types of nuisance, and reduce and offset such nuisance as far as possible. Monitoring systems can also be put in place, such as sound level measurements at the site perimeter, or networks of sensors to determine the origin and intensity of odors.

2.2.3. Incident risk

In addition to setting up management structures and systems, TOTAL strives to minimize the industrial risks and the environmental impacts associated with its operations by:

- performing rigorous inspections and audits;
- training staff and raising the awareness of all parties involved; and
- implementing an active investment policy;

In particular, TOTAL strives to prevent accidental spills. A common technological risk management approach has been developed to formalize this requirement at the Group's industrial sites. The methodology is gradually being implemented in all operated businesses exposed to technological risks and sets out a risk analysis based on incident scenarios for which the severity of the consequences and the probability of occurrence are assessed.

These parameters are used to create a decision matrix that identifies the required level of mitigation.

Specifically with regard to shipping, the Group has an internal policy setting out the rules for selecting vessels. These rules are based on the recommendations of the Oil Company International Marine Forum (OCIMF), an industry association made up of the main global oil companies that promotes best practices in oil shipping, and on its Ship Inspection Report (SIRE) Program. TOTAL does not charter any single-hulled vessels for shipping its hydrocarbons.

In accordance with industry best practices, TOTAL particularly monitors accidental liquid hydrocarbon spills of a volume of more than one barrel (159 liters). Spills that exceed a certain severity threshold (whether in terms of volume spilt, toxicity of the product in question or sensitivity of the natural environment affected) are reviewed on a monthly basis and annual statistics are sent to the Group's Management Committee. All accidental spills are followed by a corrective action aimed at returning the environment to its original state as quickly as possible.

The table below shows the number and volume of accidental hydrocarbon spills with an environmental impact and that are greater than one barrel in volume:

	2012	2011
Number of hydrocarbon spills with an environmental impact	219	263
Total volume of hydrocarbon spills with an environmental impact (thousands of m^3)	2.0	1.8

Note: Soil on sites is deemed to form part of the natural environment unless sealed. 2010 values are not given because they are not comparable due to a change in methodology.

The spills volumes increased by 11%. This rise is mainly due to the Elgin incident (see below) partly compensated by a drop of 28% in less significant spills.

While risk prevention is emphasized, TOTAL regularly addresses the issue of crisis management on the basis of risk scenarios identified through analyses.

In particular, the Group has emergency plans and procedures in place in the event of a hydrocarbon leak or spill. These plans and procedures are specific to each subsidiary in line with its structure, activities and environment, while complying with Group recommendations, and are regularly reviewed and tested during exercises. In 2012, the Group's requirements for preparing emergency plans and the associated exercises were set out in a Group directive.

Since 2012, the Group has been using the following indicators to measure its readiness for the fight against pollution:

	2012
Number of sites whose risk analysis identified at least one scenario of major accidental pollution to surface water	171
Proportion of those sites with an operational anti-pollution plan	94%
Proportion of those sites having performed at least one anti-pollution exercice during the year	88%

Also available to TOTAL's subsidiaries, the PARAPOL (Plan to Mobilize Resources Against Pollution) alert scheme is used to facilitate crisis management at Group level. Its main aim is to mobilize the internal and external human and physical resources necessary to respond in the event of pollution of marine, coastal or inland waters, without geographical restriction, at any time, at the request of any site.

TOTAL and its subsidiaries have assistance agreements with the main bodies specializing in oil spill management, such as Oil Spill Response Limited, CEDRE and Clean Caribbean & Americas. Their role is to provide expertise, resources and equipment in all of the regions where TOTAL has operations.

Following the blowout of the Macondo well in the Gulf of Mexico in 2010 (in which the Group was not involved), TOTAL created three task forces in order to analyze risks and issue recommendations. The task forces finalized most of their work in 2012, and the Group has continued deploying solutions to minimize such risks.

In 2012, the work carried out as part of the Subsea Well Response Project (SWRP), a consortium of nine oil companies including TOTAL, paved the way for the construction of several capping systems designed to prevent hydrocarbon spills in the underwater environment. The capping systems will be positioned in various parts of the world, representing a solution that can be launched into action in case of a deepwater drilling pollution incident.

Additionally, the work carried out as part of TOTAL's Subsea Emergency Response System (SERS) has also enabled to launch the construction of capping equipment to respond to an event on a production well. These capping systems will be positioned in the Gulf of Guinea where TOTAL is strongly present in subsea production.

The Group experienced two major incidents in 2012: Elgin and Ibewa.

Elgin (North Sea, United Kingdom)

During operations on the G4 well on March 25, 2012, an uncontrolled surface gas leak occurred at the Elgin wellhead platform in the North Sea, approximately 240 km east of Aberdeen. TOTAL immediately launched its emergency plan, mobilized crisis management teams in Aberdeen and Paris, and shut down production at the Elgin, Franklin and West Franklin fields. The 238 site employees were safely evacuated to the Scottish coast, and no injuries were reported.

Once the gas flare had been extinguished in late March, well inspections were organized in close liaison with the British authorities, with personal safety representing the top priority. The leak was finally plugged on May 15, 2012, by pumping mud into the well.

Major resources were mobilized throughout the leak to keep a close eye on and minimize the environmental impact:

- aerial surveillance two to three times a day with a Dornier 228 aircraft from OSRL (Oil Spill Response Limited);
- OSRL aerial dispersant capabilities mobilized and on standby (but ultimately not required);
- aerial resources for measuring the flow rate (in cooperation with the National Center for Atmospheric Science);
- surface vessels for surveillance operations and preparing anti-pollution measures;
- satellite imagery for monitoring sheen;
- use of a drilling vessel and apparatus to plug the well by pumping in mud;
- additional mobilization of two drilling devices, and operations launched to drill a relief well;
- two vessels for underwater surveillance using an ROV (underwater remote operated vehicle) and seabed reconnaissance for positioning the relief well; and
- several logistics and fire-fighting vessels.

The leak was a mixture of natural gas (mainly methane) and condensate, which formed a surface sheen that naturally dispersed or evaporated in just a few days, thereby minimizing any effect on the environment. Evaluations put the initial flow rate at 2 kg/s (200,000 m^3/day), which fell over time to approximately one quarter of the initial rate. According to final estimates, the leak released around 3 kt of gas and roughly the same amount of condensate, the vast majority of which evaporated before falling back to the sea, leaving an estimated quantity of slightly less than 700 m^3 on the surface of the sea. The greenhouse gases released by the actual leak were estimated at approximately 80 kt of CO_2eq.

Throughout the leak, both the Group and the British authorities analyzed samples to check for any impact on the different environments (atmosphere, water surface, water column and seabed). The leak was found to have no serious or moderate effect on the marine environment, fish or air quality.

The Group and the local subsidiary delivered a constant and transparent stream of communication, with regular press releases, a dedicated website and presence on the social networks.

On March 9, 2013, following the approval of the safety case by the UK Health and Safety Executive (HSE), the production of the Elgin/Franklin area has progressively resumed.

Ibewa (Nigeria)

On March 20, 2012, a drilling incident occurred at the Ibewa gas field (the Obite site on the OML58 license) in Nigeria's Rivers State, where an operational onshore gas well (IBW16) was affected while drilling a new well (OB127b).

No injuries were reported. Production at the Obite gas plant was put on hold and the well closed down. Following the incident, water and natural gas resurgences occurred on April 3, 2012, in an uninhabited wooded area outside the operations site. The resurgences showed that the gas was flowing underground before re-emerging at the surface.

On March 20, TOTAL's teams immediately sprang into action to neutralize any risks for the populations, minimize the environmental impact and deliver the best-fit solutions. A security perimeter was established. Drinking water and air quality inside and outside the site were checked every day. For the few points where hydrocarbons were detected, their concentration was revealed to be less than the exposure thresholds, except for one well that was closed on May 19, 2012.

TOTAL deployed considerable resources to plug the leak and keep a close eye on the environmental and health consequences:

- equipment was installed to recover the gas at the surface and therefore prevent it from flowing underground;
- drilling equipment was dispatched to the site in readiness of drilling two relief wells;
- well intervention equipment was flown in by jumbo jet from Europe and the United States;
- daily ground and helicopter-based aerial surveillance was carried out by the teams of Total E&P Nigeria Ltd;
- observation wells were drilled to a depth of 20 meters (piezometric wells) to check for changes in the surface water (groundwater) around the affected area.

On May 13, 2012, once snubbing had been performed (a process whereby mud is pumped into the well through small diameter rods), the operations teams regained control of the IBW 16 well and stemmed the underground gas flow.

Throughout the incident, Total E&P Nigeria Ltd remained in constant contact with the local communities and authorities.

2.2.4. Sustainable use of resources

Water

The distribution of the freshwater available worldwide varies greatly in space and time. The issue of water consumption therefore requires different responses depending on the regional and technical context.

In order to establish which of its facilities are affected by this issue as a priority, TOTAL both:

- Identifies water withdrawals and discharges across all of its sites.
- Identifies sites located in "water stress" areas (watersheds that will have less than 1,700 m^3 of renewable freshwater available per person and per year by 2025, according to the Falkenmark indicator), using the Global Water Tool for Oil & Gas, developed jointly by the World Business Council for Sustainable Development and IPIECA.

	2012	2011	2010
Freshwater withdrawals excluding cooling water (million m^3)	143	142	147
Percentage of Group sites, excluding Marketing, located in water stress areas	49%	44%	N/A

The increase in the proportion of sites located in water-stressed areas is due to a change in methodology: sites that were located in an area that was not correctly mapped have been repositioned against the nearest mapped area.

The "Optimizing water consumption on industrial sites" guide sets out best practices for saving and recycling water at all Group sites. The guide has been widely distributed throughout the Group since 2007.

In Exploration & Production, reinjecting water extracted at the same time as the hydrocarbons (production water) back into the original reservoir is one of the methods used to maintain reservoir pressure. The technical specifications in force in the Group stipulate that this option must be given priority over other production water treatment technologies.

At refineries and petrochemical sites, water is mainly used to produce steam and cooling units. Increasing recycling and replacing water by air for cooling are TOTAL's preferred approaches to reducing freshwater withdrawals.

Raw materials

Hydrocarbons, an energetic material, are the Group's main raw material. Optimum use of hydrocarbons therefore lies in what is known as "energy efficiency", as described below.

Since 2011, TOTAL has measured the raw material loss rate for each line of business. This is the percentage of converted raw materials that are neither delivered to any of the business line's customers nor used for energy purposes.

Raw material loss rate	2012	2011
Hydrocarbon production line of business	2.8%	2.5%
Refining line of business	0.5%	0.6%

The increase in the raw material loss rate during hydrocarbon production is mainly due to the increase in flaring of associated gas (see Climate change section). The decrease of the loss rate in the refineries is concentrated in two sites, Donges and Port-Arthur refineries, following the implementation of an action plan to reduce losses in the latter site.

Energy efficiency

Streamlining energy use is one of the Group's performance targets. Internal documents (roadmaps and guides) describe the challenges, set out methodologies and action plans, and include quantified goals to reduce consumption. A Group directive was published in early 2013 that defines the procedure for sites using in excess of 50,000 toe/year of primary energy.

In early 2013, the Group decided to improve energy efficiency by 1.5% per year between 2012 and 2017.

	2012	2011	2010
Net primary energy consumption (TWh)	159	158	157

Early 2011, the Group's internal structure relating to "Climate and Energy" was changed:

- A decision-making body was created in the form of the CO_2/Energy Efficiency Management Committee. Its role is to define the guidelines and targets on greenhouse gas emissions and energy performance. It is based on a permanent energy efficiency task force and, where applicable, temporary Group-wide task forces.
- Energy Network days and the Energy seminar provide opportunities for internal discussion, reflection and information-sharing.

In France, Energy Efficiency Certificates are awarded by the Energy and Climate Administration in recognition of energy-saving activities. TOTAL is encouraging its customers to reduce their energy consumption by 40 TWh (over the entire service life of the product) in the 2011-2013 period.

Through the "Total Ecosolutions" program, the Group is also developing innovative products and services that perform above market average environmental performance, such as by curbing energy use while providing the same level of service. At year-end 2012, 36 products and services bore the "Total Ecosolutions"label. The new Fuel Eco motor oil for light vehicles, which increases fuel efficiency by 3.3% on average, received the "Total Ecosolutions"label in 2012.

In early 2013, the Group set the following target: to have fifty "Total Ecosolutions" labeled products and services by year-end 2015.

Use of renewable energies

As part of its strategy, TOTAL has long been committed to developing renewable energies. A detailed description of the initiatives that the Group has spearheaded in the field of new energy sources is provided in point 4.2. of Chapter 2.

The main avenue that the Group has been exploring to develop renewable energies is solar energy. With costs plummeting in the industry, solar energy should become a serious contender over the next few years for producing electricity, and grid parity has already been achieved in some markets, such as in California. The Group is therefore pursuing its efforts to further R&D and drive down production costs.

TOTAL is also exploring a number of avenues for developing biomass depending on the resource used, markets targeted (fuels, lubricants, petrochemicals, specialty chemicals, etc.) and the conversion processes. The Group has chosen to target two of the primary biomass conversion processes: biotechnological and thermochemical.

TOTAL only uses minimal quantities of renewable energies to power its production sites. However, the Group uses biomass to heat tertiary buildings, such as the one opened in 2011 by TIGF in Cugnaux, France, and has installed solar photovoltaic panels on several of its buildings (CSTJF in Pau, Lacq, Provence refinery, etc.) and certain isolated wellheads, as well as a number of service station canopies in Europe and Africa.

2.2.5. Climate change

Greenhouse gas emissions

TOTAL has made reducing greenhouse gas emissions one of its priorities. Quantified targets have been defined in an attempt to reduce flaring, curb emissions and raise the energy efficiency bar. These targets are annually published and tracked. Taken together, the measures on this front should enable the Group to reduce the greenhouse gas emissions generated by its operations by 15% from 2008 to 2015.

	2012	2011	2010
Daily volumes of gas flared (million m^3 per day)	10.8	10.0	14.5
Operated direct greenhouse gas emissions (Mt CO_2 equivalent, 100% of emissions from sites operated by the Group)	47	46	52
Group share of direct greenhouse gas emissions (Mt CO_2 equivalent, from sites in which TOTAL has a stake)	55	53	59

The rise in direct greenhouse gas emissions can mainly be attributed to the increase in the flaring of associated gas. This increase is a combination of the major quantities of gas flared at the Usan FPSO (Nigeria), which has lasted longer than initially expected, but which is partially offset by a decrease of production in Yemen. The increase in the Group share of emissions on a financial equity basis can mainly be explained by the contribution of TOTAL's 15.34% stake in Novatek. The Group's objective is to halve the flaring of gas associated with production between 2005 (15 million cubic-meters per day) and 2014 (7.5 million cubic-meters per day).

TOTAL invests in R&D to reduce direct greenhouse gas emissions into the atmosphere by other means. The Group especially intends to develop CO_2 capture, transport and storage technologies and for several years has been working on CCS (carbon capture and storage), so that it can be used on its industrial sites when permitted by economic and regulatory conditions. Currently, two production sites in which TOTAL has a stake, the Sleipner and Snøhvit fields in Norway, are using these technologies. The research program is ongoing, notably through a pilot project at the Lacq complex in France, where CO_2 is being captured by oxy-fuel combustion, transported and stored in a depleted natural gas field. The CO_2 pumping phase will be stopped in 2013, but the Group will continue to monitor the behavior of the CO_2 storage conditions.

Adapting to climate change

The Group assesses the vulnerability of its existing and future facilities against predicted climate change. More in-depth scientific

knowledge about climate forecasts, one element of which will be the IPCC's publication of a new assessment report in the fall of 2013, is eagerly anticipated.

Climate conditions are factored into the design of industrial facilities, which are not only built to withstand extreme events observed in the past but also to include additional safety margins.

In addition to adapting to climate change and limiting the effects of human activity on the climate, TOTAL advocates concerted action, particularly the emergence of a balanced, progressive international agreement that prevents the distortion of competition between industries or regions of the world.

2.2.6. Protecting biodiversity

Due to the nature of its business, and particularly because new exploration and production projects are located in potentially sensitive natural environments, TOTAL's operations are likely to have an impact on biodiversity. More specifically:

- Impacts related to construction sites, access roads, linear infrastructures, etc., which can result in habitat fragmentation.
- Physicochemical impacts leading to changes in environments and habitats, or that might affect or interfere with certain species.
- Contribution to the propagation of invasive species in terrestrial and marine environments.

TOTAL is aware of these challenges and takes biodiversity into account in its guidelines at a number of levels:

- The Safety Health Environment Quality Charter (refer to point 2. of this Chapter), Article 10 of which specifies: "TOTAL (…) controls (…) (its) impact on biodiversity".
- A biodiversity policy that details the Group's principles for action in this area:
  1. minimizing the impact of operations on biodiversity throughout the facility life cycle.
  2. incorporating biodiversity protection into the environmental management system, particularly initial analyses, and social and environmental impact studies.
  3. paying specific attention to operations in regions with particularly rich or vulnerable biodiversity.
  4. informing and raising the awareness of employees, customers and the public, helping to improve understanding of ecosystems.

This policy is implemented by means of a number of tools and rules. In Exploration & Production, rules and specifications govern the performance of baseline surveys and environmental impact studies on land or at sea. Since 2011, all Group business units have had access to a detailed mapping tool showing the world's protected areas, based on regularly updated data from UNEP-WCMC (World Conservation Monitoring Center). The Group has renewed its partnership with UNEP-WCMC for 2013-2015.

As a result of the first biodiversity action plan based on the "avoid, mitigate, restore and offset" approach implemented for TOTAL's activities in France, developed by TIGF for the "Artère du Béarn" gas pipeline project, vulnerable areas and protected species stations were avoided and the impact of the work was reduced through the use of special tree clearance and river-crossing techniques.

TOTAL classifies protected areas around the world according to the categories defined by IUCN (International Union for the Conservation of Nature). TOTAL consistently aims to launch biodiversity action plans leveraging industry best practices for any new projects (excluding exploration, storage and distribution operations) in the most sensitive protected areas corresponding to IUCN categories I to IV, such as national parks. In-depth studies are carried out prior to project implementation and may lead to a series of preventive measures. For example, in January 2012, the Congolese authorities awarded TOTAL an oil exploration license (Block III), approximately 30% of which is located in the Virunga national park. The exploration program is strictly limited to the north part of the license, which therefore excludes any exploration activities in the area within the Virunga park in the Democratic Republic of Congo.

Finally, TOTAL is involved in sector-specific initiatives, such as those spearheaded by IPIECA, which in 2010 resulted in the publication of a guide to the issue of invasive species. Recommendations include taking seasons into account when planning work and checking the origin of the equipment used (also refer to paragraph 3.3. of this Chapter).

2.3. Consumer health and safety

Many of the products that TOTAL markets pose a potential health risk if they are incorrectly used. The Group therefore meets its current and future obligations with regard to information and prevention in order to minimize the risks throughout the product life cycle.

TOTAL uses various guidelines to ensure compliance with the vital measures in place to promote consumer health and safety:

- The Safety Health Environment Quality Charter (articles 1 and 5; see point 2. of this Chapter).
- A health policy that sets out the Group's principles for action in relation to incident prevention and protecting the health of people in direct or indirect contact with its products, throughout the entire product life cycle, including customers, users and anyone else involved (health and products).
- A directive stating the minimum requirements for marketing products worldwide in order to avoid or reduce potential risks to consumer health and the environment.

TOTAL identifies and assesses the risks inherent in its products and their use, and then informs customers and users of these risks and the applicable prevention and protection measures. The material safety data sheets (MSDS) that accompany all products marketed by the Group (in at least one of the languages used in the country) and product labels are two key sources of information in this regard. All new products comply fully with the regulatory requirements in the countries and markets for which they are intended.

As part of the first phase of the European REACH Regulation (Registration, Evaluation, Authorization and Restriction of Chemicals), the Group registered a total of 214 chemical substances. This regulation aims to protect the health of consumers and professionals by means of a stringent assessment of the toxicological effects for each substance use scenario and the implementation of appropriate mitigation measures.

3. Community development information

Consistent with the values and principles set out in the Code of Conduct, Ethics Charter and Safety Health Environment Quality Charter (see paragraph 2. of this Chapter), TOTAL places its commitment to community development at the heart of its corporate responsibility. This approach, which involves all Group's sectors, covers all action taken to improve our integration into the countries where we operate.

TOTAL aims to act and be known as:

- an energy company that places respect, openness, continuous dialogue and transparency in relation to stakeholders at the heart of its strategy;
- a responsible operator that can be welcomed for the long term, setting an example in the way that it manages the impact of its activities;
- a partner in the sustainable human, economic and social development of the communities and countries where it operates;
- a leading player in access to energy.

Formalized in 2011 through the "Societal Lab" internal process and accompanied by a directive to facilitate its application within the Group, this community development policy is one of the pillars of TOTAL's approach to the challenges of Sustainable Development.

The societal policy and directive are applicable to all the Group's entities and subsidiaries, in accordance with their respective decision-making rules.

The Group's expenditure on community development has increased regularly over the last three years: €247 million in 2010, €305 million in 2011 and €316 million in 2012. About 90% of the expenditure on community development is made outside OECD countries. In 2012, around 3,000 community development actions were listed, with an even spread with the Upstream, Refining & Chemicals and Marketing & Services business segments.

TOTAL's community development actions

Community development actions support or serve local communities by contributing to their cultural, socio-economic and human development. These communities are usually concerned by the Group's presence or activities. TOTAL's approach is moving away from the "philanthropic" model (donations, subsidies and sponsorship) towards a more "integrated" model, consisting of societal actions directly linked to operations for more effective and durable community development initiatives.

TOTAL's community development actions fall into three main categories: good citizenship, human and social development and local economic development. Each of these themes is in turn divided up into several sub-themes.

- **Good citizenship:** these actions aim to promote the close integration of the Group's activities in the local social and cultural environment. They include all the actions taken to encourage social harmony through "good neighbor" relations. Examples include the actions taken to create or foster conditions in which the Group's activities are accepted by the local communities, by respecting traditional customs and practices and by recognizing the cultural wealth of these communities.
- **Human and social development:** all the actions intended to "broaden the possibilities available to everyone. The fundamental goal is to create an environment that offers the populations the possibility of enjoying a long and healthy life, to acquire knowledge that helps them to make the right choices and to have access to resources guaranteeing a decent standard of living" (UNDP, 1990).
- **Local economic development:** these actions contribute to the development of the local economy by promoting employment and the development of activities that have a positive economic effect on the region.

TOTAL prefers an approach based on dialog with all the stakeholders and the establishment of human, economic and social relations that are transparent and beneficial.

The programs aim to control the global footprint of the Group's activities and to contribute to the socio-economic development of the host countries. These projects are drawn up in close collaboration with the national authorities and also benefit from the support of the local populations, without which their impact would remain limited. Their implementation usually calls on the expertise of local NGOs and, occasionally, multilateral backers, such as the World Bank.

New societal reporting tools were applied to the community development actions in 2012 in order to better manage the overall societal initiative, in line with the strategic priorities. The Group's societal reporting system is now made up of two parts:

- A self-assessment questionnaire on the quality of the application of the community development directive. This questionnaire can be used to assess and manage the degree of deployment of the societal directive in the Group.
- A quantitative questionnaire listing all the local community development actions taken by the Group's operational divisions.

This new annual reporting system aims to improve the measurement of the efforts made by the Group in this field using a series of indicators.

3.1. Stakeholder relationships

For around twenty years, changes in the regulatory framework have led to the holding of information, consultation or dialogue processes with the stakeholders prior to making decisions that have a significant environmental impact. In addition to complying with regulations, TOTAL implements structures for dialogue at every level of the Group. In particular, there is one person at headquarters responsible for relationships with NGOs.

To put its approach to community development at its sites and subsidiaries on a professional footing, in 2006 TOTAL implemented the internal SRM+ (Stakeholder Relationship Management) tool. It is used to identify and map the main stakeholders, to schedule meetings with them and record their expectations, and then draw up an action plan for building a long-term relationship. Communities neighboring TOTAL sites often have questions about the impact of

the Group's activities on health, safety and the environment. Entering into a dialogue with local residents enables us to respond to these legitimate concerns. In addition to SRM+, other schemes for dialogue appropriate to TOTAL's locations or business segments exist, such as:

– Community Advisory Panels in the United States, developed on the initiative of the American Chemistry Council;

– local information and consultation Committees in France, pursuant to the French technological risk prevention act;

– the "*Terrains d'entente*" (common ground) scheme, set up in 2002 within Chemicals, currently included in the Refining & Chemicals segment, to increase dialogue between industrial sites and their surroundings;

– the residents conference, set up in 2007 by the Feyzin refinery in France, in partnership with Feyzin town council. This residents' dialog forum improves the living conditions of the neighboring population and its relationship with the site. It was recognized by the authorities as a consultation partner under the technological risk prevention plan;

– the launch in 2011, in the Lorraine region of France, of a collective consultation procedure involving the stakeholders in all of the Group's sectors operating in the region.

TOTAL is aware of the specificities of indigenous and tribal peoples (as identified in the International Labor Organization's Convention No. 169), and has introduced a Charter of principles and guidelines regarding indigenous and tribal peoples.
Under this Charter and in compliance with our Code of Conduct, we strive to get to know and understand the legitimate needs of the communities neighboring our subsidiaries. In particular, this charter encourages the subsidiaries to call on experts, if necessary, to identify and understand the expectations and specificities of indigenous peoples, to consult them through dialog before starting industrial projects and to make a positive contribution to their socio-economic development.

3.2. Social and economic development of host communities and countries

Social and economic development of neighboring or local communities

Wherever it operates, TOTAL has particular responsibility for the social and economic development of the communities living near its facilities. This aim is embodied in a variety of ways:

– firstly, a requirement for relevant investments and transparency in its financial contribution (through the taxes, duties and royalties paid) to the development of host countries, in accordance with local legislation;

– creating direct and indirect local jobs through a tailored contractual policy, as part of a long-term education and training approach;

– proactive support for the implementation of social and economic development schemes in emerging countries. Tailored to community expectations, these schemes are run in partnership with local organizations and authorities and are sometimes accompanied by health and education initiatives.

TOTAL takes care not to substitute the local authorities in all its actions. By cooperating with the public authorities, the Group completes or replicates their initiatives, while taking care:

– to fully support the legitimacy of local social and economic development or health schemes;

– to prevent dependency on TOTAL's presence, promoting self-sufficiency rather than aid;

– to ensure the success of projects that require knowledge of local cultures that its employees do not necessarily have.

The Group's expertise is based on the continuous professionalization of its community development engineers. Tools such as structuring projects, setting goals and monitoring and assessment indicators have enabled us to progress from an aid-giving approach to one in which communities take charge of their own development.

In this regard, TOTAL teams up with NGOs specializing in social action, which have extensive practical experience. These organizations help the Group increase the effectiveness of the social and economic development programs it supports, particularly by encouraging it to take into account the entire life cycle of its programs, from the design phase to shutdown. There are already over 300 full-time employees working in this area at headquarters and at the Exploration & Production subsidiaries.

In Africa, the Group takes action in particular in favor of the development of the industrial fabric and local content (local production, local personnel in the subsidiaries, pre-qualification of local contractors, development of domestic infrastructures, diversification of the local economy).

– The involvement of local service providers in industrial projects has been steadily increasing since 2000. TOTAL has set up a scheme to pre-qualify and certify local small and medium-sized companies, in line with the standards required by the Group, in order to work with more local suppliers.

– More than three million hours of work have been completed in Angola as part of the Pazflor project. In cooperation with the educational projects supported by Total E&P Angola, some fifty candidates have been recruited and trained by the national oil institute since 2007 in order to become production operators on the project. For the CLOV project, the Group aims to complete nine million hours of work in Angola.

– In Nigeria, 80% of the subsidiary's employees are locals and more than 100 new local recruits are expected per year. 28% of the construction work to develop Akpo was done by local contractors.

– As part of its drive to support the diversification of local economies, in Congo, TOTAL has stepped up its commitment to the Pointe-Noire Industrial Association (APNI), a platform launched in 2000 for the development of small and medium-sized companies. TOTAL is encouraging the development of cooperatives and micro-companies, such as the project to support the transformation of manioc in Gabon, or the development of business centers in Nigeria.

Access to energy

For more than ten years, some subsidiaries have been occasionally and independently engaged in various community development projects focusing on access to energy, in three main areas:

- the electrification of rural areas that are not connected to the electric power network, thanks to photovoltaic solutions. 20,000 households have been electrified in South Africa using photovoltaic kits, plus a further 25,000 in Morocco;
- aid for LPG supplies through the Shesha program in South Africa, in which gas cylinders are sold to the residents of the townships in order to improve their security and health;
- the use of associated gases to produce electricity in certain countries where TOTAL's Exploration & Production has operations. The project developed on OML 58 in Nigeria supplies almost 100,000 people. Electricity generated using associated gases in Yemen (25 MW since 2009) is supplied to tens of thousands of people in the neighboring communities. In Congo, TOTAL contributed to the funding of the extension of the electricity network in certain districts of Pointe Noire, supplying electric power to about 10,000 people.

These projects were usually developed in cooperation with the communities neighboring the Group's sites or as part of programs launched by the authorities in the host countries and sometimes without any goals to achieve economic viability and, therefore, sustainability.

TOTAL has been considering ways of improving its societal performance and structuring its approach since 2010. TOTAL is aiming to develop programs that are both profitable and sustainable. For this reason, the Group has developed "Total Access to Energy", which proposes energy solutions adapted to underprivileged populations. The Group relies on feedback from experiments conducted in recent years to implement these programs as part of the social economy, with a view to deploying sustainable energy access solutions that can be reproduced on a large scale.

As of today, Total Access to Energy covers three areas in line with TOTAL's core business:

- the development of photovoltaic solar energy in non-OECD countries (the "Awango by Total" trademark was launched in 2012);
- the fight against energy insecurity in OECD countries (mobility and heating);
- the use of gases associated with the production of hydrocarbons in certain African countries (currently being investigated).

At the United Nations Rio Conference in June 2012 ("Rio+20"), TOTAL committed to enabling five million people on low incomes to have access to lighting thanks to reliable photovoltaic products by 2015, while offering a broad selection of services, ranging from after-sales to options for the collection of end-of-life products and recycling.

TOTAL was the leading sponsor of Lighting Africa, the worldwide conference on energy access organized in Dakar in November 2012 by the World Bank and the International Finance Corporation (IFC). At this conference, TOTAL launched its new Awango by Total offer, comprising a series of products and services that meet the needs for lighting and for the charging of mobile phones. TOTAL also announced that, after a trial period by customers in four countries (Cameroon, Kenya, Indonesia and Congo DR), its Awango offer would be deployed in eight new countries: Burkina Faso, Cambodia, Ethiopia, Haiti, Myanmar, Nigeria, Uganda and Senegal. With almost 119,000 products sold in 2012, and 168,000 that have been sold since the project was launched, the project achieved a growth rate of about 130% in 2012. Growth forecasts for 2013 are in excess of 100%.

The fight against energy insecurity in OECD countries

Fifteen to twenty percent of the population of developed countries is considered to suffer from energy insecurity. This problem affects people who are no longer able to meet two needs: heating and mobility.

Due to this context, in 2012, the Marketing & Services segment launched a program to transform the insolvency problems of European households into levers of innovation. This program has two goals: to develop a more affordable commercial and financial offer, and to meet the rising needs of the stakeholders (public authorities, civil society).

The adopted approach consists in implementing innovative projects that involve players from the public and private sectors and civil society:

- In the field of heating/housing, pilot projects with renowned partners from the world of social mediation (PIMMS - Point d'information et de médiation multiservices -, Unis Cité, etc.) will help to identify households in precarious situations, including amongst the Group subsidiaries' customers, and to devise a suitable offer of support. The first project was launched in the Meurthe et Moselle department in France, in September 2012. In September 2011, the Group signed an agreement with the French National Housing Agency (ANAH) to join the "*Habiter mieux*" program, overseen by the French Ministry for Ecology, Sustainable Development, Transportation and Housing. The Group is continuing its actions to fund work to overhaul the heating systems in seventeen French departments.
- In the field of mobility, the partnership launched in December 2012 with Voiture & Co, France's leading player in "mobility insecurity", aims to deploy solutions for "mobility to work": supply of low-cost vehicles, diagnostic, personalized advice and support, training. This partnership aims to support 20,000 people by providing "mobility to work" in the next five years. A survey has also been launched to draw up the first ever inventory of "mobility insecurity" in France and to provide recommendations that will improve the mobility of persons living in precarious situations.

The Group's investment of more than €3 million over a three-year period (2013-2015) in this field will be measured according to three types of indicators: the socio-economic impact (the number of heating renovations, the number of persons benefiting from support, returning to work, etc.), innovation (in practices and processes, innovative solutions that can be applied to our activities, etc.) and the level of satisfaction amongst the stakeholders (changes in the perception of the Group as a contributor to solutions to energy insecurity).

These projects are currently concentrated in France, due to the presence and the network of the Group, but they could eventually be extended to include other European countries.

Developing regional economies

TOTAL's activities generate hundreds of thousands of direct and indirect jobs worldwide. The Group's purchasing activities alone represent about €29 billion. This presents us with numerous

challenges with regard to our impact on the environment, society and community development, all of which we take into account in our relationships with suppliers (see paragraph 3.4. of this Chapter).

In addition to the jobs generated by its activities, the Group has a proactive policy of supporting Small and Medium-Sized Businesses in France and worldwide, particularly through *Total Développement Régional* (TDR). The aim of this body is to promote job creation and skill sharing in order to develop the local economic fabric.

Although there is usually no economic or social crisis surrounding these measures, TDR can also support planned employment area regeneration schemes alongside the redeployment of the Group's activities.

The support provided forms a major component of TOTAL's economic and social responsibility policy and takes a number of forms:

- financial backing for the creation, buy-out and expansion of SMEs, and support for regeneration;
- export and international expansion support;
- aid for innovative small and medium-sized companies.

In the last three years, TDR has provided €12 million in financial assistance for 360 SMEs, supporting 6,000 jobs.

TOTAL's regional development policy is becoming increasingly international, both in Europe and in the emerging countries where it operates, through the Total Small Business Initiative. In Belgium, support for small and medium-sized businesses has become a key factor of the Group's societal action. The Total Small Business Initiative has been deployed around the Feluy basin since 2008, and has now been extended towards Antwerp, Ghent and Brussels. In Italy, TOTAL's Exploration & Production subsidiary is helping small and medium-sized companies in the Basilicata region to access export markets.

3.3. Partnerships and philanthropy

Corporate philanthropy

In addition to the community development initiatives that are directly related to the Group's industrial activities, TOTAL has also been committed to taking general-interest actions in the countries where it has operations for many years. Most of the Group's philanthropic actions are conducted by the TOTAL Foundation and by the Philanthropy Department of TOTAL S.A. In 2012, the total budget of TOTAL S.A.'s philanthropic actions (including the Corporate Foundation) totaled €32 million, compared with €28 million in 2011.

Founded in 1992, after the Rio World Summit, the TOTAL Foundation celebrated its twentieth anniversary in 2012. Initially dedicated to the environment and marine biodiversity, in 2008 the Foundation extended its scope of action to include the Group's other philanthropic fields of activity. The Foundation is now active in four fields: marine biodiversity, culture and heritage, health and solidarity. In 2012, TOTAL renewed the commitments of its Foundation for a further five years (2013-2017) which has a €50 million multi-year action budget.

With regard to the marine biodiversity, the Foundation funds programs aimed at research studies to improve knowledge, protection and enhancement of marine and coastal species and ecosystems.

The Foundation promotes cultural dialogue by supporting exhibitions that showcase the heritage and arts of the Group's host countries. In France, with the heritage association *Fondation du Patrimoine*, it supports the preservation of traditional crafts and industry and the restoration of heritage sites in France.

In the field of health, the Foundation has been a partner of the Institut Pasteur since 2005. This partnership, guided by the scientific expert Professor F. Barré-Sinoussi, who won the Nobel Prize for Medicine in 2008, focuses on the fight against infectious diseases. The Foundation also contributes to research programs and actions in the field in partnership with the Group's subsidiaries, mainly in Africa.

Finally, the Foundation encourages Group Employees to engage with the community, through support for projects championed by non-profit organizations with which employees volunteer on a personal basis. In 2012, the Foundation supported fifty-two employee projects in twenty-four countries.

The Group has also forged a number of major institutional partnerships. In 2009, TOTAL committed to donating €50 million over six years to the Fonds d'expérimentation pour la jeunesse, run by the French Education Ministry. This fund aims to support and assess innovative social action designed to inspire public policies promoting educational success and the social and professional integration of young people. TOTAL has also been a partner of the French national lifeboat institute (SNSM) since 2008. The Group provides funds and expert knowledge to improve the maritime safety of the institute's offshore rescue operations in France.

After twenty years of involvement, in 2012, the TOTAL Foundation renewed its ambition to support the development of actions of general interest that extend beyond its industrial responsibilities, by fostering the combination of expertise and innovation.

Educational partnerships

TOTAL aims to enable its employees in countries outside France to take up positions of responsibility within their local subsidiaries. As part of its social programs, the Group therefore offers local and international scholarships to create skilled local workforces for future hiring. Thousands of students are thus given the opportunity to pursue their studies in their country of origin or at the world's leading universities. TOTAL's international scholarship program has also enabled over six hundred students from thirty countries to study in France for qualifications (bachelor's degrees, engineering and master's degrees, MBAs and doctorates).

Moreover, in July 2012, TOTAL signed a partnership agreement with the French Foreign Ministry for the new "Quai d'Orsay – Entreprises" program of co-funded international grants, in addition to the existing partnership. The courses, delivered in French and in French universities, are open to students from six countries.

With support from other major groups, in the fall of 2011 TOTAL, Paris Tech and the *École polytechnique* introduced the Renewable Energy Science and Technology Master II postgraduate degree program. Forty students from ten countries enrolled for this program in the fall of 2012.

TOTAL is particularly active in supporting research chairs in thirty establishments, more than half of which are in France. One of the

latest examples is the "Complex industrial purchasing" chair at the École Centrale de Paris.

Another of the Group's flagship initiatives in favor of education was the fourth Total Energy and Education Seminar, which took place in Paris in November 2012, bringing together seventy academics from thirty-five countries. The academics and some twenty TOTAL managers and external experts discussed issues such as the future of energy, climate change, relationships between universities and business, and the impact of globalization on education and Human Resources management.

The seventh Total Summer School took place in Paris in July 2012, welcoming one hundred and twenty postgraduate students from thirty countries to debate energy challenges.

The program of University partnerships launched in Africa in 2010 has been extended to Asia and the Middle East. Partnership agreements have been signed or renewed in China, Singapore and Indonesia. In the Middle East, the first partnership was signed in Qatar in December 2011, and two more are planned in Iraq and the United Arab Emirates. In addition to the societal dimensions, these programs aim to prepare the talents required to achieve the Group's international ambitions.

In Africa, the Group continues to support the pilot programs launched in 2008 in the Eiffel (Angola) and Augagneur (Congo) high schools to provide free, quality education in regions where educational opportunities remain limited. TOTAL funds the development of preparatory courses for prestigious universities at the Léon Mba high school in Gabon.

In the field of higher education, TOTAL has entered partnerships with the oil and gas institutes and science faculties in several countries: IST-AC (Congo/Cameroon), Boumerdès University (Algeria), Port Harcourt University (Nigeria). It is also developing international University partnerships with the Massachusetts Institute of Technology (MIT), the French oil institute (IFP) and the Paris institute of political studies (IEP). As of today, the Group has signed six regional partnerships with Witwatersrand University in South Africa, the 2iE institute in Burkina Faso, Makerere University in Uganda, the CESAG in Senegal, KNUST University in Ghana and the National University in Singapore. In 2012, these partnerships allowed more than twenty interns to enter our subsidiaries, provided financial support for students and allowed around ten people to be hired. In Africa, the Group signed national partnerships in Nigeria, Kenya, Malawi and Tanzania.

Over the years, the Group has developed a major project to raise awareness of road safety among all the categories of road users:

– Actions targeting children, who are the main victims of road accidents, have been underway since 2004. In September 2012, the Africa-Middle East division of Marketing & Services launched a major awareness and information campaign in schools in several African countries. The goal is to raise the awareness of one million children by deployment 1,000 "safety cubes" that teach them the rules of road safety using a selection of methods to raise their awareness.

– At the same time, a large-scale operation is underway to encourage the public and private sectors to improve road safety on two of the most deadly cross-border roads in Africa and to take societal actions along these corridors. The subsidiaries of the Marketing & Services segment in Uganda, Cameroon and Kenya have brought together the potential stakeholders in the project for each corridor by calling on the World Bank and independent experts in road safety.

– In Ethiopia, Zambia, Ghana, Nigeria and Senegal, the subsidiaries are working with the local authorities and other stakeholders to encourage the spread of best practices in terms of the management of fleet safety and of road safety in general.

These societal actions supplement the initiatives taken internally to improve the safety of the Group's transport operations such as the PATROM program in Africa.

3.4. Fair operating practices

Preventing corruption

The amounts of money involved and the diversity of the various regions require the oil industry to be particularly vigilant about corruption and fraud. Around one quarter of TOTAL employees work in countries considered to be high-risk in this regard (countries in which the Transparency International index of the perception of corruption is less than or equal to 5). Reinforcing integrity and preventing corruption and fraud therefore constitute a major challenge for the Group and all its employees.

TOTAL's stance on the issue of corruption is based on clear principles, set out in 2000 in the Code of Conduct: "TOTAL rejects bribery and corruption in all forms, whether public or private, active or passive".

The Code of Conduct sets out the principles governing the actions and individual behavior of each person, both in their day-to-day decisions and in their relations with stakeholders. In it, TOTAL reiterates its support for the OECD Guidelines for Multinational Enterprises and the Tenth Principle of the United Nations Global Compact, which invites companies to act against all forms of corruption.

The Group's commitment was reiterated by the Chairman and Chief Executive Officer of TOTAL by the publication of the new "Integrity Policy" in February 2011. This commitment takes the form of a number of actions:

– in 2009, approval by the Executive Committee of the Corruption Prevention Policy and Compliance Program, which includes the creation of a dedicated compliance structure;

– creation of the Compliance and Social Responsibility Department within the Group Legal Department, which is now backed by a network of more than 350 compliance managers in the Holding and the Group's various sectors;

– in 2011, the Executive Committee's decision to reinforce the means of preventing fraud and corruption by setting up an integrity policy and program;

– the adoption in 2011 of Group directives applying to the implementation of these policies at all levels.

This initiative involves actions to raise awareness amongst employees and to train them. Training seminars are organized for the Compliance officers in the segments and subsidiaries. Specific

actions are also taken to prevent corruption, in particular on the occasion of the "Ethics" seminars. An e-learning course on the prevention of corruption, available in twelve languages, was made available internally in 2011. As of today, more than 40,000 employees have followed the course.

Human rights

Although ultimate responsibility for human rights lies with governments, the activities of companies can affect the human rights of the employees, partners or communities with which they interact in numerous ways. In addition to being an ethical commitment for TOTAL, adopting a proactive approach to human rights within the Company is vital for its daily business. This approach helps to establish and maintain successful relationships with all stakeholders.

TOTAL's Code of Conduct formally recognizes the Group's support for the principles of the 1948 Universal Declaration of Human Rights, the key conventions of the International Labor Organization, the OECD Guidelines for Multinational Enterprises and the principles of the United Nations Global Compact. Between 2005 and 2011, the Group took part in the consultations organized by the United Nations' special representative, professor John Ruggie, on the issue of business and human rights. The Chairman and Chief Executive and the Group's Senior Vice President for Legal Affairs expressed their support for the "protect, respect, remedy" framework and for the UN's guiding principles on business and human rights.

Furthermore, the Group is actively involved in numerous initiatives and work groups on human rights that bring together various stakeholders. As part of the Global Compact, TOTAL takes part in the Human Rights Working Group, the Responsible Investment in Conflict-Affected Countries Working Group and the Anti-Corruption Working Group. Created in 2010, the Global Compact LEAD (Initiative for Sustainable Leadership) has fifty-four members, of which TOTAL is the only French company. The Group is also a founding member of the Global Business Initiative on Human Rights and actively participates in the work of IPIECA through the Social Responsibility Working Group and the Human Rights Task Force. After having implemented the recommendations of the Voluntary principles on security and human rights (VPSHR) for several years, TOTAL joined this initiative in March 2012. In 2012, TOTAL also took part in the activities of the Shift NGO, created by John Ruggie after his term of office with the UN. TOTAL's Senior Vice President for Legal Affairs took part in a workshop organized by Shift in Boston (USA) on the practical implementation of respect for human rights by companies.

Internally, in order to spell out its human rights position and initiatives, TOTAL has created a Human Rights Coordination Committee, managed by the Ethics Committee Chairman. A discussion forum that meets every other month, its members including representatives of the Human Resources, Public Relations, Legal, Finance, Security and Sustainable Development Departments, the Committee coordinates the initiatives taken by the Group's various business units. In these meetings, the participants share their feedback and information on a range of topics related in particular to TOTAL's involvement in public or private international initiatives (VPSHR, ITIE, GBI, IPIECA, etc.), on human rights tools, procedures and internal policies already adopted or under construction, and on civil society projects.

Linked to the United Nations guiding principles on business and human rights, TOTAL's human rights approach is based on several pillars:

- **Written principles:** in accordance with its Code of Conduct, the Group has adopted principles appropriate to the operations and countries where it works, some of which are set out in the Human Rights Internal Guide published in 2011 in English, French, Spanish and Chinese.
- **Awareness activities:** to ensure that its human rights principles are disseminated in-house, TOTAL raises employee awareness via internal communications channels such as the Ethics and Security intranet sites, and through specific training programs tailored to the various challenges encountered in the field. These programs are listed in the TOTAL University's Ethical, Environmental and Social Responsibilities catalogues.
- **Listening and advice bodies:** two dedicated bodies, the Ethics Committee and the Compliance and Social Responsibility Department, are available to advise employees and coordinate efforts to promote human rights. All employees experiencing difficulties in the practical implementation of the Code of Conduct should first turn to their line manager; if necessary, they can contact the Human Resources Department or take their concerns to the Ethics Committee.

  The Ethics Committee is a central, independent structure that represents all of TOTAL's business units. Its role is to listen to, support and advise both employees and people outside the Group. The Committee maintains complete confidentiality with regard to referrals; this can only be lifted with the agreement of the person in question.
- **Assessment tools:** these are used for regular assessment of subsidiaries' human rights risks and compliance. They analyze the local consequences of projects (societal audits in local communities in certain countries that are questioned on their perception of the impact of the Group's activities on their everyday lives) or check that the subsidiaries' ethical practices meet the Group's standards. Most of these tools are designed to prevent or limit the ethical risks or impacts related to our activities. Some of them are used with the assistance of independent experts, such as GoodCorporation, the Danish Institute for Human Rights or the CDA Collaborative Learning Projects. Action and monitoring plans are then implemented on the basis of these assessments.

Contractors and suppliers

In its Code of Conduct, TOTAL states that it expects its suppliers to respect equivalent principles to those that it abides by. A document entitled "Fundamental Principles in Purchasing" sets out the Group's commitments with regard to preventing corruption, compliance with the rules of free competition, respect for fundamental principles and rights at work, protecting health and the environment and promoting economic and social development. All TOTAL suppliers can be made aware of these rules, which are covered by specific contract clauses for major calls for tenders.

Questionnaires focused on environmental and social challenges are used to gather more in-depth information from suppliers about their approach to these subjects, either during prequalification or as part of an audit. This aspect of supplier relationships can also be examined in ad hoc ethical assessments of Group subsidiaries or entities, performed by GoodCorporation.

A cross-functional working group dedicated to sustainable purchasing, that includes the various segments and the Purchasing and Sustainable Development departments, was set up in 2011. This group is tasked with reinforcing TOTAL's policy in this area, using the initiatives taken in each sector. In 2012, a map of the CSR risks and opportunities in the Group's main purchasing categories was drawn up, in order to identify the main issues in three areas: ethics and human rights, environmental impact and the creation of value with the communities. Detailed pilots were launched on certain types of purchases further to this analysis.

TOTAL continues to collaborate with the Danish Institute for Human Rights to improve the tools and processes it uses to assess its suppliers' approach to their environmental and social impact.

A special effort has been made in France within the framework of the disability policy in order to increase the proportion of the Group's purchases from the sector for disabled workers. In terms of beneficiary entities, these purchases are expected to increase two-fold for the head office at Paris La Défense, due to contracts signed in 2012.

4. Other social, community development and environmental information

4.1. TOTAL and Canadian oil sands

With the development of several major projects in the Canadian oil sands, TOTAL expects to produce 200 kb/d of bitumen within ten to fifteen years. It is vital that the environmental challenges, and in particular the impact on water, the rehabilitation of the land and the ecosystems affected, together with greenhouse gas emissions, are taken into account. For several years, TOTAL has been actively involved in the various collaborative research initiatives undertaken by Canadian industry into these areas, and invests over CAD 20 million each year. In particular, TOTAL is one of the founder members of COSIA (Canadian Oil Sands Innovation Alliance), an initiative launched in 2012 by fourteen producers in Canada to speed up the improvement in the environmental performance of Canadian oil sands by promoting collaboration and innovation.

In order to restrict water consumption on the Surmont (50% share) in situ project, the Group has been working with the operator to optimize water use and recycling. For Phase 2 of the project, the selected option should allow water to be withdrawn only from saline aquifers and not from fresh water aquifers or rivers, which will lead to additional processing costs. On Joslyn North (38.25%, operator), TOTAL has committed to building a freshwater storage facility sufficient for ninety days of production, in order to reduce withdrawals from the Athabasca River in low flow periods.

The Group is also involved in oil industry work to improve management of the waste associated with developing oil sand mines, which has historically been stored in tailing ponds. For Joslyn, TOTAL is planning to use processes to separate waste flows and thicken the finest waste, and even flocculation and centrifuging, in order to significantly reduce the size of the tailing ponds and ensure that they are solidified within several years.

As open-pit mining of oil sands disturbs land and ecosystems, TOTAL is committed to their sustainable rehabilitation throughout its operations, taking into account the specific features of the boreal forest. Sixty percent of the rehabilitation work at Joslyn will be completed at the end of mining, and the rest in the next seven years.

Over and above Canadian industry's efforts to reduce greenhouse gas emissions from the entire oil sands production chain (which are approximately 10 to 15% higher than the average for conventional crude in a complete "well to wheel" cycle, according to the Group's estimates), TOTAL plans to install cogeneration units at its mines. The Group is also involved in carbon capture and storage project analyses in Alberta.

Mindful of its responsibilities to its stakeholders and neighbors, and particularly the First Nations, TOTAL opened a permanent office in Fort McMurray in 2006. Since that time, the Group has signed social and economic agreements with the Fort McKay, Athabasca Chipewyan and Mikisew Cree First Nations, and with the Regional Municipality of Wood Buffalo. These reflect TOTAL's commitment to engaging in dialogue with the communities living near its facilities and allowing them to benefit from the economic impact of its activities (see paragraph 3.1. of this Chapter).

For more information, visit
total-ep-canada.com/csr/responsibility.asp.
total.com

4.2. TOTAL and shale gas

TOTAL has stakes either as operator or partner in several shale gas licenses in Poland, Denmark, the United States and Argentina.

In every country where the Group has operations, its environmental and social charters, in addition to compliance with local legislation, provide the framework for its operations.

The environmental challenges associated with shale gas development include reducing the quantity and impact of chemical additives, optimizing water management, and reducing the visual impact and nuisance caused by the operations. TOTAL's R&D teams are looking for the appropriate technological solutions.

In Europe, where TOTAL has stakes in Denmark (operator) and Poland (partner), the Group's efforts are focused on listening to our contacts so that the operations can proceed in a way that is acceptable to all stakeholders. TOTAL is convinced that shale gas

will have a place in the European energy mix, if the exploration campaigns confirm the existence of this resource in Europe. In the United States, TOTAL is a partner in the appraisal and development of shale gas licenses in the Barnett (Texas) and Utica (Ohio) plays.

In Argentina, TOTAL has stakes either as operator or partner in several shale gas licenses in the Neuquén basin.

In Australia, TOTAL signed an agreement to enter four shale gas exploration licenses in the South Georgina basin in the center of the country. Under the terms of the agreement, TOTAL can increase its stake to 68% and become the operator in the event of development, which remains subject to approval by the authorities.

4.3. TOTAL and the Arctic

According to a survey published by the USGS (United States Geological Survey) in 2012, the Arctic may host 13% of the conventional oil resources to be discovered on the planet and 30% of gas resources. These substantial resources could help to meet the rise in demand for energy in the coming decades.

Exploration & Production in the Arctic faces a number of stiff challenges due to the difficult weather and oceanographic conditions, logistical factors and the nature of the technologies to be deployed in a particularly sensitive ecosystem.

TOTAL currently does not conduct any exploration activities for oil fields under the ice cap, and favors either the development of gas fields or the development of oil fields not located under the ice cap.

At the same time, TOTAL is involved in the research into the specific issues in the Arctic, in particular through its “Grands froids” (deep cold) R&D program. TOTAL is also taking part in the Joint Industry Program that brings together oil companies and scientific organizations in research into the means of preventing, detecting and responding to accidental pollution by hydrocarbons.

The Group is mainly involved in various projects, including in Norway (Snøhvit and Novarg) and in Russia (Kharyaga, Yamal LNG, Termokarstovoye).

5. Third party assurance report

Year ended December 31, 2012

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with and is construed in accordance with French law and professional auditing standards applicable in France.

To the Executive Board,

In accordance with your request and in our capacity as statutory auditors of Total, we hereby report to you on the consolidated social, environmental and societal information presented in the Registration Document issued for the year ended December 31, 2012 in accordance with the requirements of article L.225-102-1 of the French commercial code (*Code de commerce*).

Entity's Responsibility

The executive board of the entity is responsible for the preparation of the Registration Document including the consolidated social, environmental and societal information (the "Information") in accordance with the requirements of Article R. 225-105-1 of the French commercial code (*Code de commerce*), presented as required by the entity's internal reporting standards (the "Guidelines") and available upon request at the entity's premises.

Our Independence and Quality Control

Our independence is defined by regulatory requirements, the Code of Ethics of our profession (*Code de déontologie*) and Article L. 822-11 of the French commercial code (*Code de commerce*). In addition, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Independent verifier's responsibility

It is our role, on the basis of our work:

- to attest whether the required Information is presented in the Registration Document or, if not presented, whether an appropriate explanation is given in accordance with the third paragraph of Article R. 225-105 of the French commercial code (*Code de commerce*) and Decree no. 2012-557 dated April 24, 2012 (Attestation of disclosure);
- to provide limited assurance on whether the other Information is fairly presented, in all material respects, in accordance with the Guidelines (limited assurance).

We called upon our Corporate Social Responsibility experts to assist us in the performance of our work.

5.1. Attestation of presentation

Our engagement was performed in accordance with professional standards applicable in France:

- we compared the Information presented in the Registration Document with the list as provided for in Article R. 225-105-1 of the French commercial code (*Code de commerce*);
- we verified that the Information covers the consolidated perimeter, namely the entity and its subsidiaries within the meaning of Article L. 233-1 and the controlled entities within the meaning of Article L. 233-3 of the French commercial code (*Code de commerce*);
- in the event of the omission of certain consolidated Information, we verified that an appropriate explanation was given in accordance with Decree no. 2012-557 dated April 24, 2012.

On the basis of our work, we attest that the required Information is presented in the Registration Document. Environmental information is consolidated on the operated perimeter only. The Group also discloses the greenhouse gas emissions on the equity share perimeter.

5.2. Limited assurance report

Nature and scope of the work

We conducted our engagement in accordance with ISAE 3000 (International Standard on Assurance Engagements) and French professional guidance.

We performed the following procedures to obtain a limited assurance that nothing has come to our attention that causes us to believe that the Information of the Registration Document is not fairly presented, in all material respects, in accordance with the Guidelines.

A higher level of assurance would have required us to carry out more extensive work.

Our work consisted in the following:

– We assessed the suitability of the Guidelines as regards their relevance, comprehensiveness, neutrality, understandability and reliability, taking into consideration, where applicable, the good practices in the sector.

– We verified that the Group had set up a process for the collection, compilation, processing and control of the Information to ensure its completeness and consistency. We examined the internal control and risk management procedures relating to the preparation of the Information. We conducted interviews with those responsible for social and environmental reporting.

– We selected the consolidated Information to be tested(1) and determined the nature and scope of the tests, taking into consideration their importance with respect to the social and environmental consequences related to the Group's business and characteristics, as well as its societal commitments.

– Concerning the quantitative consolidated information that we deemed to be the most important:

- at the level of the consolidating entity TOTAL S.A. and the controlled entities, we implemented analytical procedures and, based on sampling, verified the calculations and the consolidation of this information;

- at the level of the sites that we selected(2) based on their business, their contribution to the consolidated indicators, their location, former verification campaigns and a risk analysis:

. we conducted interviews to verify that the procedures were correctly applied and to identify any omissions;

. we performed tests of detail based on sampling, consisting in verifying the calculations made and reconciling the data with the supporting documents.

The sample thus selected represents 7.5% of the headcount and 22% of the greenhouse gases emissions.

– Concerning the qualitative consolidated information that we deemed to be the most important, we conducted interviews and reviewed the related documentary sources in order to corroborate this information and assess its fairness. Regarding ethical standards and employees security, interviews were conducted at Group level only.

– As regards the other consolidated information published, we assessed its fairness and consistency in relation to our knowledge of the Group and, where applicable, through interviews or the consultation of documentary sources.

– Finally, we assessed the relevance of the explanations given in the event of the absence of certain information.

Comments on the Guidelines

We draw your attention to the following comments on the Guidelines:

– The Environmental Guidelines are cascaded to each business and segment, which adjusts the reporting process to Total's various activities.

Comments on the Information

We wish to make the following comment on the Information:

Social information

– Total's social reporting data is based on a reporting software deployed at all units in the review's scope. The tool combined with internal controls performed by the holding TOTAL S.A. increase the reliability of the social information, in particular by automating checks and facilitating consolidation.

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(1) *Environment and Safety indicators verified onsite*: Number of sites ISO 14001- certified, positions (FTE) dedicated to environmental matters, existence of an operational anti-pollution plan and number of exercises carried out, greenhouse gases emissions (operated domain and equity share domain), atmospheric emissions of NOx and SO_2, number and volume of accidental spills of hydrocarbons reaching the environment, fresh water withdrawal by source (excluding once-through), Chemical oxygen demand (COD) in water discharged (Specialty Chemicals only), classification of waste by type of disposal (quantity by type of disposal), quantity of hazardous waste treated externally, materials loss rates, energy imports, consolidation process of the safety indicators TRIR-LTIR-SIR, occupational illness rate.
Social indicators verified onsite: total headcount and breakdown by age, by men/women, and by nationality, recruitments, existence of a legislated guaranteed minimum wage, existence of a supplementary occupational scheme, absenteeism, indicators related to labor practices (part time working, teleworking), existence of elected or labor-union staff representatives, percentage of the employees covered by a bargaining agreement, number of course-based training days (excl. on-the-job training and e-learning).

(2) *Environment and Safety indicators:*
- Exploration-Production: Total E&P Angola – TEPA (Angola), Total E&P Russia – TEPR (Russia), Total E&P Qatar – TEPQ (Qatar);
- Refining-Chemicals: Port Arthur Refinery – PAR (USA), Vlissingen Refinery – ZR (Netherland), Lyndsey Oil Refinery – LOR (UK), Carville Cosmar (USA), Total Gonfreville Petrochemicals (France), Hutchinson Joué les Tours (France);
- Marketing & Services: Total Erdevelt (Belgium), Total Valdemoro (Spain).
Social indicators:
- Exploration-Production: Total E&P Angola – TEPA (Angola), Total E&P Russia – TEPR (Russia), Total E&P Qatar – TEPQ (Qatar);
- Refining-Chemicals: Lyndsey Oil Refinery – LOR (UK), Bostik Inc (USA), Total Gonfreville Petrochemicals (France), Total Petrochemicals (France), Atotech Deutschland (Deutschland);
- Marketing & Services: Total Belgium (Belgium), Compagnie Pétrolière de l'Ouest – CPO (France);
- Holding: TOTAL S.A. La Défense (France).

Conclusion

We express qualifications on the following points:

- Methods to calculate the number and volume of spills which reach the environment are not consistent between sites and subsidiaries, resulting in heterogeneous consolidated data.
- Calculations of SO_2 emissions of Exploration & Production subsidiaries are based on an insufficient number of analytical results, generating uncertainty on the reported data.
- Regarding the number of training days, the type of training as well as the calculation methodology was not fully understood within some of the audited sites.

Based on our work described in this report, except for the effects of the matters described above, nothing has come to our attention that causes us to believe that the Information is not fairly presented, in all material respects, in accordance with the Guidelines.

La Défense, March 13, 2013

The independent verifier
Ernst & Young et Associés
Cleantech & sustainability department
French original signed by:
Christophe Schmeitzky

Glossary

A

Acreage
Areas in which mining rights are exercised.

API degrees
Scale established by the American Petroleum Institute (API) to measure oil density. A high API degree indicates light oil from which a high yield of gasoline can be refined.

Appraisal (delineation)
Work performed after a discovery for the purpose of determining the boundaries or extent of an oil or gas field or assessing its reserves and production potential.

Associated gas
Gas released during oil production.

Association/Joint venture/Consortium
Group of companies not forming a new legal entity. In an oil and gas joint venture, each member holds an undivided interest in the specific area of the contract (PSC, concession, buyback, etc.) and has separate tax obligations toward the host country.

B

Barrel
Unit of measurement of volume of crude oil equal to 42 U.S. gallons or 158.9 liters. Quantities of liquid hydrocarbons in barrels are expressed at 60°F.

Barrel of Oil Equivalent (BOE)
Conventional unit for measuring the energy released by a quantity of fuel by relating it to the energy released by the combustion of a barrel of oil.

Biochemical conversion
Conversion of energy sources (usually biomass) through biological transformation (reactions in living organisms). Examples include fermentation (in the presence of enzymes).

Biofuel
Liquid or gaseous fuel used for transport and produced from biomass.

Biomass
Biodegradable fraction of products, waste and residues of biological origin from agriculture (including plant and animal substances), forestry and related industries, including fisheries and aquaculture which, through chemical transformation, can become beneficial molecules (carbon molecules) for the production of fuels and specialty chemicals.

Brent
Quality of crude (38° API) produced in the North Sea, at the Brent fields.

Buyback
Risk services agreement (the investments and risks are undertaken by the contractor) combined with an offset mechanism that allows the contractor to receive a portion of the production equivalent to the monetary value, with interest, of its investments and a return on its investment.

C

Capacity of treatment
Annual crude oil treatment capacity of the atmospheric distillation units of a refinery.

Carbon capture and storage (CCS)
Technology designed to reduce greenhouse gas emissions in the atmosphere during the combustion of fossil materials by capturing, compressing, transporting and injecting carbon dioxide (CO_2) into deep geological formations for permanent storage. The use of oxygen instead of air in CO_2 production is called oxy-combustion.

Catalysts
Substances that facilitate chemical reactions during the refining process used in conversion units (reformer, hydrocracker, catalytic cracker) and desulphurization units.

Principal catalysts are precious metals (platinum) or other metals such as nickel and cobalt. There are some catalysts that regenerate themselves and others that are consumable.

Coal bed methane
Natural gas present in coal beds.

Cogeneration
Simultaneous generation of electrical and thermal energies from a combustible source (gas, fuel oil or coal).

Concentrating solar power plant
The most advanced form of solar steam plant which concentrates sunlight using mirrors to heat a liquid and produce electricity. This technology consists mainly of tower power plants and cylindrical-parabolic plants.

Concession contract
Exploration and production contract under which a host country grants to an oil & gas company (or joint venture) the right to explore a geographic area and develop and produce potential reserves. The oil and gas company (or joint venture) undertakes the execution and financing, at its own risk, of all operations.
In return, it is entitled to the entire production.

Condensate
Light hydrocarbon substances produced with natural gas that exist – either in a gaseous phase or in solution – in the crude oil under the initial pressure and temperature conditions in the reservoir, and which are recovered in a liquid state in separators, on-site facilities or gas treatment units.

Conversion
Refining operation aimed at transforming heavy products (heavy fuel oil) into lighter or less viscous products (gasoline, jet fuels, etc.)

Cost oil/gas
In a production sharing contract, portion of the oil and gas production made available to the contractor (contractor group) and contractually reserved for reimbursement of exploration, development, operation and site reclamation costs (“recoverable” costs).

Cracking

Refining process that entails converting the molecules of large, complex, heavy hydrocarbons into simpler, lighter molecules using heat, pressure and, in some cases, a catalyst. A distinction is made between catalytic cracking and steam cracking, which uses heat instead of a catalyst. Cracking then produces ethylene and propylene, in particular.

D

Debottlenecking

Change made to a facility to increase its production capacity.

Deep conversion unit (coker)

Unit that produces light products (gas, gasoline, diesel) and coke through the cracking of distillation residues.

Desulphurization unit

Unit in which sulphur and sulphur compounds are eliminated from mixtures of gaseous or liquid hydrocarbons.

Developed Reserves

Reserves that are expected to be recovered from existing wells and installations or for which the cost of the required equipment is relatively minor. This applies to both proved reserves and proved plus probable reserves.

Development

Operations carried out to bring an oil or gas field on stream, including in particular construction of the necessary infrastructures for oil and gas production.

Distillates

Products obtained through the atmospheric distillation of crude oil or through vacuum distillation. Includes medium distillate such as aviation fuel, diesel fuel and heating oil.

E

Energy mix

The various energy sources used to meet the demand for energy.

Ethane

A colorless, odorless combustible gas found in natural gas and petroleum gas.

Ethanol

Also commonly called ethyl alcohol or alcohol, ethanol is obtained through the fermentation of sugar (beetroot, sugarcane) or starch (grains, etc.). Ethanol has numerous food, chemical and energy (biofuel) applications.

Ethylene/Propylene

Petrochemical products derived from cracking and essential to the production of polyethylene and polypropylene, two plastics frequently used in packaging, the automotive industry, household appliances, healthcare and textiles.

Ex situ oil shale production technology (Red Leaf: EcoShaleTM In-Capsule Technology)

Ex-situ production technology is used for shallow oil shale formations. Shale is extracted using a mining method and then heated in large sealed capsules. Heating triggers a pyrolysis reaction that produces high-quality liquid hydrocarbons and gas.

F

Farnesane

Farnesane is obtained through the hydrogenation of farnesene, a saturated hydrocarbon (alkane) that can be added to diesel fuel.

Farnesene

A hydrocarbon molecule (iso-olefin containing 15 carbon atoms), farnesene is a molecule that is very similar to fossil hydrocarbons and can therefore be used to produce fuel or chemical compounds. The Amyris company has developed a process to produce it through the fermentation of sugar.

FEED studies (Front-End Engineering Design)

Studies aimed at defining the project and preparing for its execution. In the TOTAL process, this covers the pre-project and basic engineering phases.

Fossil energies

Energies produced from oil, natural gas and coal.

FPSO (Floating production, storage and offloading)

Floating integrated offshore unit comprising the equipment used to produce, process and store hydrocarbons and offload them directly to an offshore oil tanker.

H

Hydraulic fracturing

Technique that involves fracturing rock to improve its permeability.

Hydrocarbons

Molecules composed principally of carbon and hydrogen atoms. They can be solid such as asphalt, liquid such as crude oil or gaseous such as natural gas. They may also include compounds with sulphur, nitrogen, metals, etc.

Hydrocracking

Catalytic refining process that uses hydrogen to convert heavy oils into lighter fractions.

I

In situ oil shale production technology (American Shale Oil, LLC (AMSO) Technology)

In an *in situ* process, oil shale is heated in place underground in order to trigger an *in situ* pyrolysis reaction. The very high-quality liquid and gaseous hydrocarbons produced through this reaction are then extracted from the reservoir by gas lift and/or pumping, which are traditional production techniques.

L

Lignocellulose

Lignocellulose makes up the wall of plant cells. In the biofuel sector, this term is used to designate wood and straw, two resources that can be used for biofuel production. Lignocellulose can be gasified (thermochemical conversion) or split into its basic components (sugars from cellulose and lignin) in order to transform them through biochemical conversion.

Liquefied Natural Gas (LNG)

Natural gas, primarily methane, that has been liquefied by cooling in order to transport it.

Liquefied Petroleum Gas (LPG)

Light hydrocarbons (comprised principally of butane and propane) that are gaseous under normal temperature and pressure conditions and that are kept in liquid state by increasing the pressure or reducing the temperature. LPG is included in NGL.

M

Mineral interests

Rights to explore for and/or produce oil and gas in a specific area for a fixed period. Covers the concepts of “permit”, “license”, “title”, etc.

MTO/OCP

MTO (Methanols to Olefins) involves the conversion of methanol into olefins. OCP (olefin cracking process) is then used to convert these olefins into plastics.

N

Naphta

Heavy gasoline used as a base in petrochemicals.

Natural gas

Mixture of gaseous hydrocarbons, composed mainly of methane.

Natural Gas Liquids (NGL)

Natural gas liquids are a mixture of light hydrocarbons that exist in the gaseous phase at atmospheric pressure and are recovered as liquid in gas processing plants. NGL include very light hydrocarbons (ethane, propane and butane).

O

Oil and gas exploration

All operations carried out to reveal the existence of oil and gas fields.

Olefins

Products (gas) obtained after cracking of petroleum streams. Olefins are ethylene, propylene and butadiene. These products are used in the production of large plastics (polyethylene, polypropylene, PVC, etc.), elastomers (polybutadiene, etc.) and large chemical intermediates.

Operated production

Total quantity of oil and gas produced on fields operated by an oil company.

Operator

Partner of an oil and gas joint venture in charge of carrying out the operations on a specific area on behalf of the joint venture. A refinery is also said to be operated by a specific partner when the operations are carried out by the partner on behalf of all the partners of the joint venture that owns the refinery.

P

Permit

Area contractually granted to an oil and gas company (or a joint venture) by the host country for a defined period. The permit grants the oil and gas company (or joint venture) the exclusive right to carry out exploration work (“exploration” permit) or to exploit a field (“exploitation” permit).

Petcoke (or petroleum coke)

Residual product remaining after the improvement of very heavy petroleum cuts. This solid black product consists mainly of carbon and can be used as fuel in a manner similar to steam coal.

Polymers

Molecule composed of monomers bonded together by covalent bonds, such as starch and proteins. They are generally organic (DNA), artificial or synthetic (such as polystyrene). Polyolefins represent the largest family of polymers.

Production plateau

Expected average stabilized level of production for a field following the production build-up.

Production Sharing Contract (PSA, PSC)

Exploration and production contract under which a host country or, more frequently, its national company, transfers to an oil & gas company (the contractor) or a joint venture (the contractor group) the right to explore a geographic area and develop and produce the reserves of the fields discovered. The contractor (or contractor group) undertakes the execution and financing, as its own risk, of all operations. In return, it is entitled to a portion of the production, called cost oil/gas, to recover its costs and investment. The remaining production, called profit oil/gas, is then shared between the contractor (contractor group), on the one hand, and the national company and/or host country, on the other hand.

Project

As used in this report, “project” may encompass different meanings, such as properties, agreements, investments, developments, phases, activities or components, each of which may also informally be described as a “project”. Such use is for convenience only and is not intended as a precise description of the term “project” as it relates to any specific governmental law or regulation.

Proved and probable reserves (2P reserves)

Sum of proved reserves and probable reserves. 2P reserves are the median quantities of oil and gas recoverable from fields that have already been drilled, covered by E&P contracts and for which technical studies have demonstrated economic development in a long-term price environment. They include projects developed by mining.

Proved permit

Permit for which there are proved reserves.

Proved reserves (1P reserves)

Estimated quantities of crude oil and natural gas that geological and engineering data show, with reasonable certainty (90%), to be recoverable in the coming years from known reservoirs and under existing contractual, economic and operating conditions:

- developed proved reserves are those that can be recovered from existing facilities and without significant additional investment;
- undeveloped proved reserves are those that are expected to be recovered with new investments (surface facilities, wells, etc.).

R

Refining

The various processes used to produce petroleum products from crude oil (distillation, reforming, desulphurization, cracking, etc.).

Renewable energies

An energy source whose inventories can be renewed or are inexhaustible, such as solar, wind, hydraulic, biomass and geothermal energy.

Reserve life
Ratio of reserves at the end of the year to the production sold during the past year.

Reserves
Estimated remaining quantities of oil and gas and related substances expected to be economically producible, as of a given date, by application of development projects to known accumulations.

Reservoirs
Porous, permeable underground rock formation that contains oil or natural gas.

Resources
Sum of proved and probable reserves and contingent resources (average quantities potentially recoverable from known accumulations) - Society of Petroleum Engineers – 03/07.

S

Seismic
Method of exploring the subsoil that entails methodically sending vibration or sound waves and recording their reflections to assess the type, size, shape and depth of subsurface layers.

Shale gas
Natural gas trapped in very compact, low-permeable rock.

Sidetrack
Well drilled from a portion of an existing well (and not by starting from the surface). It is used to get around an obstruction in the original well or resume drilling in a new direction or to explore a nearby geological area.

Silicon
The most abundant element in the earth's crust after oxygen. It does not exist in a free state but in the form of compounds such as silica, which has long been used as an essential element of glass. Polysilicon (or crystalline silicon), which is obtained by purifying silicon and consists of metal-like crystals, is used in the construction of photovoltaic solar panels.

Site abandonment
Oil companies may have to incur expenses related to the abandonment of production sites at the end of exploitation of a deposit. This definitive shutdown of the production on a field or part of sites production capacity (a well, a group of wells, etc.) generally involves the dismantling of production, transport and storage facilities and the restoration of the sites.

Steam Assisted Gravity Drainage (SAGD)
Technique used in *in situ* production of bitumen from oil sands which entails injecting water vapor to increase the temperature of the bitumen and reduce its viscosity, making it easier to extract.

T

Thermochemical conversion
Conversion of energy sources (gas, coal, biomass) through thermal transformation (chemical reactions from heat). Examples include gasification, combustion and photosynthesis (solar energy).

Tower/cylindrical-parabolic collector power plant
Type of solar steam plant consisting of a field of solar mirrors – heliostats – which concentrate sunlight toward a boiler located at the top of a tower. At a cylindrical-parabolic collector plant (a reference to its shape), the mirrors follow the sun automatically as it rises.

U

Unconventional hydrocarbons
Hydrocarbons, oil and gas that cannot be produced or extracted using conventional methods. These hydrocarbons generally include shale gas, coal bed methane, gas located in very low-permeable reservoirs, methane hydrates, extra heavy oil, bitumen and liquid or gaseous hydrocarbons generated during pyrolysis of oil shale.

Unitization
Creation of a new joint venture and appointment of a single operator for the development and production as single unit of an oil or gas field involving several permits/licenses or countries.

Unproved permit
Permit for which there are no proved reserves.

Upgrader
Refining unit where petroleum products, such as heavy oils, are upgraded through cracking and hydrogenation.

Cross reference lists

Registration Document concordance tables, for use in identifying the information required by Annex 1 of Regulation 809/2004/EC of 29 April 2004

Information required by Annex 1 of Regulation 809/2004/EC		Registration Document 2012 Relevant chapters	Relevant paragraphs
1.	Persons responsible	p i	p i
2.	Statutory auditors	5	4.1. to 4.3.
3.	Selected financial information	1	2.
4.	Risk factors	4	1. to 4.
5.	Information about the issuer		
5.1.	**History and development**	**2**	**1.1.**
5.1.1.	Legal and commercial name	2 8	1.1. 2.1.
5.1.2.	Place of registration and registration number	2 8	1.1. 2.1.
5.1.3.	Date of incorporation and length of life	2 8	1.1. 2.1.
5.1.4.	Domicile, legal form, applicable legislation, country of incorporation address and telephone number of registered office	2 8	1.1. 2.1.
5.1.5.	Important events in the development of the business	2 3	2. to 5. 1.
5.2.	**Investments**	**2**	**5.1. to 5.2.**
5.2.1.	Principal investments over the last three fiscal years	2	5.1.
5.2.2.	Principal investments in progress	2	5.1.
5.2.3.	Principal future investments	2	5.2.
6.	Business overview		
6.1.	**Principal activities**	**1** **2**	**2.** **2. to 5.**
6.2.	**Principal markets**	**1** **2**	**2.** **2. to 5.**
6.3.	**Exceptional factors that have influenced the principal activities or principal markets**	**2** **3**	**2. to 5.** **1.1. to 1.5.**
6.4.	**Dependence on certain contracts**	**4**	**3.3.**
6.5.	**Competitive position**	**2** **4**	**1.1., 2., 3., 4.** **3.10.**
7.	Organizational structure	2	8.
7.1.	**Issuer's position within the Group**	**2**	**6.1.**
7.2.	**Significant subsidiaries**	**2** **9**	**6.2.** **7. (note 35)**
8.	Property, plant and equipment		
8.1.	**Most significant tangible fixed assets**	**2** **9**	**1. to 4., 7.** **7. (note 11)**
8.2.	**Environmental issues affecting the most significant tangible fixed assets**	**4** **12**	**2.** **2.**

		Chapter	Paragraph
9.	Operating and financial review		
9.1.	**Financial condition**	**1**	**2.**
		3	**1.1. to 1.6.**
9.2.	**Operating results**	**3**	**1.1. to 1.6.**
9.2.1.	Significant factors materially affecting income from operations	3	1.1. to 1.6. and 4.
9.2.2.	Narrative description of changes in net sales or revenues	3	1.1. to 1.6.
9.2.3.	External factors that have materially affected, or could materially affect, operations	3	1.1. to 1.6. and 4.
10.	Capital resources		
10.1.	**Information concerning capital resources (both short and long term)**	**3**	**2.1.**
10.2.	**Source, amounts and narrative description of cash flows**	**3**	**2.2.**
		9	**5.**
10.3.	**Borrowing requirements and funding structure**	**3**	**2.3.**
		4	**1.**
10.4.	**Restrictions on the use of capital resources that have materially affected, or could materially affect, operations**	**n/a**	**n/a**
10.5.	**Anticipated sources of funds needed for the principal future investments and major encumbrances on the most significant tangible fixed assets**	**2**	**5.2.**
		3	**2.5.**
		9	**5.**
		9	**7. (note 11)**
11.	Research and development, patents and licenses	3	3.
12.	Trend information		
12.1.	**Most significant trends in production, sales and inventory, and costs and selling prices since the end of the last fiscal year**	**3**	**4.3.**
		7	**6.**
12.2.	**Known trends, uncertainties, demands, commitments or events that are likely to have a material effect on prospects for the current fiscal year**	**2**	**5.2.**
		3	**4.**
		4	**1. to 3.**
		7	**6.**
13.	Profit forecasts or estimates	n/a	n/a
14.	Administrative, management and supervisory bodies and Senior Management		
14.1.	**Information about members of the administrative and management bodies**	**5**	**1.1. and 5.3.**
14.2.	**Conflicts of interests, understandings relating to nominations,**	**5**	**1.9.**
	restrictions on the disposal of holdings in the issuer's securities	**5**	**6.3.**
15.	Remuneration and benefits		
15.1.	**Remuneration paid and benefits in kind granted by the issuer and its subsidiaries**	**5**	**5.**
15.2.	**Amounts set aside or accrued to provide pension, retirement or similar benefits**	**5**	**5.5.**
		9	**7. (note 24 and 25)**
16.	Board practices		
16.1.	**Date of expiration of the current term of office, and date of commencement in office**	**5**	**1.1.**
16.2.	**Contracts with the issuer or any of its subsidiaries providing for benefits upon termination of such contracts**	**5**	**5.5.**
16.3.	**Information about the issuer's audit committee**	**5**	**1.5.1. and 1.5.2.**
	and remuneration committee	**5**	**1.6.1. and 1.6.2.**
16.4.	**Compliance with the corporate governance regime in force in France**	**5**	**1.3.**

17.	**Employees**		
17.1.	Number of employees at the end of the last 3 fiscal years; breakdown by geographic location and category of activity	1 5 12	2. 6.1. 1.1.
17.2.	Shareholdings and stock options	1 5 12	2. 6.2. 1.1.3.
17.3.	Arrangements for involving employees in the capital of the issuer	5 5 8	5.6. 6.2. 3.1.
18.	**Major shareholders**		
18.1.	Interests held above the threshold for notification (known interests)	6	4.4.
18.2.	Major shareholders' voting rights in excess of their share in the share capital	6 8	4.4. 2.4.
18.3.	Control of the issuer by one or more shareholders	n/a	n/a
18.4.	Arrangements, known to the issuer, the operation of which may at a subsequent date result in a change in control of the issuer	n/a	n/a
19.	**Related party transactions**	6 9	4.9. 7. (note 24)
20.	**Financial information concerning the issuer's assets and liabilities, financial position and profits and losses**		
20.1.	Historical financial information	7	1. and 2.
20.2.	Pro forma financial information	n/a	n/a
20.3.	Consolidated annual financial statements	9	2. to 7.
20.4.	Auditing of historical annual financial information		
20.4.1.	Auditing of the historical financial information	7 9 11	2. 1. 2.
20.4.2.	Other information in the Registration Document that has been audited by the auditors	5 11	2. 1.
20.4.3.	Financial data in the Registration Document that is not extracted from the issuer's audited financial statements	10 10 7	1.5. to 1.9. 2. 3.
20.5.	Age of latest audited financial information		December 31, 2012
20.6.	Interim and other financial information		
20.6.1.	Quarterly or half yearly financial information published since the date of the last audited financial statements	n/a	n/a
20.6.2.	Interim financial information covering the first six months of the fiscal year after the end of the last audited fiscal year	n/a	n/a
20.7.	Dividend policy	6	2.1.
20.8.	Legal and arbitration proceedings	7	5.
20.9.	Significant change in the issuer's financial or commercial position	7	6.

21.	**Additional information**		
21.1.	**Share capital**		
21.1.1.	Issued capital and authorized capital	8	1.1. to 1.4.
		11	4. (note 6.a)
		9	7. (note 17)
21.1.2.	Shares not representing capital	n/a	n/a
21.1.3.	Shares held by the issuer or its subsidiaries	6	3.2.2., 3.2.7.
		6	4.4.1., 4.5.
		8	1.5.
		9	7. (note 17)
		11	4. (note 6)
21.1.4.	Securities granting future access to the issuer's share capital	8	1.3. and 1.4.
21.1.5.	Terms of any acquisition rights and/or obligations over capital issued but not paid, or any capital increase	5	6. 2. 4. and 6. 2. 5.
21.1.6.	Capital of any member of the Group which is under option	n/a	n/a
21.1.7.	History of the issuer's share capital over the last 3 fiscal years	8	1.6.
		9	7. (note 17)
		11	4. (note 6.a)
21.2.	**Memorandum and Articles of Association**		
21.2.1.	Issuer's objects and purposes	8	2.2.
21.2.2.	Provisions of statutes and charters with respect to the members	5	1.4. and 1.5.
	of the administrative, management and supervisory bodies	8	2.3.
21.2.3.	Rights, preferences and restrictions attaching to each class of the existing shares	8	2.4.
21.2.4.	Action necessary to change the rights of shareholders	8	2.5.
21.2.5.	Manner in which annual general meetings of shareholders are called	8	2.6.
	including the conditions of admission	6	4.4.3. and 4.4.4.
21.2.6.	Provisions of the issuer's statutes, charter or bylaws that would have the effect of delaying, deferring or preventing a change in control of the issuer	8	2.4.
21.2.7.	Provisions of the statutes governing the ownership threshold above which share ownership must be disclosed	8	2.7.
21.2.8.	Conditions governing changes in the capital that are more stringent than is required by law	n/a	n/a
22.	**Material contracts (other than contracts entered into in the ordinary course of business)**	n/a	n/a
23.	**Third party information and statement by experts and declarations of any interest**	n/a	n/a
24.	**Documents on display**	8	4.
25.	**Information on holdings**	8	5.
		9	7. (note 35)
		11	5.

Registration Document concordance table, for use in identifying the information contained in the Annual Financial Report

The concordance table below is used to identify the information in this Registration Document contained in the Annual Financial Report pursuant to Article L. 451-1-2 of the French Financial and Monetary Code and Article 222-3 of the General Regulation of the French Financial Markets Authority.

Annual Financial Report	Registration Document 2012 Relevant chapters	Relevant paragraphs
Annual Financial Statements	11	3. to 4.
Consolidated Financial Statements	9	2. to 7.
Management Report (pursuant to the French Financial and Monetary Code)		
Information mentioned in Articles L. 225-100 and L.225-100-2 of the French Commercial Code		
Analysis of profit and loss, changes in business, financial position and debt position	2	2. to 4.
	3	1. to 2.
Use of financial instruments by the company	4	4.1.
Key financial and non-financial performance indicators	1	1. and 2.
	12	1. to 3.
Principal risks and uncertainties facing the company and all of the entities taken as a whole included in the consolidation	3	4.1. to 4.3.
	4	1. to 4.
	7	5.
Summary table of valid delegations with respect to capital increases	8	1.3.
Information mentioned in Article L. 225-100-3 of the French Commercial Code: factors likely to have an impact in the event of a public offering	**8**	**3.3.**
Information mentioned in Article L. 225-211 of the French Commercial Code: buybacks of its own shares by the Company	**6**	**3.**
Declaration of persons responsible for the Annual Financial Report		p i
Reports of the statutory auditors on the parent company financial statements and consolidated financial statements	9 11	1. 2.
Statutory auditors' fees	5	4.4.4
Report of the Chairman of the Board of Directors (Article L. 225-37 of the French Commercial Code)	5	1.
Auditors' Report on the Report of the Chairman of the Board of Directors (Article L. 225-235 of the French Commercial Code)	5	2.

Registration Document concordance table, for use in identifying the information contained in the Management Report pursuant to the French Commercial Code

Board of Directors' Management Report pursuant to the French Commercial Code	Registration Document 2012 Relevant chapters	Relevant paragraphs
Position and activities of the Company and Group during the fiscal year	2	2. to 4.
Analysis of changes in the business, results and financial position of the Company and Group	3	1. to 2.
Key financial and non-financial performance indicators	1 12	1. and 2. 1. to 3.
Foreseeable change in the position of the Company and Group, outlook	3	4.
Significant changes since the end of the fiscal year	7	6.
Research and development activities	3	3.
Significant acquisitions of shares in or takeovers of companies with registered offices in France	n/a	n/a
Amount of dividends distributed in the last 3 fiscal years and amount of distributed income	6	2.
Injunctions or penalties for antitrust practices	7	5.1.
Information about payment terms of suppliers or customers of the Company	9	7. (note 23)
Description of the principal risks and uncertainties faced by the Company and Group companies	3 4 7	4.1. to 4.3. 1. to 4. 5.
Information about the use of financial instruments by the Company and Group	4	4.1.
Company's exposure to price, credit, liquidity and cash flow risks	4	4.1.
Social and environmental consequences of activities; social commitments to promote sustainable development	12	1. to 4.
Polluting or high-risk activities (upper threshold in accordance with the Seveso II directive)	4 12	2. 2.
Terms of office and duties performed in the company as a whole by each of the directors during the last fiscal year	5	1.1.
Form of management of the company	5	1.7.1. and 3.1.
Remuneration and other benefits granted to each of the directors	5	5.
Mandatory share holding period applicable to directors	5	5.6.2.
Summary of transactions in the Company's stock carried out by the directors	5	6.3.1.
Information about share capital distribution	6	4.4.
TOTAL shares held by Group companies	6 8	3.2. and 4.5. 1.5.
Information mentioned in Article L. 225-211 of the French Commercial Code relating to buybacks of its own shares by the Company	6	3.
Disposals of shares to adjust reciprocal shareholdings	n/a	n/a
Statement of employee involvement in the share capital on the last day of the fiscal year	5 6	6.2. 4.4.
Translation adjustments and adjustments to terms of issue or exercise of stock options or securities granting access to the share capital	n/a	n/a
Changes made to the method of presentation of the annual financial statements	9 11	7., Introduction 4.1.
Observations made by the French Financial Markets Authority on proposed appointments and renewals	n/a	n/a
Table of results for each of the last five fiscal years	11	5.2.
Table and report on delegations with respect to capital increases	8	1.3.
Information mentioned in Article L. 225-100-3 of the French Commercial Code relating to factors likely to have an impact in the event of a public offering	8	3.3.
Report of the Chairman of the Board of Directors L. 225-37 of the French Commercial Code	5	1.

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