

SUPPLEMENTARY INFORMATION ON OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES (Unaudited information)

Below is presented the information on Repsol Group's (*) oil and gas exploration and production activities.

This information includes the following disclosures:

- Capitalised cost, in relation with capitalized historical costs;
- Cost incurred: which represent the amounts capitalized or charged to profit during the year;
- Results of oil and gas exploration and production activities, including revenue and expenses associated directly to this activity;
- Estimated proved net developed and undeveloped oil and gas reserves;
- Standardized measure of discounted future net cash flows relating to proved oil and gas reserves, which represent the estimate of future net cash flows from proven reserves on the basis of a standardized measure criteria.
- Changes in Standardized measure of discounted future net cash flows relating to proved oil and gas reserves with respect to those presented for the previous year.

This information, which the Group performs and publishes annually, is prepared in accordance with the general accepted principles applied in the oil and gas industry, specifically those principles laid down by the U.S. Financial Accounting Standards Board (FASB) and the guidelines and framework established for the industry by the U.S. Securities and Exchange Commission (SEC), which govern financial information practices in the U.S.A. Proved reserves are also estimated in accordance with the criteria established by the Petroleum Reserves Management System of the Society of Petroleum Engineers (PRMS-SPE).

The Group has applied IFRS 11 *Joint Arrangements* from January 1, 2014; first-time application of this new standard has entailed accounting for the Group's interests in joint ventures using the equity method (see Note 2 "Basis of preparation" of the 2014 consolidated annual financial statements).

The benchmark principles used to prepare the information herein (FASB, Topic 932) require separate disclosures for the companies accounted using the equity method. Accordingly, the information provided below is broken down so as to distinguish between fully-consolidated entities and equity-accounted investees. The corresponding information for 2012 and 2013 has been restated accordingly.

(*) As a result of the expropriation of the shares of YPF, S.A. and YPF Gas, S.A. (formerly Repsol YPF Gas, S.A.) owned at the time by the Group, Repsol lost control of YPF and YPF Gas (see Note 4.1. "Disposal of shares of YPF S.A. and YPF GAS S.A." of the 2014 consolidated annual financial statements). In the tables that follow the information corresponding to YPF at December 31, 2011 has been left unchanged.

Capitalised costs

Capitalised costs represent the historical costs capitalised related to oil and gas exploration and production activities, including auxiliary equipment and facilities, and the related accumulated depreciation and accumulated impairment losses.

	Millions of euros								
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
<u>At December 31st, 2012</u>									
Fully-consolidated entities									
Capitalised costs of proved oil and gas properties.....	6,184	462	232	19	679	1,325	2,249	1,218	-
Capitalised costs of unproved oil and gas properties.....	2,057	15	-	7	189	36	1,516	230	64
	8,241	477	232	26	868	1,361	3,765	1,448	64
Auxiliary equipment and facilities.....	991	172	71	13	-	30	459	246	-
Total capitalised costs	9,232	649	303	39	868	1,391	4,224	1,694	64
Accumulated depreciation and impairment losses	(3,457)	(383)	(144)	(7)	(66)	(878)	(1,186)	(793)	-
Net amount (1)	5,775	266	159	32	802	513	3,038	901	64
Equity-accounted investees									
Capitalised costs of proved oil and gas properties.....	3,256	-	1,318	706	-	1,068	-	-	164
Capitalised costs of unproved oil and gas properties.....	981	-	376	48	-	491	-	22	44
	4,237	-	1,694	754	-	1,559	-	22	208
Auxiliary equipment and facilities.....	1,229	-	809	151	-	269	-	-	-
Total capitalised costs	5,466	-	2,503	905	-	1,828	-	22	208
Accumulated depreciation and impairment losses	(2,267)	-	(1,276)	(263)	-	(717)	-	-	(11)
Net amount (1)	3,199	-	1,227	642	-	1,111	-	22	197

	Millions of euros								
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
<u>At December 31st, 2013</u>									
Fully-consolidated entities									
Capitalised costs of proved oil and gas properties.....	6,350	342	222	47	786	1,323	2,421	1,209	-
Capitalised costs of unproved oil and gas properties.....	2,623	25	5	-	154	4	2,090	257	88
	8,973	367	227	47	940	1,327	4,511	1,466	88
Auxiliary equipment and facilities.....	1,049	285	95	10	-	33	386	240	-
Total capitalised costs	10,022	652	322	57	940	1,360	4,897	1,706	88
Accumulated depreciation and impairment losses	(3,852)	(501)	(165)	(12)	(83)	(859)	(1,428)	(804)	-
Net amount (1)	6,170	151	157	45	857	501	3,469	902	88
Equity-accounted investees									
Capitalised costs of proved oil and gas properties.....	3,804	-	1,434	768	-	1,351	-	-	251
Capitalised costs of unproved oil and gas properties.....	957	-	348	-	-	512	-	22	75
	4,761	-	1,782	768	-	1,863	-	22	326
Auxiliary equipment and facilities.....	1,300	-	781	246	-	273	-	-	-
Total capitalised costs	6,061	-	2,563	1,014	-	2,136	-	22	326
Accumulated depreciation and impairment losses	(2,489)	-	(1,364)	(290)	-	(796)	-	-	(39)
Net amount (1)	3,572	-	1,199	724	-	1,340	-	22	287

	Millions of euros								
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
At December 31 st , 2014									
Fully-consolidated entities									
Capitalised costs of proved oil and gas properties.....	7,500	360	326	61	950	1,433	2,954	1,416	-
Capitalised costs of unproved oil and gas properties.....	3,139	73	22	-	42	48	2,484	391	79
	10,639	433	348	61	992	1,481	5,438	1,807	79
Auxiliary equipment and facilities.....	1,542	290	122	11	-	57	769	293	-
Total capitalised costs	12,181	723	470	72	992	1,538	6,207	2,100	79
Accumulated depreciation and impairment losses	(5,266)	(560)	(222)	(13)	(135)	(934)	(2,413)	(989)	-
Net amount (1).....	6,915	163	248	59	857	604	3,794	1,111	79
Equity-accounted investees									
Capitalised costs of proved oil and gas properties.....	5,328	-	1,868	811	-	2,477	-	-	172
Capitalised costs of unproved oil and gas properties.....	873	-	395	-	-	403	-	24	51
	6,201	-	2,263	811	-	2,880	-	24	223
Auxiliary equipment and facilities.....	1,699	-	912	670	-	117	-	-	-
Total capitalised costs	7,900	-	3,175	1,481	-	2,997	-	24	223
Accumulated depreciation and impairment losses	(3,348)	-	(1,744)	(374)	-	(1,175)	-	-	(55)
Net amount (1).....	4,552	-	1,431	1,107	-	1,822	-	24	168

(1) Does not include capitalised costs regarding non-current assets held for sale in 2014, 2013 and 2012 amounting to €293, €155 and €66 million, respectively.

Cost incurred

The costs incurred represent amounts capitalised or charged to profit during the year relating to acquisitions of properties and for exploration and development activities.

		Millones de euros											
		Total	Europe	Trinidad & Tobago		Venezuela	Peru	Rest of South America		North America	Africa	Asia	Australia
At December 31st, 2012													
Fully-consolidated entities													
Acquisition of proved properties.....	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition of unproved properties.....	309	-	-	-	-	-	-	199	110	-	-	-	-
Exploration costs.....	647	80	1	-	97	79	228	119	43	-	-	-	-
Development costs.....	892	96	25	10	115	128	466	52	-	-	-	-	-
TOTAL	1,848	176	26	10	212	207	893	281	43	-	-	-	-
Equity-accounted investees													
Acquisition of proved properties.....	154	-	-	-	-	-	-	-	-	154	-	-	-
Acquisition of unproved properties.....	79	-	-	-	-	-	-	-	-	79	-	-	-
Exploration costs.....	159	-	-	-	-	147	-	12	-	-	-	-	-
Development costs.....	531	-	160	165	-	199	-	-	7	-	-	-	-
TOTAL	923	-	160	165	-	346	-	12	240	-	-	-	-

		Millions of euros											
		Total	Europe	Trinidad & Tobago		Venezuela	Peru	Rest of South America		North America	Africa	Asia ⁽¹⁾	Australia
At December 31st, 2013													
Fully-consolidated entities													
Acquisition of proved properties.....	28	-	-	-	-	-	-	28	-	-	-	-	-
Acquisition of unproved properties.....	371	-	-	-	-	-	-	371	-	-	-	-	-
Exploration costs.....	770	164	6	-	34	52	299	89	104	22	-	-	-
Development costs.....	569	1	4	15	87	124	290	48	-	-	-	-	-
TOTAL	1,738	165	10	15	121	176	988	137	104	22	-	-	-
Equity-accounted investees													
Acquisition of proved properties.....	29	-	-	-	-	-	-	-	-	29	-	-	-
Acquisition of unproved properties.....	78	-	-	-	-	-	-	-	-	78	-	-	-
Exploration costs.....	213	-	-	-	-	209	-	4	-	-	-	-	-
Development costs.....	780	-	175	277	-	262	-	-	66	-	-	-	-
TOTAL	1,100	-	175	277	-	471	-	4	173	-	-	-	-

(1) Includes, at December 31, 2013, the acquisition cost of assets which in previous year, as required by accounting regulations, were classified as non-current assets held for sale, at the percentage finally withheld by Repsol.

Millions of euros

At December 31st, 2014

	Millions of euros									
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia	Australia
Fully-consolidated entities										
Acquisition of proved properties.....	34	-	-	-	-	-	34	-	-	-
Acquisition of unproved properties.....	20	-	-	-	-	-	20	-	-	-
Exploration costs.....	1,346	211	32	-	67	127	450	306	145	8
Development costs.....	567	30	83	15	(34)	106	305	62	-	-
TOTAL	1,967	241	115	15	33	233	809	368	145	8
Equity-accounted investees										
Acquisition of proved properties.....	-	-	-	-	-	-	-	-	-	-
Acquisition of unproved properties.....	-	-	-	-	-	-	-	-	-	-
Exploration costs.....	95	-	-	-	-	93	-	1	1	-
Development costs.....	980	-	245	366	-	347	-	-	22	-
TOTAL	1,075	-	245	366	-	440	-	1	23	-

Results of oil and gas exploration and production activities

The following table shows the revenues and expenses associated directly with the Group's oil and gas exploration and production activities. It does not include any allocation of the finance costs or general expenses and, therefore, is not necessarily indicative of the contribution to consolidated net profit of the oil and gas activities.

	Millions of euros									
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia	Australia
2,012										
Fully-consolidated entities										
. Income										
Sales to non-Group companies.....	386	-	6	6	168	147	21	38	-	-
Sales between business segments and to Group Companies.....	2,066	81	273	-	111	204	820	577	-	-
Other income.....	999	-	-	-	-	17	-	982	-	-
Total income.....	3,451	81	279	6	279	368	841	1,597	-	-
Production costs (1).....	(694)	(20)	(190)	(28)	(133)	(124)	(7)	(192)	-	-
Exploration expenses.....	(495)	(84)	(1)	-	(62)	(75)	(141)	(89)	(43)	-
Other operating expenses.....	(40)	(4)	(3)	-	-	(29)	(3)	(1)	-	-
Depreciation and amortisation charge.....	(577)	(37)	(27)	(2)	(20)	(101)	(313)	(77)	-	-
Profit (Loss) before taxes and charges.....	1,645	(64)	58	(24)	64	39	377	1,238	(43)	-
Taxes and charges.....	(1,032)	38	(28)	0	(19)	(6)	(137)	(893)	13	-
Results of oil and gas production activities (2).....	613	(26)	29	(24)	45	33	240	345	(30)	-
Equity-accounted investees										
. Income										
Sales to non-Group companies.....	1,088	-	289	482	-	278	-	-	39	-
Sales between business segments and to Group Companies.....	472	-	356	-	-	116	-	-	-	-
Other income.....	3	-	-	-	-	3	-	-	-	-
Total income.....	1,563	-	645	482	-	397	-	-	39	-
Production costs (1).....	(534)	-	(194)	(227)	-	(89)	-	-	(24)	-
Exploration expenses.....	(56)	-	-	-	-	(53)	-	(3)	-	-
Other operating expenses.....	(35)	-	(1)	(1)	-	(33)	-	-	-	-
Depreciation and amortisation charge.....	(294)	-	(156)	(42)	-	(85)	-	-	(11)	-
Profit (Loss) before taxes and charges.....	643	-	294	212	-	137	-	(3)	4	-
Taxes and charges.....	(258)	-	(164)	(22)	-	(72)	-	1	(1)	-
Results of oil and gas production activities (2).....	385	-	130	190	-	65	-	(2)	3	-
Total results of oil and gas production activities.....	998	(26)	159	166	45	98	240	343	(27)	-

	Millions of euros									
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia	Australia
2,013										
Fully-consolidated entities										
. Income										
Sales to non-Group companies.....	503	-	5	8	203	218	39	30	-	-
Sales between business segments and to Group Companies.....	1,722	197	258	-	105	118	729	315	-	-
Other income.....	620	-	-	-	-	27	-	593	-	-
Total income.....	2,845	197	263	8	308	363	768	938	-	-
Production costs (1).....	(584)	(22)	(183)	(22)	(137)	(78)	(37)	(105)	-	-
Exploration expenses.....	(433)	(152)	(1)	-	(6)	(52)	(114)	(58)	(28)	(22)
Other operating expenses.....	(34)	(5)	(2)	-	-	(24)	(1)	(2)	-	-
Depreciation and amortisation charge.....	(581)	(120)	(28)	(2)	(21)	(58)	(305)	(46)	(1)	-
Profit (Loss) before taxes and charges.....	1,213	(102)	49	(16)	144	151	311	727	(29)	(22)
Taxes and charges.....	(722)	62	(27)	(11)	(43)	(28)	(145)	(529)	(2)	1
Results of oil and gas production activities (2).....	491	(40)	22	(27)	101	123	166	198	(31)	(21)
Equity-accounted investees										
. Income										
Sales to non-Group companies.....	1,410	-	376	452	-	395	-	-	187	-
Sales between business segments and to Group Companies.....	469	-	369	-	-	100	-	-	-	-
Other income.....	7	-	-	-	-	7	-	-	-	-
Total income.....	1,886	-	745	452	-	502	-	-	187	-
Production costs (1).....	(689)	-	(212)	(200)	-	(160)	-	-	(117)	-
Exploration expenses.....	(186)	-	-	-	-	(183)	-	(3)	-	-
Other operating expenses.....	8	-	(2)	(2)	-	12	-	-	-	-
Depreciation and amortisation charge.....	(317)	-	(144)	(42)	-	(100)	-	-	(31)	-
Profit (Loss) before taxes and charges.....	702	-	387	208	-	71	-	(3)	39	-
Taxes and charges.....	(371)	-	(216)	(73)	-	(73)	-	1	(10)	-
Results of oil and gas production activities (2).....	331	-	171	135	-	(2)	-	(2)	29	-
Total results of oil and gas production activities.....	822	(40)	193	108	101	121	166	196	(2)	(21)

	Millions of euros									
	Total	Europe	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia	Australia
2,014										
Fully-consolidated entities										
Income										
Sales to non-Group companies.....	662	-	5	10	260	272	90	25	-	-
Sales between business segments and to Group Companies.....	1,356	148	223	-	39	100	675	171	-	-
Other income.....	260	-	-	-	-	-	-	260	-	-
Total income.....	2,278	148	228	10	299	372	765	456	-	-
Production costs (1).....	(524)	(27)	(160)	(34)	(128)	(66)	(20)	(89)	-	-
Exploration expenses	(811)	(228)	(27)	-	(21)	(80)	(139)	(214)	(120)	18
Other operating expenses.....	(16)	(7)	(3)	-	(1)	(2)	(1)	(2)	-	-
Depreciation and amortisation charge	(634)	(60)	(33)	(2)	(38)	(69)	(404)	(27)	(1)	-
Profit (Loss) before taxes and charges	293	(174)	5	(26)	111	155	201	124	(121)	18
Taxes and charges	(215)	65	(9)	6	(38)	(23)	(75)	(176)	41	(6)
Results of oil and gas production activities (2).....	78	(109)	(4)	(20)	73	132	126	(52)	(80)	12
Equity-accounted investees										
Income										
Sales to non-Group companies.....	1,705	-	735	409	-	401	-	-	160	-
Sales between business segments and to Group Companies.....	229	-	-	-	-	229	-	-	-	-
Other income.....	-	-	-	-	-	-	-	-	-	-
Total income.....	1,934	-	735	409	-	630	-	-	160	-
Production costs (1).....	(683)	-	(222)	(189)	-	(188)	-	-	(84)	-
Exploration expenses	(92)	-	-	-	-	(92)	-	-	-	-
Other operating expenses.....	(7)	-	(2)	(2)	-	(2)	-	-	(1)	-
Depreciation and amortisation charge	(413)	-	(179)	(43)	-	(147)	-	-	(44)	-
Profit (Loss) before taxes and charges	739	-	332	175	-	201	-	-	31	-
Taxes and charges	(323)	-	(186)	(44)	-	(89)	-	-	(4)	-
Results of oil and gas production activities (2).....	416	-	146	131	-	112	-	-	27	-
Total results of oil and gas production activities	494	(109)	142	111	73	244	126	(52)	(53)	12

- (1) Production costs include local taxes, production taxes and other similar payments amounting to €375, €490 and €113 million in 2014, 2013 and 2012 respectively. It also includes transport and other costs totalling €18, €11 and €56 million in 2014, 2013 and 2012 respectively.
- (2) The results do not include the income and expenses associated with the impairment provisions, registered as a result of the comparison between market value (discounted cash flows) from oil and gas proved and non-proved reserves (the latter of which are subject to a risk factor) from each field owned by the Company at year-end and the carrying amount of the assets associated therewith, which amounted to a net expense of €25million in 2014, a net expense of €6 million in 2013, and a net expense of €14 million in 2012.

Estimated proved net developed and undeveloped oil and gas reserves

The tables below reflect the net developed and undeveloped proved reserves of crude oil, condensed oil and LPG and natural gas as of December 31, 2014, 2013 and 2012, and the variations therein. Proved reserves shown includes the reserves equivalent to the economic income obtained under certain production sharing contracts entered into as of December 31, 2014, 2013 and 2012.

In determining net reserves, we exclude from our reported reserves royalties due to others, whether payable in cash or in kind, where the royalty owner has a direct interest in the underlying production and is able to make lifting and sales arrangements independently. By contrast, to the extent that royalty payments required to be made to a third party, whether payable in cash or in kind, are a financial obligation, or are substantially equivalent to a production or severance tax, the related reserves are not excluded from our reported reserves despite the fact that such payments are referred to as “royalties” under local rules. We follow the same methodology in reporting our production amounts.

Proved reserves in each year were estimated in accordance with the disclosure requirements and framework established for the petroleum and gas industry by the Securities and Exchange Commission (SEC) and on the basis of the criteria established by the Petroleum Reserves Management System of the Society of Petroleum Engineers (PRMS-SPE). In accordance with these rules, proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible – from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonable certain that it will commence the project within a reasonable time.

All of Repsol’s oil and gas reserves have been estimated by the company’s petroleum engineers.

To control the quality of reserves booked, Repsol has established a process that is integrated into Repsol’s internal control system. The process to manage reserves booking is centrally controlled by the Reserve Control Direction which is independent from the upstream activities and it is overseen by the Audit and Control Committee. Furthermore, the volumes booked are submitted to third party engineers for a reserves audit on a periodic basis (100% of the reserves on a three years cycle).

For those areas submitted to third party audit, Repsol’s proved reserves figures have to be within 7% of the third party reserves audit figures for Repsol to declare that the reserves information meets the third party reserves audit standards. In the event that the difference is greater than 7% tolerance, Repsol reestimates its proved reserves to achieve this tolerance level or discloses the third party reserves audit figures.

In 2014, Repsol commissioned an external audit for various areas of South America, North America, Northern Africa, Asia and Spain. The independent engineers' reports will be available on our website: www.repsol.com.

Proved developed and undeveloped reserves of crude oil, condensate GPL:

	Millions of barrels									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
Reserves at December 31 st , 2011 (1)(2)(3)										
Fully-consolidated entities										
Reserves at December 31 st , 2011 (1)(2)(3)	878	6	584	24	-	63	37	49	115	-
Revisions of previous estimates	38	0	-	1	-	-	11	2	23	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	10	-	-	-	-	2	(0)	6	3	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(595)	-	(584)	-	-	-	(10)	(1)	-	-
Production (1)	(42)	(1)	-	(3)	-	(3)	(9)	(10)	(16)	-
Reserves at December 31 st , 2012 (1)	290	5	-	22	-	62	29	46	125	-
Revisions of previous estimates	22	1	-	1	-	19	1	2	(1)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(36)	(2)	-	(3)	-	(4)	(6)	(10)	(11)	-
Reserves at December 31 st , 2013 (1)	276	4	-	20	-	78	24	38	113	-
Revisions of previous estimates	20	1	-	-	-	-	3	18	(2)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	13	-	-	2	-	11	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(31)	(2)	-	(3)	-	(4)	(6)	(10)	(6)	-
Reserves at December 31 st , 2014 (1)	278	3	-	19	-	85	21	46	105	-
Equity-accounted investees										
Reserves at December 31 st , 2011 (1)	100	-	-	8	50	-	42	-	-	-
Revisions of previous estimates	2	-	-	1	(1)	-	2	-	-	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	23	-	-	-	-	-	23	-	-	-
Purchases of minerals in place	24	-	-	-	-	-	-	-	-	24
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(10)	-	-	(1)	(5)	-	(3)	-	-	(1)
Reserves at December 31 st , 2012 (1)	139	-	-	8	44	-	63	-	-	23
Revisions of previous estimates	13	-	-	0	3	-	3	-	-	6
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	10	-	-	1	1	-	7	-	-	1
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(15)	-	-	(1)	(5)	-	(5)	-	-	(4)
Reserves at December 31 st , 2013 (1)	146	-	-	9	44	-	67	-	-	26
Revisions of previous estimates	22	-	-	1	3	-	10	-	-	8
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	13	-	-	-	-	-	13	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(18)	-	-	(1)	(5)	-	(8)	-	-	(4)
Reserves at December 31 st , 2014 (1)	163	-	-	9	42	-	82	-	-	30
Total Fully-consolidated entities and Equity-accounted inv	441	3	-	28	42	85	103	46	105	30
Proved developed reserves of crude oil, condensate GPL:										
At December 31 st , 2011	671	2	438	24	34	45	36	21	71	-
Fully-consolidated entities	619	2	438	22	-	45	21	21	71	-
Equity-accounted investees	52	-	-	3	34	-	15	-	-	-
At December 31 st , 2012	255	5	-	23	35	42	34	20	80	16
Fully-consolidated entities	187	5	-	20	-	42	20	20	80	-
Equity-accounted investees	68	-	-	3	35	-	14	-	-	16
At December 31 st , 2013	238	3	-	21	33	39	41	13	68	19
Fully-consolidated entities	162	3	-	18	-	39	20	13	68	-
Equity-accounted investees	76	-	-	3	33	-	21	-	-	19
At December 31 st , 2014	265	3	-	21	31	52	44	25	65	24
Fully-consolidated entities	181	3	-	18	-	52	18	25	65	-
Equity-accounted investees	84	-	-	3	31	-	26	-	-	24

Note: The aggregated changes in reserves and total reserves at December 31 may differ from the individual values shown because the calculations use more precise figures than those shown in the table

- (1) Total proved developed and undeveloped net reserves at December 31, 2014, 2013, 2012 and 2011 include an estimated 46, 44, 39 and 109 million barrels of oil equivalent, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Net production in 2014, 2013 and 2012 includes an estimated 4, 4 and 3 million barrels of oil equivalent, respectively, in respect of such types of payments.
- (2) Includes 249 million barrels of oil equivalent relating to the participation in the minority interest of YPF, as of December 31, 2011.
- (3) At December 31, 2011, proven reserves of crude oil, condensates and LPG relating to YPF stood at 584 million barrels in "Argentina" and less than 1 million barrels of crude oil equivalent in "North America". Similarly, YPF production at December 31, 2011 amounted to 100 million barrels in "Argentina" and 0.5 million barrels in "North America".

Proved developed and undeveloped reserves of natural gas:

	Thousand Millions of Standard Cubic Feet									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
Fully-consolidated entities										
Reserves at December 31 st , 2011 (1)(2)(3)	4,198	0	2,400	72	36	1,243	271	11	165	-
Revisions of previous estimates	109	2	-	(13)	82	-	40	(0)	(1)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	65	-	-	-	-	31	1	33	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(2,400)	-	(2,400)	-	-	-	-	-	-	-
Production (1)	(82)	(2)	-	(4)	(4)	(39)	(16)	(5)	(12)	-
Reserves at December 31 st , 2012 (1)	1,891	0	-	54	114	1,235	295	40	152	-
Revisions of previous estimates	246	1	-	13	(21)	238	(6)	13	7	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(94)	(1)	-	(4)	(5)	(40)	(24)	(9)	(11)	-
Reserves at December 31 st , 2013 (1)	2,043	0	-	63	88	1,433	266	44	148	-
Revisions of previous estimates	(8)	-	-	(56)	-	-	19	53	(24)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	174	-	-	1	-	173	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(121)	-	-	(4)	(6)	(53)	(33)	(14)	(11)	-
Reserves at December 31 st , 2014 (1)	2,088	0	-	4	82	1,553	252	83	113	-
Equity-accounted investees										
Reserves at December 31 st , 2011 (1)	2,550	-	-	1,770	577	-	203	-	-	-
Revisions of previous estimates	108	-	-	93	1	-	14	-	-	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	626	-	-	-	452	-	19	-	-	155
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(6)	-	-	(6)	-	-	-	-	-	-
Production (1)	(309)	-	-	(236)	(44)	-	(30)	-	-	-
Reserves at December 31 st , 2012 (1)	2,969	-	-	1,622	986	-	205	-	-	155
Revisions of previous estimates	253	-	-	81	136	-	30	-	-	5
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	1,282	-	-	148	1,135	-	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(79)	-	-	-	-	-	-	-	-	(79)
Production (1)	(330)	-	-	(249)	(42)	-	(31)	-	-	(8)
Reserves at December 31 st , 2013 (1)	4,095	-	-	1,602	2,216	-	204	-	-	73
Revisions of previous estimates	316	-	-	246	4	-	70	-	-	(4)
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(2)	-	-	-	-	-	(2)	-	-	-
Production (1)	(333)	-	-	(241)	(43)	-	(35)	-	-	(14)
Reserves at December 31 st , 2014 (1)	4,076	-	-	1,607	2,177	-	237	-	-	55
Total Fully-consolidated entities and Equity-accounted investees	6,164	0	-	1,611	2,259	1,553	489	83	113	55

Proved developed reserves of natural gas:

At December 31 st , 2011	3,856	0	1,796	699	305	802	186	8	58	-
Fully-consolidated entities	2,776	0	1,796	7	36	802	68	8	58	-
Equity-accounted investees	1,079	-	-	692	269	-	118	-	-	-
At December 31 st , 2012	2,134	0	-	686	267	764	299	18	46	54
Fully-consolidated entities	1,036	0	-	7	38	764	164	18	46	-
Equity-accounted investees	1,097	-	-	679	229	-	135	-	-	54
At December 31 st , 2013	1,998	0	-	651	241	691	329	24	41	22
Fully-consolidated entities	997	0	-	5	43	691	194	24	41	-
Equity-accounted investees	1,001	-	-	647	198	-	135	-	-	22
At December 31 st , 2014	2,251	-	-	644	195	926	372	49	65	-
Fully-consolidated entities	1,262	-	-	2	37	926	216	49	32	-
Equity-accounted investees	989	-	-	642	158	-	156	-	33	-

Note: The aggregated changes in reserves and total reserves at December 31 may differ from the individual values shown because the calculations use more precise figures than those shown in the table.

- (1) Total proved developed and undeveloped net reserves at December 31, 2014, 2013, 2012 and 2011 include an estimated 1,144, 1,052, 767 and 1,026 thousand million standard cubic feet of gas, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Net production in 2013, 2012 and 2011 includes an estimated approximately 32, 40 and 26 thousands millions of standard cubic feet of gas, respectively, in respect of such types of payments.
- (2) Includes 1,021 thousand million standard cubic feet of gas relating to the participation in the minority interest of YPF, as of December 31, 2011.
- (3) At December 31, 2011, proven reserves of natural gas relating to YPF stood at 2,397 billion cubic feet of gas in "Argentina" and 2 million cubic feet of gas in "North America".

Proved developed and undeveloped reserves of crude oil, condensate, natural gas liquids and natural gas:

	Millions of Barrels of Oil Equivalent									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela ^a	Peru	Rest of South America	North America	Africa	Asia
Fully-consolidated entities										
Reserves at December 31 st , 2011 (1)(2)(3)	1,626	6	1,013	37	6	285	85	50	145	-
Revisions of previous estimates	58	1	-	(1)	15	-	18	2	23	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	22	-	-	-	-	7	-	12	3	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(1,023)	-	(1,013)	-	-	-	(10)	-	-	-
Production (1)	(57)	(1)	-	(4)	(1)	(10)	(11)	(11)	(19)	-
Reserves at December 31 st , 2012 (1)	627	5	-	32	20	282	82	53	152	-
Revisions of previous estimates	66	1	-	3	(4)	62	(0)	4	(0)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	-	-	-	-	-	-	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(53)	(3)	-	(4)	(1)	(11)	(11)	(11)	(13)	-
Reserves at December 31 st , 2013 (1)	639	4	-	31	16	333	71	45	139	-
Revisions of previous estimates	19	1	-	(9)	-	-	6	28	(7)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	44	-	-	2	-	42	-	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(52)	(2)	-	(4)	(1)	(14)	(11)	(13)	(7)	-
Reserves at December 31 st , 2014 (1)	650	3	-	20	15	361	66	60	125	-
Equity-accounted investees										
Reserves at December 31 st , 2011 (1)	554	-	-	323	153	-	78	-	-	-
Revisions of previous estimates	22	-	-	18	(0)	-	4	-	-	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	134	-	-	-	81	-	26	-	-	28
Purchases of minerals in place	24	-	-	-	-	-	-	-	-	24
Sales of minerals in place	(1)	-	-	(1)	-	-	-	-	-	-
Production (1)	(65)	-	-	(43)	(13)	-	(9)	-	-	(1)
Reserves at December 31 st , 2012 (1)	667	-	-	297	221	-	99	-	-	50
Revisions of previous estimates	58	-	-	15	28	-	8	-	-	7
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	238	-	-	28	203	-	7	-	-	1
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(14)	-	-	-	-	-	-	-	-	(14)
Production (1)	(73)	-	-	(46)	(12)	-	(10)	-	-	(5)
Reserves at December 31 st , 2013 (1)	876	-	-	294	438	-	104	-	-	39
Revisions of previous estimates	78	-	-	45	4	-	22	-	-	7
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	13	-	-	-	-	-	13	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(1)	-	-	-	-	-	(1)	-	-	-
Production (1)	(77)	-	-	(45)	(12)	-	(14)	-	-	(6)
Reserves at December 31 st , 2014 (1)	889	-	-	294	430	-	124	-	-	40
Total Fully-consolidated entities and Equity-accounted in	1,539	3	-	314	445	361	190	60	125	40

Proved developed reserves of crude oil, condensate, natural gas liquids and natural gas

At December 31 st , 2011	1,358	2	759	149	89	188	69	22	82	-
Fully-consolidated entities	1,114	2	759	23	6	188	33	22	82	-
Equity-accounted investees	244	-	-	126	82	-	36	-	-	-
At December 31 st , 2012	635	5	-	145	82	178	88	24	88	25
Fully-consolidated entities	372	5	-	21	7	178	50	24	88	-
Equity-accounted investees	263	-	-	124	76	-	38	-	-	25
At December 31 st , 2013	594	3	-	137	76	162	99	18	75	22
Fully-consolidated entities	340	3	-	19	8	162	55	18	75	-
Equity-accounted investees	254	-	-	119	68	-	45	-	-	22
At December 31 st , 2014	666	3	-	135	66	217	110	33	102	-
Fully-consolidated entities	405	3	-	18	7	217	56	33	71	-
Equity-accounted investees	261	-	-	117	59	-	54	-	31	-

Note: The aggregated changes in reserves and total reserves at December 31 may differ from the individual values shown because the calculations use more precise figures than those shown in the table.

- (1) Total proved developed and undeveloped net reserves at December 31, 2014, 2013, 2012 and 2011 include an estimated volume of approximately 250, 231, 176 and 292 million barrels of oil equivalent, respectively, corresponding to royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Net production in 2014, 2013 and 2012 includes an estimated volume of 10, 11 and 7 million barrels of oil equivalent, respectively, in connection with such types of payments.
- (2) Includes 431 million barrels of oil equivalent relating to the participation in the minority interest of YPF, as of December 31, 2011.
- (3) At December 31, 2011, proven reserves of crude oil, condensates, GLP and natural gas relating to YPF stood at 1,011 million barrels of equivalents in "Argentina" and 2 million barrels equivalent in "North America".

Standardized measure of discounted future net cash flows and changes therein relating to proved oil and gas reserves

The estimate of future net cash flows was performed in accordance with the guidelines and framework established for the oil and gas industry by the Securities Exchange Commission (SEC) and the principles laid down by the U.S Financial Accounting Standards Board (FASB), which govern financial information practices in the U.S.A. The method applied is the impartiality or fairness method and is the result of applying the average oil and gas prices in 2014 (considering price changes only by contractual agreement) to estimated future production of proved reserves of oil and gas as of the date of the last balance sheet, less the estimated future costs (based on current costs) to be incurred in the development and production of proved reserves, assuming the continuation of current economic conditions.

Future production costs were estimated on based on a costs structure at the end of the year. Future development costs were calculated on the basis of technical studies conducted by Repsol and by the operators holding joint title with Repsol. The taxes projected for each of the future years were determined under the contractual and tax regime prevailing at the end of the year. The rate used to discount the future net revenues was 10%.

The present value of the future net cash flows estimated on the basis of the aforementioned assumptions, applying the principle of impartiality, is not intended to be interpreted, and should not be interpreted, as the fair value of the Group's oil and gas reserves. An estimation of the fair value of these reserves should also include the future exploitation of reserves not yet classified as proved reserves, possible changes in future prices and costs and a discount rate which represents the time value of money at the calculation date and the uncertainties inherent to estimating the reserves.

The following table shows the present value of the future net revenues relating to proved oil and gas reserves, calculated on the basis of the aforementioned assumptions:

Present value of the future net revenues

	Millions of euros									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
At December 31st, 2012										
Fully-consolidated entities										
Future cash inflows	25,256	449	-	2,013	238	5,087	2,387	3,608	11,474	-
Future production costs	(6,458)	(139)	-	(1,451)	(109)	(2,637)	(495)	(442)	(1,185)	-
Future development and abandonment costs	(2,078)	(229)	-	(216)	(51)	(233)	(269)	(535)	(545)	-
Future income tax expenses	(7,835)	15	-	(178)	(14)	(657)	(335)	(481)	(6,185)	-
Future net cash flows after taxes	8,885	96	-	168	64	1,560	1,288	2,150	3,559	-
10% annual discount for estimated timing of cash flows	(3,241)	65	-	(36)	(46)	(723)	(454)	(629)	(1,418)	-
Standardized measure of discounted future net cash flows	5,644	161	-	132	18	837	834	1,521	2,141	-
Equity-accounted investees										
Future cash inflows	18,212	-	-	4,531	6,150	-	6,081	-	-	1,450
Future production costs	(7,885)	-	-	(1,638)	(2,908)	-	(2,424)	-	-	(915)
Future development and abandonment costs	(2,838)	-	-	(1,399)	(627)	-	(637)	-	-	(175)
Future income tax expenses	(2,377)	-	-	(716)	(810)	-	(778)	-	-	(73)
Future net cash flows after taxes	5,112	-	-	778	1,805	-	2,242	-	-	287
10% annual discount for estimated timing of cash flows	(2,226)	-	-	(366)	(981)	-	(740)	-	-	(139)
Standardized measure of discounted future net cash flows	2,886	-	-	412	824	-	1,502	-	-	148
Total Standardized measure of discounted future net cash flows	8,530	161	-	544	842	837	2,336	1,521	2,141	148

	Millions of euros									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
At December 31st, 2013										
Fully-consolidated entities										
Future cash inflows	24,182	304	-	1,695	181	6,714	1,989	3,626	9,673	-
Future production costs	(7,233)	(146)	-	(1,266)	(69)	(3,678)	(402)	(558)	(1,114)	-
Future development and abandonment costs	(2,040)	(239)	-	(213)	(39)	(322)	(185)	(540)	(502)	-
Future income tax expenses	(6,619)	50	-	(126)	(8)	(825)	(262)	(366)	(5,082)	-
Future net cash flows after taxes	8,290	(31)	-	90	65	1,889	1,140	2,162	2,975	-
10% annual discount for estimated timing of cash flows	(3,438)	124	-	(10)	(38)	(1,044)	(348)	(894)	(1,228)	-
Standardized measure of discounted future net cash flows	4,852	93	-	80	27	845	792	1,268	1,747	-
Equity-accounted investees										
Future cash inflows	20,576	-	-	3,515	9,393	-	6,542	-	-	1,126
Future production costs	(8,375)	-	-	(1,194)	(3,604)	-	(3,055)	-	-	(522)
Future development and abandonment costs	(2,798)	-	-	(1,231)	(980)	-	(442)	-	-	(145)
Future income tax expenses	(2,878)	-	-	(419)	(1,622)	-	(735)	-	-	(102)
Future net cash flows after taxes	6,525	-	-	671	3,187	-	2,310	-	-	357
10% annual discount for estimated timing of cash flows	(3,032)	-	-	(288)	(1,953)	-	(630)	-	-	(161)
Standardized measure of discounted future net cash flows	3,493	-	-	383	1,234	-	1,680	-	-	196
Total Standardized measure of discounted future net cash flows	8,345	93	-	463	1,261	845	2,472	1,268	1,747	196

	Millions of euros									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
At December 31st, 2014										
Fully-consolidated entities										
Future cash inflows	24,601	265	-	1,652	198	7,437	1,903	3,708	9,438	-
Future production costs	(7,358)	(127)	-	(1,363)	(75)	(3,769)	(421)	(593)	(1,010)	-
Future development and abandonment costs	(2,706)	(207)	-	(198)	(25)	(973)	(171)	(661)	(471)	-
Future income tax expenses	(6,529)	22	-	(32)	(9)	(799)	(236)	(563)	(4,912)	-
Future net cash flows after taxes	8,008	(47)	-	59	89	1,896	1,075	1,891	3,045	-
10% annual discount for estimated timing of cash flows	(3,002)	117	-	29	(42)	(1,123)	(293)	(522)	(1,168)	-
Standardized measure of discounted future net cash flows	5,006	70	-	88	47	773	782	1,369	1,877	-
Equity-accounted investees										
Future cash inflows	24,360	-	-	4,824	10,364	-	7,336	-	-	1,836
Future production costs	(9,922)	-	-	(1,662)	(3,983)	-	(3,316)	-	-	(961)
Future development and abandonment costs	(3,732)	-	-	(1,804)	(1,009)	-	(830)	-	-	(89)
Future income tax expenses	(3,087)	-	-	(480)	(1,750)	-	(681)	-	-	(176)
Future net cash flows after taxes	7,619	-	-	878	3,622	-	2,509	-	-	610
10% annual discount for estimated timing of cash flows	(3,291)	-	-	(271)	(2,147)	-	(594)	-	-	(279)
Standardized measure of discounted future net cash flows	4,328	-	-	607	1,475	-	1,915	-	-	331
Total Standardized measure of discounted future net cash flows	9,334	70	-	695	1,522	773	2,697	1,369	1,877	331

Changes in Standardized measure of discounted future net cash flows relating to proved oil and gas reserves

The detail of the changes in the standardized measure of discounted future net cash flows for 2011, 2012 and 2013 is as follows:

	Millions of euros									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
Changes in the standardized measure of discounted future net cash flows										
Fully-consolidated entities										
Balance at December 31st, 2011 (1)	12,216	157	6,437	142	23	945	799	1,733	1,980	-
Changes due to sale or transfer prices of future production costs	(182)	(3)	-	1	(10)	(228)	35	(40)	63	-
Changes in future development costs	(73)	(9)	-	(25)	(14)	59	(35)	(86)	37	-
Oil and gas sales and transfers in the period.....	(2,129)	(56)	-	(83)	(5)	(142)	(209)	(654)	(980)	-
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	278	-	-	-	-	28	2	100	148	-
Net changes due to purchases/sales of assets.....	(6,438)	-	(6,312)	-	-	-	(110)	(16)	-	-
Net changes due to revisions in quantity estimates	1,053	6	-	39	21	(98)	146	131	808	-
Previously estimated development costs incurred in the year.....	521	48	-	56	-	69	141	165	42	-
Effect of discounting to a different date and exchange rate effect.....	244	11	(125)	11	1	70	57	96	123	-
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	154	7	-	(9)	2	134	8	92	(80)	-
Net change.....	(6,572)	4	(6,437)	(10)	(5)	(108)	35	(212)	161	-
Balance at December 31st, 2012	5,644	161	-	132	18	837	834	1,521	2,141	-
Changes due to sale or transfer prices of future production costs	(48)	(22)	-	(56)	2	272	(60)	35	(219)	-
Changes in future development costs	(242)	38	-	(12)	(25)	(54)	(32)	(128)	(29)	-
Oil and gas sales and transfers in the period.....	(2,327)	(127)	-	(72)	(4)	(230)	(202)	(603)	(1,089)	-
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	-	-	-	-	-	-	-	-	-	-
Net changes due to purchases/sales of assets.....	-	-	-	-	-	-	-	-	-	-
Net changes due to revisions in quantity estimates	155	13	-	31	-	(57)	88	162	(82)	-
Previously estimated development costs incurred in the year.....	416	14	-	18	29	46	103	140	66	-
Effect of discounting to a different date and exchange rate effect.....	196	(2)	-	5	4	31	37	42	79	-
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	1,058	18	-	34	3	-	24	99	880	-
Net change.....	(792)	(68)	-	(52)	9	8	(42)	(253)	(394)	-
Balance at December 31st, 2013	4,852	93	-	80	27	845	792	1,268	1,747	-
Changes due to sale or transfer prices of future production costs	(774)	4	-	(118)	(1)	11	(79)	(303)	(288)	-
Changes in future development costs	(165)	34	-	26	-	(133)	(14)	(8)	(70)	-
Oil and gas sales and transfers in the period.....	(2,248)	(77)	-	(83)	(2)	(162)	(273)	(625)	(1,026)	-
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	112	-	-	44	-	65	3	-	-	-
Net changes due to purchases/sales of assets.....	-	-	-	-	-	-	-	-	-	-
Net changes due to revisions in quantity estimates	857	11	-	4	(4)	(147)	54	682	257	-
Previously estimated development costs incurred in the year.....	490	13	-	31	16	15	80	193	142	-
Effect of discounting to a different date and exchange rate effect.....	1,035	12	-	19	9	175	169	264	387	-
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	847	(20)	-	85	2	104	50	(102)	728	-
Net change.....	154	(23)	-	8	20	(72)	(10)	101	130	-
Balance at December 31st, 2014	5,006	70	-	88	47	773	782	1,369	1,877	-

	Millions of euros									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
Equity-accounted investees										
Balance at December 31st, 2011 (1)	2,484	-	-	704	710	-	1,070	-	-	-
Changes due to sale or transfer prices of future production costs	(23)	-	-	(100)	114	-	(37)	-	-	-
Changes in future development costs	(363)	-	-	(124)	(148)	-	(91)	-	-	-
Oil and gas sales and transfers in the period.....	(883)	-	-	(381)	(256)	-	(246)	-	-	-
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	875	-	-	-	180	-	615	-	-	80
Net changes due to purchases/sales of assets.....	65	-	-	(3)	-	-	-	-	-	68
Net changes due to revisions in quantity estimates	(19)	-	-	(1)	(57)	-	39	-	-	-
Previously estimated development costs incurred in the year.....	415	-	-	152	178	-	85	-	-	-
Effect of discounting to a different date and exchange rate effect.....	148	-	-	46	57	-	45	-	-	-
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	187	-	-	119	46	-	22	-	-	-
Net change.....	402	-	-	(292)	114	-	432	-	-	148
Balance at December 31st, 2012	2,886	-	-	412	824	-	1,502	-	-	148
Changes due to sale or transfer prices of future production costs	(203)	-	-	(321)	212	-	(104)	-	-	10
Changes in future development costs	(129)	-	-	26	(111)	-	-	-	-	(44)
Oil and gas sales and transfers in the period.....	(796)	-	-	(174)	(242)	-	(319)	-	-	(61)
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	750	-	-	80	509	-	150	-	-	11
Net changes due to purchases/sales of assets.....	(5)	-	-	-	-	-	-	-	-	(5)
Net changes due to revisions in quantity estimates	414	-	-	51	153	-	150	-	-	60
Previously estimated development costs incurred in the year.....	591	-	-	147	183	-	186	-	-	75
Effect of discounting to a different date and exchange rate effect.....	138	-	-	23	44	-	61	-	-	10
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	(153)	-	-	139	(338)	-	54	-	-	(8)
Net change.....	607	-	-	(29)	410	-	178	-	-	48
Balance at December 31st, 2013	3,493	-	-	383	1,234	-	1,680	-	-	196
Changes due to sale or transfer prices of future production costs	(529)	-	-	307	(148)	-	(710)	-	-	22
Changes in future development costs	(445)	-	-	(228)	(138)	-	(101)	-	-	22
Oil and gas sales and transfers in the period.....	(1,185)	-	-	(317)	(239)	-	(560)	-	-	(69)
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	143	-	-	-	-	-	143	-	-	-
Net changes due to purchases/sales of assets.....	(4)	-	-	-	-	-	(4)	-	-	-
Net changes due to revisions in quantity estimates	1,091	-	-	112	78	-	823	-	-	78
Previously estimated development costs incurred in the year.....	604	-	-	148	265	-	143	-	-	48
Effect of discounting to a different date and exchange rate effect.....	846	-	-	99	314	-	378	-	-	55
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	314	-	-	103	109	-	123	-	-	(21)
Net change.....	835	-	-	224	241	-	235	-	-	135
Balance at December 31st, 2014	4,328	-	-	607	1,475	-	1,915	-	-	331

	Millions of euros									
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Rest of South America	North America	Africa	Asia
Total Fully-consolidated entities and Equity-accounted investees										
Balance at December 31st, 2011 (1)	14,700	157	6,437	846	733	945	1,869	1,733	1,980	-
Changes due to sale or transfer prices of future production costs	(205)	(3)	-	(99)	104	(228)	(2)	(40)	63	-
Changes in future development costs	(436)	(9)	-	(149)	(162)	59	(126)	(86)	37	-
Oil and gas sales and transfers in the period.....	(3,012)	(56)	-	(464)	(261)	(142)	(455)	(654)	(980)	-
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	1,153	-	-	-	180	28	617	100	148	80
Net changes due to purchases/sales of assets.....	(6,373)	-	(6,312)	(3)	-	-	(110)	(16)	-	68
Net changes due to revisions in quantity estimates	1,034	6	-	38	(36)	(98)	185	131	808	-
Previously estimated development costs incurred in the year.....	936	48	-	208	178	69	226	165	42	-
Effect of discounting to a different date and exchange rate effect.....	392	11	(125)	57	58	70	102	96	123	-
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	341	7	-	110	48	134	30	92	(80)	-
Net change.....	(6,170)	4	(6,437)	(302)	109	(108)	467	(212)	161	148
Balance at December 31st, 2012	8,530	161	-	544	842	837	2,336	1,521	2,141	148
Changes due to sale or transfer prices of future production costs	(251)	(22)	-	(377)	214	272	(164)	35	(219)	10
Changes in future development costs	(371)	38	-	14	(136)	(54)	(32)	(128)	(29)	(44)
Oil and gas sales and transfers in the period.....	(3,123)	(127)	-	(246)	(246)	(230)	(521)	(603)	(1,089)	(61)
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	750	-	-	80	509	-	150	-	-	11
Net changes due to purchases/sales of assets.....	(5)	-	-	-	-	-	-	-	-	(5)
Net changes due to revisions in quantity estimates	569	13	-	82	153	(57)	238	162	(82)	60
Previously estimated development costs incurred in the year.....	1,007	14	-	165	212	46	289	140	66	75
Effect of discounting to a different date and exchange rate effect.....	334	(2)	-	28	48	31	98	42	79	10
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	905	18	-	173	(335)	-	78	99	880	(8)
Net change.....	(185)	(68)	-	(81)	419	8	136	(253)	(394)	48
Balance at December 31st, 2013	8,345	93	-	463	1,261	845	2,472	1,268	1,747	196
Changes due to sale or transfer prices of future production costs	(1,303)	4	-	189	(149)	11	(789)	(303)	(288)	22
Changes in future development costs	(610)	34	-	(202)	(138)	(133)	(115)	(8)	(70)	22
Oil and gas sales and transfers in the period.....	(3,433)	(77)	-	(400)	(241)	(162)	(833)	(625)	(1,026)	(69)
Net changes due to extensions, discoveries and improvements in the recovery of reserves...	255	-	-	44	-	65	146	-	-	-
Net changes due to purchases/sales of assets.....	(4)	-	-	-	-	-	(4)	-	-	-
Net changes due to revisions in quantity estimates	1,948	11	-	116	74	(147)	877	682	257	78
Previously estimated development costs incurred in the year.....	1,094	13	-	179	281	15	223	193	142	48
Effect of discounting to a different date and exchange rate effect.....	1,881	12	-	118	323	175	547	264	387	55
Other non-specific changes.....	-	-	-	-	-	-	-	-	-	-
Changes in income tax.....	1,161	(20)	-	188	111	104	173	(102)	728	(21)
Net change.....	989	(23)	-	232	261	(72)	225	101	130	135
Balance at December 31st, 2014	9,334	70	-	695	1,522	773	2,697	1,369	1,877	331

(1) Includes €2,741 million relating to the share of minority interest of YPF, as of December 31, 2011.