Official Notice



c/ Méndez Álvaro 44 28045 Madrid España Tel. 34 917 538 100 34 917 538 000 Fax 34 913 489 494 www.repsol.com

Madrid, February 26, 2014

Repsol, S.A. publishes information on oil and gas exploration and production activities of Repsol Group.

The Company will include this information in the documentation to be provided to its shareholders at the next Annual General Shareholders Meeting.

This document does not constitute an offer or invitation to purchase or subscribe shares, in accordance with the provisions of the Spanish Securities Market Law (Law 24/1988, of July 28, as amended and restated) and its implementing regulations. In addition, this document does not constitute an offer of purchase, sale or exchange, nor a request for an offer of purchase, sale or exchange of securities in any other jurisdiction.

This document contains statements that Repsol believes constitute forward-looking statements which may include statements regarding the intent, belief, or current expectations of Repsol and its management, including statements with respect to trends affecting Repsol's financial condition, financial ratios, results of operations, business, strategy, geographic concentration, production volume and reserves, capital expenditures, costs savings, investments and dividend payout policies. These forward-looking statements may also include assumptions regarding future economic and other conditions, such as future crude oil and other prices, refining and marketing margins and exchange rates and are generally identified by the words "expects", "anticipates", "forecasts", "believes", estimates", "notices" and similar expressions. These statements are not guarantees of future performance, prices, margins, exchange rates or other events and are subject to material risks, uncertainties, changes and other factors which may be beyond Repsol's control or may be difficult to predict. Within those risks are those factors described in the filings made by Repsol and its affiliates with the Comisión Nacional del Mercado de Valores in Spain, the Comisión Nacional de Valores in Argentina, the Securities and Exchange Commission in the United States and with any other supervisory authority of those markets where the securities issued by Repsol and/or its affiliates are listed.

Repsol does not undertake to publicly update or revise these forward-looking statements even if experience or future changes make it clear that the projected performance, conditions or events expressed or implied therein will not be realized.

 $The \ information \ contained \ in \ the \ document \ has \ not \ been \ verified \ or \ revised \ by \ the \ Auditors \ of \ Repsol.$

<u>SUPPLEMENTARY INFORMATION ON OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES</u> (Unaudited information)

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

In accordance with prevailing accounting regulation, from the loss of control, activities from YPF and YPF Gas were considered as discontinued operations and therefore the results contributed to the Group from both companies until loss of control and the impact on the income statement derived from the expropriation process were recognized under specific headings related to discontinued operations in the consolidated income statement.

In the following tables, information related to YPF has been maintained for financial year 2011. In financial year 2012 and 2013 information related to YPF and its subsidiaries is not included for the reasons explained above.

^(*) Due to the expropriation process of Repsol Group shares in YPF S.A. and YPF Gas S.A. (formerly known as Repsol YPF Gas S.A.), Repsol lost control of YPF and YPF Gas, and therefore, both companies were deconsolidated for accounting purposes. As a result, Repsol's assets and liabilities related to these investments were derecognized, other assets and liabilities related to these investments affected by the change in control and the expropriation process were revalued, and Repsol's Group ownership interest in YPF and YPF Gas, derived from the shares subject to expropriation - which still belong to the Group - and as well as the remaining shares owned by it, were recognized as financial instruments (shares).

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				
			(2)	Trinidad &			Rest of	North		
At 31 December 2011	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America (2)	Africa	Asia
Capitalised costs of proved oil and gas properties	34,481	504	25,492	1,581	690	579	2,330	2,116	1,189	_
Capitalised costs of unproved oil and gas properties	2,624	13	158	263	65	150	505	1,312	103	55
	37,105	517	25,650	1,844	755	729	2,835	3,428	1,292	55
Auxiliary equipment and facilities	2,401 39,506	52 569	26,245	2,662	78 833	729	3,107	331	255 1,547	55
Total capitalised costs	39,500	509	20,245	2,002	833	129	3,107	3,/39	1,547	23
Accumulated depreciation and impairment losses	(25,264)	(359)	(19,986)	(1,268)	(235)	(48)	(1,584)	(1,062)	(722)	
Net amounts (1)	14,242	210	6,259	1,394	598	681	1,523	2,697	825	55
					Millions of	euros				
				Trinidad &			Rest of	North		
At 31 December 2012	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia
Capitalised costs of proved oil and gas properties	9,440	462	-	1,550	725	679	2,393	2,249	1,218	164
Capitalised costs of unproved oil and gas properties	3,038	15		376	55	189	527	1,516	252	108
	12,478	477	•	1,926	780	868	2,920	3,765	1,470	272
Auxiliary equipment and facilities	2,220	172	-	880	164	-	299	459	246	
Total capitalised costs	14,698	649	-	2,806	944	868	3,219	4,224	1,716	272
Accumulated depreciation and impairment losses	(5,724)	(383)		(1,420)	(270)	(66)	(1,595)	(1,186)	(793)	(11)
Net amounts (1)	8,974	266	-	1,386	674	802	1,624	3,038	923	261
					Millions of	euros				
		_		Trinidad &		_	Rest of	North		
A4 21 December 2012	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia
At 31 December 2013										
Capitalised costs of proved oil and gas properties	10,154	342	-	1,656	815	786	2,674	2,421	1,209	251
Capitalised costs of unproved oil and gas properties	3,580	25	-	353	-	154	516	2,090	279	163
	13,734	367	-	2,009	815	940	3,190	4,511	1,488	414
Auxiliary equipment and facilities	2,349	285	_	876	256	_	306	386	240	_
Total capitalised costs	16,083	652	-	2,885	1,071	940	3,496	4,897	1,728	414
Accumulated depreciation and impairment losses	(6,341)	(501)	-	(1,529)	(302)	(83)	(1,655)	(1,428)	(804)	(39)
•										
Net amounts (1)	9,742	151		1,356	769	857	1,841	3,469	924	375

⁽¹⁾ Does not include capitalised costs regarding non current assets held for sale in 2013, 2012 and 2011 amounting to €155, €266 and €183 million, respectively.

As of 31 December 2013 and 2012, Repsol Group's share in oil and gas exploration and production activities from equity method investees amount to ϵ 207 and ϵ 169 million, respectively.

⁽²⁾ At December 31, 2011, all capitalized costs in "Argentina" relate to oil and gas exploration and production operations carried out by YPF. Moreover, in "North America", amounts pertaining to YPF companies are included under capitalized costs in assets with proven reserves, with unproven reserves, and accumulated amortization and provisions, amounting to €183, €14 and €163 million, respectively.

Costs 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.

						Millions of euro	s				
-							(1)	(1)			
			(1)	Trinidad &			Rest of	North			
At 31 December 2011	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia	Australia
Acquisitions of proved properties	-	-	-	-	-	-	-	-	-	-	-
Acquisitions of unproved properties	_	_	_	_	_	_	_	_	_	_	_
Exploration costs	1,259	62	268	3	1	43	302	386	127	66	1
Development costs	2,332	44	1,389	276	109	1	336	159	18	-	
TOTAL	3,591	106	1,657	279	110	44	638	545	145	66	1
						Millions of euro	s				
_				Trinidad &			Rest of	North			
At 31 December 2012	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia	Australia
Acquisitions of proved properties	154	-	-	-	-	-	-	-	-	154	-
Acquisitions of unproved properties	388	_	_	_	_	_	_	199	110	79	_
Exploration costs	806	80	-	1	-	97	226	228	131	43	-
Development costs	1,423	96		185	175	115	327	466	52	7	
TOTAL	2,771	176		186	175	212	553	893	293	283	
_						Millions of euro					
				Trinidad &		_	Rest of	North		(2)	
At 31 December 2013	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia	Australia
Acquisitions of proved properties	57	-	-	-	-	-	-	28	-	29	-
Acquisitions of unproved properties	449	-	-	-		-	_	371	-	78	-
Exploration costs	983	164	-	6		34	261	299	93	104	22
Development costs	1,349	1		179	292	87	386	290	48	66	
TOTAL	2,838	165	-	185	292	121	647	988	141	277	22

⁽¹⁾ At December 31, 2011, all costs incurred in Argentina relate to oil and gas exploration and production operations carried out by YPF. Moreover, "Rest of South America" and "North America" include costs incurred by YPF companies amounting to €10 and €18 million, respectively.

As of December 31, 2013 and 2012, Repsol Group's share in investments made in oil and gas exploration and production activities from equity method investees amounted to €55 and €80 million, respectively.

⁽²⁾ 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 (Note 10 "Assets and liabilities held for sale" and Note 31 "Divestments and disposals of ownership interests in subsidiaries").

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 euro	os				
-			(3)	Trinidad &			Rest of	North			
_	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America (3)	Africa	Asia	Australia
2,011											
. Income											
Sales to non-Group companies	2,031	-	643	404	432	162	317	42	31	-	-
Sales between business segments and to Group companies	5,433	51	3,614	552	-	100	280	746	90	-	-
Other income	187	-	-	-	-	-	33	-	154	-	-
Total income	7,651	51	4,257	956	432	262	630	788	275	-	-
-											
Production costs (1)	(3,107)	(25)	(2,224)	(334)	(209)	(111)	(77)	(42)	(85)	-	-
Exploration expenses	(494)	(64)	(82)	(3)	-	(19)	(48)	(130)	(124)	(23)	(1)
Other operating expenses	(352)	(6)	(317)	(3)	(2)	-	(22)	(1)	(1)	-	-
Depreciation and amortisation charge	(1,786)	(4)	(1,142)	(130)	(40)	(17)	(141)	(286)	(26)	-	-
Profit (Loss) before taxes and charges	1,912	(48)	492	486	181	115	342	329	39	(23)	(1)
Taxes and charges	(806)	29	(172)	(288)	(5)	(35)	(108)	(120)	(114)	7	
Results of oil and gas production activities (2)	1,106	(19)	320	198	176	80	234	209	(75)	(16)	(1)

						Millions of euro	os				
				Trinidad &			Rest of	North			
<u>-</u>	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia	Australia
2,012											
. Income											
Sales to non-Group companies	1,474	-	-	295	488	168	425	21	38	39	-
Sales between business segments and to Group companies	2,538	81	-	629	-	111	320	820	577	-	-
Other income	1,002	-		-			20	-	982		
Total income	5,014	81		924	488	279	765	841	1,597	39	
Production costs (1)	(1,229)	(20)	-	(385)	(255)	(133)	(213)	(7)	(192)	(24)	-
Exploration expenses	(551)	(84)	-	(1)	-	(62)	(128)	(141)	(92)	(43)	-
Other operating expenses	(75)	(4)	-	(4)	(1)	-	(62)	(3)	(1)	-	-
Depreciation and amortisation charge	(871)	(37)		(183)	(44)	(20)	(186)	(313)	(77)	(11)	
Profit (Loss) before taxes and charges	2,288	(64)	-	351	188	64	176	377	1,235	(39)	-
Taxes and charges	(1,290)	38		(192)	(22)	(19)	(78)	(137)	(892)	12	
Results of oil and gas production activities (2)	998	(26)		159	166	45	98	240	343	(27)	

						Millions of euro	os				
-				Trinidad &			Rest of	North			
_	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia	Australia
2,013											
. Income											
Sales to non-Group companies	2.031			381	460	203	731	39	30	187	
Sales between business segments and to Group companies	2,073	197		627	400	105	100	729	315	107	
Other income	627	177	-	027	-	105	34	127	593	-	_
Other income	027								393		
Total income	4,731	197		1,008	460	308	865	768	938	187	
Production costs (1)	(1,273)	(22)	_	(395)	(222)	(137)	(238)	(37)	(105)	(117)	_
Exploration expenses	(619)	(152)		(1)		(6)	(235)	(114)	(61)	(28)	(22)
Other operating expenses	(26)	(5)		(4)	(2)	-	(12)	(1)	(2)		-
Depreciation and amortisation charge	(898)	(120)		(172)	(44)	(21)	(158)	(305)	(46)	(32)	
Profit (Loss) before taxes and charges	1,915	(102)		436	192	144	222	311	724	10	(22)
Taxes and charges	(1,093)	62		(243)	(84)	(43)	(101)	(145)	(528)	(12)	1
Results of oil and gas production activities (2)	822	(40)	-	193	108	101	121	166	196	(2)	(21)

- (1) Production costs include local taxes, production taxes and other similar payments amounting to €490, €513 and €1,241 million in 2013, 2012 and 2011 respectively. In 2011, figures also include withholdings on exports of crude oil from Argentina. It also includes transport and other costs totalling €311, €356 and €170 million in 2013, 2012 and 2011 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 €6 in 2013, a net expense of €14 in 2012, and a net income of €36 million in 2011.
- (3) Results at December 31, 2011 in Argentina correspond entirely to oil and gas exploration and production operations carried out by YPF. In addition, the "North America" column includes a loss of €4 million owing to activities performed by YPF companies, constituting total revenues of €42 million, and costs, expenses, amortization and depreciation of €46 million.

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, 2013, 2012 and 2011, 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, 2013, 2012 and 2011.

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 2013, Netherland, Sewell & Associates, Inc. (NSAI), Gaffney, Cline & Associates (GCA) and Ryder Scott Company (RSC) audited certain areas in South America. The independent engineers' reports will be available on our website: www.repsol.com.

					Millions of	barrels				
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Resto of South America	North America	Africa	Asia
Reserves at December 31, 2010 (1) (2)	908	7	532	35	54	55	47	57	121	
Revisions of previous estimates	112	-	91	1	2	-	17	1	(1)	-
Improved recovery	19	-	19	-	-	-	-	-	-	-
Extensions and discoveries	80	-	43	-	-	11	26	-	-	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(1)	(1)	-	-	-	-	-	-	-	-
Production (1)	(140)	-	(100)	(5)	(5)	(3)	(13)	(10)	(4)	-
Reserves at December 31, 2011 (1) (2) (3)	978	6	584	32	50	63	79	49	115	-
Revisions of previous estimates	41	-	-	2	(1)	-	13	2	23	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	33	-	-	-	-	2	22	6	3	-
Purchases of minerals in place	24	-	-	-	-	-	-	-	-	24
Sales of minerals in place	(595)	-	(584)	-	-	-	(10)	(1)	-	-
Production (1)	(52)	(1)	-	(4)	(5)	(3)	(12)	(10)	(16)	(1)
Reserves at December 31, 2012 (1)	429	5		30	44	62	92	46	125	23
Revisions of previous estimates	35	1	-	1	3	19	4	2	(1)	6
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	10	-	-	1	1	-	7	-	-	1
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	-	-	-	-	-	-	-	-	-	-
Production (1)	(51)	(2)	=	(4)	(5)	(4)	(11)	(10)	(11)	(4)
Reserves at December 31, 2013 (1)	422	4	-	29	44	78	91	38	113	26
Proved Developed Reserves of crude oil, condesate and GPL										
At December 31, 2010	649	2	404	28	37	48	31	21	78	-
At December 31, 2011	671	2	438	24	34	45	36	21	71	=
At December 31, 2012	255	-	-	23	35	42	34	20	80	16
At December 31, 2013	238	3	-	21	33	39	41	13	68	19

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, 2013, 2012, 2011, and 2010 include an estimated 44, 39, 109 and 99 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 2013, 2012 and 2011 includes an estimated 4, 3 and 15 million barrels of oil equivalent, respectively, in respect of such types of payments.
- (2) Includes 249 and 107 million barrels of oil equivalent relating to the participation in the minority interest of YPF, as of December 31, 2011 and 2010, respectively.
- (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".

					Thousand Millions of	Standard Cubic Fee	et			
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Resto of South America	North America	Africa	Asia
Reserves at December 31, 2010 (1) (2)	6,643	1	2,578	2,036	339	1,114	477	17	81	
Revisions of previous estimates	164	1	167	55	14	-	(64)	2	(11)	-
Improved recovery	1	-		-	1	-		-		-
Extensions and discoveries	778	-	104	-	305	166	97	-	106	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place		-	-	-	-	-		-	-	-
Production (1)	(839)	(1)	(452)	(250)	(47)	(37)	(36)	(4)	(12)	-
Reserves at December 31, 2011 (1) (2) (3)	6,747		2,397	1,842	613	1,243	473	14	165	
Revisions of previous estimates	218	2	-	80	83	-	53	-	(1)	-
Improved recovery	-	-	-	-	-	-	-	-	-	-
Extensions and discoveries	691	-	-	-	452	31	20	33	-	155
Purchases of minerals in place		-		-		-		-		-
Sales of minerals in place	(2,405)	-	(2,397)	(6)	-	-	-	(2)	-	-
Production (1)	(391)	(2)		(240)	(48)	(39)	(46)	(5)	(12)	
Reserves at December 31, 2012 (1)	4,860			1,676	1,100	1,235	500	40	152	155
Revisions of previous estimates	499	1		94	115	238	24	13	7	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)	(424)	(1)		(253)	(47)	(40)	(54)	(9)	(11)	(8)
Reserves at December 31, 2013 (1)	6,138	-	-	1,665	2,304	1,433	470	44	148	73
Proved Developed Reserves of Natural Gas										
At December 31, 2010	4,275	1	1,994	875	310	839	168	7	81	
At December 31, 2011	3,854	-	1,796	699	305	802	186	8	58	-
At December 31, 2012	2,134	-	-	686	267	764	299	18	46	54
At December 31, 2013	1,998	-	-	651	241	691	329	24	41	22

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, 2013, 2012, 2011 and 2010 include an estimated 1,052, 767, 1,026 and 959 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 40, 26 and 74 thousands millions of standard cubic feet of gas, respectively, in respect of such types of payments.
- (2) Includes 1,021 and 521 thousand million standard cubic feet of gas relating to the participation in the minority interest of YPF, as of December 31, 2011 and 2010.
- (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". Similarly, YPF production at December 31, 2011 amounted to 452 billion cubic feet of gas in "Argentina" and 1 billion cubic feet in "North America".

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

					Millions of Barrels	of Oil Equivalen	ıt			
	Total	Europe	Argentina	Trinidad & Tobago	Venezuela	Peru	Resto of South America	North America	Africa	Asia
Reserves at December 31, 2010 (1) (2)	2,091	7	991	398	114	254	132	60	135	-
Revisions of previous estimates	141	-	121	11	4	-	6	1	(3)	-
Improved recovery	19	-	19	-	-	-	-	-	-	-
Extensions and discoveries	219	-	62	-	54	40	44	-	19	-
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(1)	(1)	-	-	-	-	-	-	-	-
Production (1)	(290)	(1)	(180)	(49)	(13)	(10)	(20)	(11)	(7)	-
Reserves at December 31, 2011 (1) (2) (3)	2,179	6	1,011	360	159	285	163	51	145	
Revisions of previous estimates	80	1	-	17	14	-	23	2	23	-
Improved recovery	=	-	-	-	-	=	=	-	-	-
Extensions and discoveries	156	-	-	-	80	7	26	12	3	28
Purchases of minerals in place	24	-	-	-	-	-	-	-	-	24
Sales of minerals in place	(1,023)	-	(1,011)	(1)	-	-	(10)	(1)	-	-
Production (1)	(122)	(1)	-	(47)	(13)	(10)	(20)	(11)	(19)	(1)
Reserves at December 31, 2012 (1)	1,294	6	-	329	240	282	182	53	152	51
Revisions of previous estimates	123	1	-	18	24	62	8	4	-	7
Improved recovery	=	-	-	-	-	=	=	-	-	-
Extensions and discoveries	238	-	-	27	203	-	7	-	-	1
Purchases of minerals in place	-	-	-	-	-	-	-	-	-	-
Sales of minerals in place	(14)	-	-	-	-	-	-	-	-	(14)
Production (1)	(126)	(3)	-	(49)	(13)	(11)	(21)	(11)	(13)	(5)
Reserves at December 31, 2013 (1)	1,515	4	-	325	454	333	175	45	139	39
Proved developed reserves of crude oil, condensate, na	atural gas liquids an	nd natural gas								
At December 31, 2010	1,410	2	759	184	92	197	62	22	92	-
At December 31, 2011	1,358	2	758	149	89	188	68	23	82	-
At December 31, 2012	635	5	0	145	82	178	88	24	88	25
At December 31, 2013	594	3	-	137	76	162	99	18	75	22

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, 2013, 2012, 2011 and 2010 include an estimated approximately 231, 176, 292 and 270 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 2013, 2012 and 2011 includes an estimated 11, 7 and 28 million barrels of oil equivalent, respectively, in respect of such types of payments.
- (2) Includes 431 and 200 million barrels of oil equivalent relating to the participation in the minority interest of YPF, as of December 31, 2011 and 2010 respectively.
- (3) At December 31, 2011, proven reserves of crude oil, condensates, LPG and natural gas relating to YPF stood at 1,011 million barrels of equivalents in "Argentina" and 2 million barrels equivalent in "North America". Similarly, YPF production at December 31, 2011 amounted to 180 million barrels in "Argentina" and 0.7 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 2013 (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:

_					Millions	of euros				
			(2)	Trinidad &			Rest of	North		
_	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America (2)	Africa	Asia
At December 31, 2011										
Future cash inflows	72,363	498	32,052	6,437	5,299	6,178	7,016	4,033	10,850	-
Future production costs	(25,993)	(145)	(14,144)	(2,610)	(2,771)	(2,608)	(2,128)	(361)	(1,226)	-
Future development and abandonment costs	(9,621)	(215)	(4,687)	(1,506)	(585)	(569)	(944)	(526)	(589)	-
Future income tax expenses	(13,162)	3	(3,344)	(902)	(678)	(968)	(939)	(621)	(5,713)	<u> </u>
Future net cash flows after taxes	23,587	141	9,877	1,419	1,265	2,033	3,005	2,525	3,322	-
10% annual discount for estimated timing of cash flows	(8,887)	16	(3,440)	(573)	(532)	(1,088)	(1,136)	(792)	(1,342)	-
Standardized measure of discounted future net cash flows (1)	14,700	157	6,437	846	733	945	1,869	1,733	1,980	

					Millions	of euros				
				Trinidad &			Rest of	North		
	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia
At December 31, 2012										
Future cash inflows	43,468	449		6,544	6,388	5.087	8,468	3,608	11.474	1.450
ruture cash innows	45,408	449	-	0,344	0,588	3,087	8,408	3,008	11,474	1,450
Future production costs	(14,343)	(139)	-	(3,089)	(3,017)	(2,637)	(2,919)	(442)	(1,185)	(915)
Future development and abandonment costs	(4,916)	(229)	-	(1,615)	(678)	(233)	(906)	(535)	(545)	(175)
Future income tax expenses	(10,212)	15		(894)	(824)	(657)	(1,113)	(481)	(6,185)	(73)
Future net cash flows after taxes	13,997	96		946	1,869	1,560	3,530	2,150	3,559	287
10% annual discount for estimated timing of cash flows	(5,467)	65	-	(402)	(1,027)	(723)	(1,194)	(629)	(1,418)	(139)
Standardized measure of discounted future net cash flows	8,530	161		544	842	837	2,336	1,521	2,141	148

					Millions	of euros				
	<u> </u>			Trinidad &			Rest of	North		
	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia
At December 31, 2013										
Future cash inflows	44,758	304	-	5,210	9,574	6,714	8,531	3,626	9,673	1,126
Future production costs	(15,608)	(146)	-	(2,460)	(3,673)	(3,678)	(3,457)	(558)	(1,114)	(522)
Future development and abandonment costs	(4,838)	(239)	-	(1,444)	(1,019)	(322)	(627)	(540)	(502)	(145)
Future income tax expenses	(9,497)	50		(545)	(1,630)	(825)	(997)	(366)	(5,082)	(102)
Future net cash flows after taxes	14,815	(31)	-	761	3,252	1,889	3,450	2,162	2,975	357
10% annual discount for estimated timing of cash flows	(6,470)	124	-	(298)	(1,991)	(1,044)	(978)	(894)	(1,228)	(161)
Standardized measure of discounted future net cash flows	8,345	93		463	1,261	845	2,472	1,268	1,747	196

- (1) Includes €2,747 million relating to the share of minority interest of YPF, as of December 31, 2011.
- (2) At December 31, 2011, the current value of the net cash flows in "Argentina" related entirely to YPF. Moreover, in "North America" 16 million euros of the current value of the cash flows corresponded to YPF companies.

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				
				Trinidad &			Rest of	North		
	Total	Europe	Argentina	Tobago	Venezuela	Peru	South America	America	Africa	Asia
Balance at 31 December 2010 (1)	14,414	99	8,305	716	682	626	936	1,578	1,472	
Changes due to sale or transfer prices or future production costs	(497)	90	(4,420)	508	(31)	414	532	930	1,480	
Changes in future development costs	(2,222)	(44)	(1,566)	(134)	20	(147)	(186)	(147)	(18)	-
Oil and gas sales and transfers in the period	(4,958)	(43)	(2,407)	(472)	(266)	(82)	(349)	(476)	(863)	-
Net changes due to extensions, discoveries, and improvements in the recovery of reserves	2,704	-	1,525	-	91	278	783	-	27	-
Net changes due to purchases/sales of assets	-	-	-	-	-		-	-	-	-
Net changes due to revisions in quantity estimates	2,153	10	1,934	59	27	(180)	163	(285)	425	-
Previously estimated development costs incurred in the year	1,499	33	627	173	46	119	225	203	73	-
Effect of discounting to a different date and exchange rate effect	1,763	12	1,011	84	80	90	121	191	174	-
Other non-specific changes	-	-	-	-	-		-	-	-	-
Changes in income tax	(156)	-	1,428	(88)	84	(173)	(356)	(261)	(790)	-
Net change	286	58	(1,868)	130	51	319	933	155	508	-
Balance at 31 December 2011 (1)(2)	14,700	157	6,437	846	733	945	1,869	1,733	1,980	
Changes due to sale or transfer prices or 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	(50)		(101)	180	28	617	100	148	80
Net changes due to purchases/sales of assets	(6,373)		(6,312)	(3)	-	- 20	(110)	(16)	140	68
Net changes due to purchases saids of assets Net changes due to revisions in quantity estimates	1.034	6	(0,512)	38	(36)	(98)	185	131	808	- 00
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	392	- 11	(123)	31		70	102		123	-
Changes in income tax	341	7		110	48	134	30	92	(80)	
Changes in income tax	341	,	-	110	40	134	30	92	(60)	
Net change	(6,170)	4	(6,437)	(302)	109	(108)	467	(212)	161	148
Balance at 31 December 2012	8,530	161		544	842	837	2,336	1,521	2,141	148
Changes due to sale or transfer prices or 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 31 December 2013	8,345	93		463	1,261	845	2,472	1,268	1,747	196

Includes €2,741and €1,681 million relating to the share of minority interest of YPF, as of December 31, 2011 and 2010.
 In 2011, the net variation in the current value of the net cash flows in "Argentina" related entirely to YPF. Moreover, in "North America" 4 million euros of the variation in the current value of the cash flows related to YPF companies.