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2011



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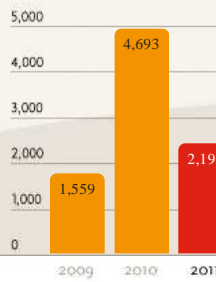
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## General overview

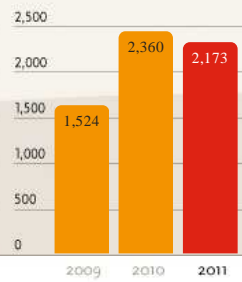
### Net income

Millions of euros



### Recurrent net income

Millions of euros

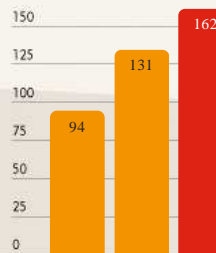


Recurring net income fell by 7.9% due to external factors, such as the conflict in Libya

### Reserve replacement ratio

Upstream unit (ex YPF)

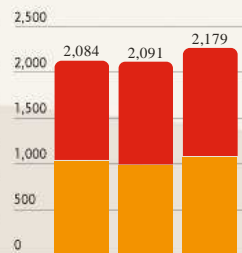
Percentage



### Proven reserves

Repsol YPF

Thousands of barrels of oil equivalent



Repsol's proven reserves (ex YPF) increased by 10% in three years



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## Letter from the Chairman and the CEO

I am writing to you to inform you of the most notable events affecting our company in 2011 - a hugely challenging year from a macroeconomic perspective, in which Repsol not only demonstrated the strength of its financial discipline but also its solid business strategy oriented towards sustainable growth in all business areas.

A comparison of the evolution of the Ibex 35 and Repsol's share price is good evidence of this. While the Spanish benchmark index ended the year with a 13% decline compared with 2010, Repsol's shares ended the year up by 14%, reflecting a six-month high at the end of 2011. The second highest increase in market capitalisation on record was achieved, reaching €29 billion.

The uncertainty in financial markets last year, together with the worsening of the sovereign debt crisis in peripheral European Union countries and a deepening of the social and political conflicts in North Africa and the Middle East, directly influenced the high volatility of oil prices. In such an objectively adverse scenario, aggravated by the notable decline in consumption in Spain, Repsol obtained recurring net income totalling €2.173 billion, 7.9% lower than in 2010.

The significant exploration successes in Gávea - classed as one of the top ten hydrocarbon discoveries in 2011 - and Malombé (both in Brazil), A1-130/4, in Libya and, in 2012, Pao de Açúcar (Brazil), confirm that the Upstream Division is the main growth driver in the company.

Despite the satisfactory performance in this area, the reserve replacement rate of which (162%) is among the most highest in the sector, its results fell sharply compared with the preceding year, when the agreement with the Sinopec Group in Brazil was concluded resulting in a capital injection of €5.389 billion. The latter, together with the suspension of operations in Libya during most of the year and the depreciation of the dollar against the euro, explain the operating income of €1.413 million.

The operating income totalling €386 million obtained in 2011 by the Liquefied Natural Gas area represents a 268% increase due to the higher volume obtained after the launch of the plant in Peru in 2010 and the higher profit margins recorded last year.

The Downstream business presented a €1.207 billion profit, which is slightly down on 2010 due to the lower margins obtained from the refining business and the decline in volume seen by the marketing businesses. Our stake in YPF ended the year with operating income down to €1.231 billion - 15% less compared with last year, while the interest in Gas Natural Fenosa reported €887 million, in line with 2010 figures.

Despite the evident impact of the financial crisis on international business activity, in 2011 Repsol maintained its firm goal of pursuing and developing the main vectors defined by its strategic plan.

A good example of this is the more than €6 billion invested in 2011. This figure made it possible to carry out new initiatives oriented towards complying with the company's primary business objectives. These include the exploration activity in Bolivia, Brazil, Norway or Peru, as well as the demarcation of the major discoveries in Brazil, Peru, Venezuela and the United States.

Repsol achieved a refining milestone through the completion and launch of the projects in Cartagena and Bilbao. The first has given rise to the largest industrial investment in the history of Spain, totalling more than €3 billion. The successful culmination of these challenges means that Repsol is one of the European companies with the highest conversion level and positions both refineries as leaders on the continent.

At the beginning of 2012, the Board of Directors adopted a resolution to propose to the General Shareholders' Meeting a new type of remuneration for shareholders, under which they may choose between cash or paid-up shares in the company. Taking into account the execution of this new system and the gross dividend of €0.5775 per share paid in January of this year, the company foresees increasing final shareholder remuneration charged against 2011 income by 10%.

I am sure you will agree that achieving broad business objectives serves very little if they do not include a strategy for sustainable growth that provides a purpose and direction for current achievements. Aligning our activity with long-term development is by no means just a declaration of good intentions and today, more than ever, forms a basic part of business consolidation. Accordingly, in 2011 Repsol strengthened its already renowned energy efficiency policies.

"Company shares ended the year up by 13.8%, ending 2011 at a six-month high"

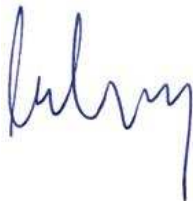
Our drive towards the implementation of realistic corporate responsibility policies, oriented towards the attainment of tangible results has received international recognition. As a result, Repsol once again received the Gold Class company rating in the 2011 Sustainability Annual Report, and it continues to form part of prestigious sustainability measurement indexes such as FTSE4Good, Ethibel Sustainability and Dow Jones Sustainability.

In 2011 Repsol continued to work to improve the working conditions of its personnel through its work-life balance, flexibility, professional development and talent promotion policies. The company continued to implement new measures designed to make jobs more flexible. The result of these policies was evaluated by Repsol employees in a job satisfaction survey, in which the Group's role as an employer, diversity and work-life balance were the most highly rated aspects.

These results, together with the positive financial results for the year, confirm that Repsol's strategy is a reality that is acquiring even more value, bearing in mind the difficult macroeconomic situation we face, and which, I am sure, will see us emerge even stronger with the help of all of you.

I cannot end without referring to the exceptionally serious event that occurred shortly before I wrote this letter. On 16 April 2012, the Argentinean government announced the expropriation of 51% of YPF shares owned by Repsol. This illegal and discriminatory action is being contested by Repsol. Rest assured that Repsol will take all appropriate legal measures to preserve the interests of all its shareholders and the value of their assets and, if appropriate, will request all relevant compensation.

Our robust projects, diversification of assets and the company's financial strength will allow Repsol to continue to develop our business plans and reward our shareholders accordingly.



Antonio Brufau Niubó  
Chairman and CEO

"The important exploration successes achieved by the Upstream Division allow us to remain optimistic about 2012"



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# 2011 milestones



## Consolidation of Upstream growth

During 2011, the Upstream Division's portfolio of assets and projects was consolidated, thereby allowing Repsol to achieve its objectives. Authorities in Brazil were presented with a Declaration of Commercial Readiness and the Final Report on the Evaluation Plan for the Sapinhoa project. This fundamental milestone within this area's development plan will allow production to start in 2013.

The Perla megafield gas project in Venezuela, within the Cardón IV block was the subject of a supply contract for 8.7 TCF of natural gas until 2036. This represents the start of the implementation stage of this major project.

Final approval was obtained from the Algerian authorities for the development plan for the important Reggane gas project, which will allow the area to start to be developed with a view to commencing production in 2016.

The existing installations in Margarita-Huacaya (Bolivia) were optimised, which increased gas production to 3 Mm³d. The development work relating to the first phase has practically been completed and it is intended to increase output in 2012 by an additional 6 Mm³d. The final investment decision (FID) relating to the second phase to reach a total output of 14-15 Mm³d in 2013/2014 has been taken. In addition, the Kinteroni gas project (Peru) is ready to start production in 2012, after the surface installations and the pipeline to the Malvinas Plant are completed.

Last October, production in Libya restarted at blocks NC-115 and NC-186, and over the Course of 2012 production levels will return to those seen before the conflict.



## Entry into new areas with great potential

In 2011, Repsol made progress consolidating the growth of Upstream, both from the standpoint of existing project development and the launch of new projects with high potential in the United States, Russia, Ireland, Iraq, Tunisia and Portugal.

In this respect, an agreement was concluded with the US oil company Sand Ridge Energy to acquire 16% and 25% stakes in two areas of non-conventional resources at the Mississippian Lime oilfield in the States of Kansas and Oklahoma. Under this agreement, output and reserves have already been flowing to the company during 2012. A 70% stake in the North Slope exploration project (Alaska) was also acquired.

A significant agreement was also concluded with Alliance Oil Company to establish a joint venture (AROG) that will serve to grow both companies in the Russian Federation - the largest gas and oil producer in the world. This alliance combines the knowledge and access to exploration and production opportunities that Alliance Oil has in Russia, with Repsol's technical capacity.

The company Eurotek was also acquired in Russia. This company has exploration and production licences in Western Siberia. The assets acquired include the licences for the Syskonsyninskoye (SK) gas field, which will enter into production in 2012, and the Yuzhno- Khadyryakhinskoye (YK) gas field.

In 2011, three new discoveries were made, with two exploration wells in Brazil (Gávea and Malombe) and one in Libya (A1 130/4).



## Vaca Muerta Discovery

On 7 November 2011, Repsol YPF announced one of its largest discoveries of unconventional hydrocarbons at the Vaca Muerta formation located in the Argentinean province of Neuquén.

The total hydrocarbon resources and reserves discovered at Vaca Muerta amount to 22,807 thousand barrels of oil equivalent (Mboe), according to the international specialists Ryder Scott. These discovered volumes equate to just 49% of the mining rights held by YPF in this formation. The analysts have assigned an approximate value of \$13.7 billion to these resources.



## LNG Growth

Operating income from the Liquefied Natural Gas (LNG) activity was €386 million in 2011, which represents a 268% increase year on year. The improvement in the results of this business area is fundamentally explained by higher volume and LNG sales margins in 2011. The market was characterised by the increase in demand in Japan after the earthquake and the gradual increase in prices in the Far East.



## Improvement in refining capacity

The strategic projects to expand and convert the Industrial Complex in Cartagena and the Fuel Oil Reduction Unit (FRU) in Bilbao - both in operation - has boosted the business' efficiency and allowed Repsol's refining margins to increase by \$2 to \$3 dollars per barrel, increasing fuel production volume.

The efficient execution of both projects allowed the investment to be reduced to €4.08 billion, compared with the €4.304 billion initially budgeted. In the case of the Cartagena refinery, the C10 - the name given to the expansion - represents the most important industrial investment in the history of Spain, totalling nearly €3.2 billion. The official inauguration in April 2012 was presided by the Prince of Asturias.

Successfully meeting these challenges has positioned Repsol as one of the European companies with the highest conversion ratios, and represents the culmination of one of the main projects in the Group's strategy.



## Sustainable projects

In Madrid, Repsol opened the world's first service station to be certified by BREEAM, the leading international assessment and certification method for sustainable buildings.

The station was built under eco-architecture parameters using a new concept of sustainability and multiple recycled materials. The management of this unique service station is also sustainable, both in terms of energy and the consumption and conservation of water. It is also one of the first service stations in the world with 100% LED lighting, which lasts 5 times longer and reduces energy consumption by 80%.

On 3 October 2011, Repsol and the airline Iberia carried out the first Spanish flight using biofuels.

Repsol was responsible for obtaining, distributing and handling the logistics for the fuel, the formulation of which was assessed and certified by researchers at Repsol's Technology Centre by submitting the fuel to several high performance tests.



## People are a strategic value

Against the backdrop of the economic crisis and uncertainty, Repsol and the trade unions reached a new Framework Agreement in 2011 that guarantees jobs and sends a calming message to all company employees.

Furthermore, Repsol distributed a climate survey to all employees in order to improve aspects such as work-life balance, equal opportunities and the policy of integrating physically- and mentally-challenged individuals.

Initiatives such as home working, which continued to grow throughout 2011 and which has already been opened to all industrial employees in Spain that meet the requirements, and commitments such as transferring the requirement to directly hire individuals with different physical and mental disabilities to all businesses and geographic areas, make Repsol a point of reference with respect to integration, work-life balance, etc.

One of the company's most important achievements in 2011 was the evacuation of its employees during the conflict in Libya, which received the recognition of governments, the media and the employees themselves.

In record time, Repsol chartered two private aircraft to bring all employees and their families working in the North African country back to Spain. The company did not hesitate to also assist its contractors, employees of other companies in Libya and even Spanish citizens that were in a worrying situation at that time.





## Repsol, a point of reference in top races

Team Repsol MotoGP obtained historic success in the 2011 World Motorcycling Championship. The Australian rider Casey Stoner was crowned World Champion after a brilliant season in which he obtained 10 victories, alongside the three victories of Repsol's other rider, Dani Pedrosa.

Thanks to these results, the World Constructors' Champion and Team Champion awards were added to Stoner's individual title, thereby obtaining an unprecedented hat trick in World MotoGP. In the intermediate category, the rookie Marc Márquez enjoyed the biggest comeback in the history of motorcycle racing and ended up just short of glory.

In Trial Racing, Toni Bou further boosted his legendary status by becoming the World Indoor and Outdoor Trial Champion for the fifth consecutive time. The trial bike rider did not let his guard down in a year in which he had already revalidated his title in the indoor category.

Repsol has participated in top competitions for more than 40 years and over that time, it has supported top riders and become associated with values such as effort, talent and teamwork. Over that time it has won 56 world championships in various disciplines.

Since 2011, Repsol has been the official fuel supplier for the Spanish Speed Championship. Racing Effitec CEV is the high quality fuel developed by Repsol's Technology Centre, which optimises engine performance and provides a level playing field for riders in the various categories of the championship. Repsol also supplies the official fuel and lubricants for the Repsol Honda Team MotoGP category and it is the competition's main sponsor.



## Macroeconomic environment

2011 witnessed a slow-down in the pace of economic recovery as the world attempts to drag itself out of the harshest economic crisis seen in the last seventy years. During the year, the deterioration in certain previously very clearly identified risks, coupled with the fall-out of other unforeseeable events, such as the tsunami in Japan and the confrontations in Libya, tested the robustness of the worldwide economic recovery.

World gross domestic product (GDP) climbed by roughly 3.8%, well below the growth forecast by the International Monetary Fund (IMF) at the start of the year.

The most disappointing performances came from the developed economies, which faced a particularly difficult year. Following the upturn of 2010, which saw 3.2% growth in developed economies, the same nations slowed to an anaemic rate of 1.6% in 2011, while projected global growth for 2012 was also slashed.

The slump in growth over the first half of 2011 can be put down to the effects that the following factors had on a still-fragile economy: the spike in inflation due to higher commodity prices; the gradual phasing out of fiscal stimulus policies; the austerity measures ushered in from the end of 2010 onward throughout various European countries, and the widespread concerns over the global supply chain in the wake of the Japanese earthquake of 11 March.

### Financial bailout

As a result, employment and state revenues fared worse than expected, further undermining the sustainability of the weaker euro zone economies. In April, Portugal was effectively forced to seek financial aid from the IMF and the European Union (EU) to avoid bankruptcy, following in the footsteps of Greece and Ireland. To compound matters, Greece acknowledged its inability to meet the objectives laid down in its bailout package. Negotiations for a second aid package before summer ended up including a mechanism for exchanging Greek debt, forcing private creditors to accept significant debt relief measures.

This precedent triggered systemic risk within the euro zone, while increasing pressure on other member states and European banks due to their heavy exposure to sovereign debt.

Confirmation that the break-up of the single European currency was actually on the cards, following the announcement of a referendum in Greece's subsequently cancelled, caused massive turmoil within the markets, widespread adjustments in counterparty risk and further difficulties in securing financing. In response to these tensions, the main central banks from across the world joined forces to ensure the on-going liquidity of the system.

It is worth noting that 2011 also saw somewhat improved international political coordination, thus eliminating the likelihood of a chain reaction similar to the one that followed the bankruptcy of Lehman Brothers in 2008. Having said that, measures and reforms implemented to date have been unable to predict or stem the underlying problems. This not only holds true in the case of the euro zone, for similar problems in the United States and Japan have led to downgrades in their credit rating, adding further uncertainty to the financial markets.

The Spanish economy experienced a mild slow-down in its pace of recovery from the second quarter of 2011 onward, closing the year with accumulated growth of 0.7% versus 2010. Foreign trade once again proved decisive and while private domestic demand improved in 2011, it failed to offset the committed adjustments in government spending in an attempt to reduce the public deficit to 3% of GDP by 2013.



China, India, the Middle East and Brazil maintained strong demand for commodities in order to support their growth



## High volatility

Oil prices in 2011 were heavily influenced by both economic and geopolitical factors, with events materialising in two stages. Over the first half of the year, existing market inertia brought on by rallying demand from the end of 2010 was exacerbated by the added uncertainty of what has since been coined the "Arab Spring", leading to fuel price pressures due to the risk of a supply shortage in any key exporting nation. Thus, with the market withdrawal of Libyan oil exports, and the increase in Japanese imports to address the impacts of its natural disasters, the price of Brent crude climbed to prices not seen in over two and a half years, at \$126 per barrel at the start of April. Over the second half of the year, the prevailing economic and financial uncertainty in developed countries, mainly European, coupled with the gradual return of Libyan oil, caused oil prices to fall back by 13%, to stand at around \$110. And they have remained at this level, albeit with considerable volatility.

## Emerging economies

China, India, the Middle East and Brazil, among other regions, have maintained heavy demand for commodities on the path to economic growth and, as in 2010, these same regions were solely responsible for the increase in worldwide oil consumption for the year. Non-OPEC countries, on the other hand, seem incapable of stepping up production. This, combined with the steady decline in oil fields and the departure of Libyan crude due to the crisis, has meant that supply within the market remains poor, despite only limited demand.

This situation of the fundamentals is what has given rise to a Brent price floor above \$100 over the course of the year, even within the current context, which raises serious doubts as to the performance of the world economy with a high risk of recession in several developed economies. At the close of 2011, the average price for Brent crude stood at \$111 per barrel.

This level marks an all-time high in annual terms, exceeding prices for 2008 by \$12.7. Another important point to note is that when translated to euros, the current average for Brent oil stands at €80 per barrel, more precisely €12.5 above the figure for 2008. The scenarios are different. Now, with the euro weakened by the sovereign debt problems plaguing various countries, inflationary pressure can do more damage in Europe. The average for West Texas Intermediate crude (WTI) was \$95 per barrel, \$5 less than the 2008 price. The contrast between the evolution of Brent and WTI crude prices is largely due to the disconnect between the latter and international markets.



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## Repsol Group

The Group's activities are divided into five business areas, which correspond to the main divisions in its organisational structure:

Three strategic integrated activities, including the operations undertaken by the Group companies (except YPF and Gas Natural Fenosa) in the following areas:

- Upstream, relating to the exploration and production of oil and natural gas;
- LNG, relating to midstream operations (liquefaction, transport and regasification) of natural gas and the marketing of natural gas and liquefied natural gas;
- Downstream, corresponding to refining and marketing petroleum products, chemicals, and liquefied petroleum gas.

### Two holdings in strategic companies:

- YPF, which includes the operations of YPF S.A. and its Group companies in all of the aforementioned activities; at 31 December 2011, the Group owned 57.43% of YPF, S.A., which is fully consolidated in the Group's financial statements;
- Gas Natural Fenosa, which mainly engages in natural gas marketing and the generation, distribution, and marketing of electricity; at 31 December 2011, the Group owned 30.01% of Gas Natural Fenosa, which is included in the Group's financial statements through proportional consolidation.

## Results

Repsol YPF's net income for 2011 stood at €2.193 billion. Operating income was €4.805 billion, while EBITDA amounted to €8.440 billion. Earnings per share amounted to €1.80.

In 2010, net income attributable to the parent amounted to €4.693 billion, while operating income and EBITDA stood at €7.621 billion and €9.196 billion, respectively. The agreement reached with China Petroleum & Chemical Corporation (Sinopec) for the joint development of exploration and production projects in Brazil had a marked effect on results for the year. Following the deal, Repsol holds a 60% stake in Repsol Sinopec Brasil, while Sinopec holds the remaining 40%. The agreement ensures financing for the development and subsequent exploitation of the discoveries in Brazil, in particular Guar, Carioca and Panoramix, with the estimated market value of these assets exceeding \$10.6 billion.

Operating income for the Upstream area (Exploration and Production) fell from €4.113 billion in 2010 to €1.413 billion at 31 December 2011.

Profits in 2010 include a capital gain totalling €2.847 billion, generated as a result of the agreement between Repsol and Sinopec. Excluding this capital gain and other issues, the income recorded by Upstream declined in 2011, fundamentally as a result of the drop in output due to the suspension of operations in Libya during most of the year and the impact on revenues of the depreciation of the dollar against the euro. All of this was offset slightly by higher international prices for crude and gas during the period, and lower exploration costs.

The Liquefied Natural Gas (LNG) business posted profits of €386 million in 2011, up €281 million on figures for 2010, largely on the back of larger LNG volumes (the LNG Peru plant having been operational since June 2010) and LNG sales margins in 2011.

Operating profits for the Downstream area totalled €1.207 billion, compared with the €1.304 billion recorded last year. This drop in profit can largely be explained by the reduced margins reported by the Refining business, as well as by the lower volumes in the Marketing businesses resulting from the economic crisis, despite a better showing from Chemicals in the first half of the year and the better results from the Trading division.

The discoveries made over the past few years lay the foundations for future growth



YPF ended 2011 with operating income of €1.231 billion, down 15.3% on the €1.453 billion posted in 2010. The difference is mainly due to the effect that the strikes have had on crude oil production, cost inflation, and the temporary suspension of the Petróleo Plus program.

Higher revenues from fuel sales at service stations and from products with prices linked to international markets could not offset the aforementioned negative effects. Repsol's 30% stake in Gas Natural Fenosa generated operating income of €887 million, in line with the same figure for 2010.

The consolidated Group reported a net finance expense of €822 million in 2011, in comparison with an expense of €1.008 billion a year earlier. The difference is primarily due to a lower net interest expense on borrowings, mainly on account of the larger average balances of financial investments associated with higher rates of return.

Corporate income tax totalled €1.514 billion, with an effective tax rate of 38% (versus 26.3% in 2010, with this unusually low rate resulting from the non-recurrent transactions carried out during the year, such as the agreement with Sinopec, sale of Refap and CLH, etc.).

#### REPSOL GROUP RESULTS

Million euros	2010	2011
<b>OPERATING INCOME</b>	<b>7,621</b>	<b>4,805</b>
Upstream	4,113	1,413
LNG	105	386
Downstream	1,304	1,207
YPF	1,453	1,231
Gas Natural Fenosa	881	887
Corporate and adjustments	(235)	(319)
<b>FINANCIAL RESULT</b>	<b>(1,008)</b>	<b>(822)</b>
Share of results of companies accounted for using the equity method - net of taxes	76	75
<b>NET INCOME BEFORE TAX</b>	<b>6,689</b>	<b>4,058</b>
Income tax	(1,742)	(1,514)
<b>CONSOLIDATED NET INCOME FOR THE YEAR</b>	<b>4,947</b>	<b>2,544</b>
Net income attributable to minority interests	(254)	(351)
<b>NET INCOME ATTRIBUTABLE TO THE PARENT</b>	<b>4,693</b>	<b>2,193</b>



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## Financial overview

At year-end 2011, Repsol YPF was in a solid financial position. The net financial debt of the Group excluding Gas Natural Fenosa, i.e. excluding the proportional integration of the figures relating to this company, was €6.775 billion at 31 December 2011, compared with €1.697 billion the preceding year. Within this figure, the impact of the acquisition of treasury shares representing 10% of the share capital of Repsol YPF, S.A. on 20 December 2011 was notable at €2.572 billion, as was the redemption on 8 February 2011 of the preferred shares issued by Repsol International Capital for a nominal amount of \$725 million. Subsequent to the year end, on 11 January 2012 half of the treasury shares acquired on 20 December were sold. Taking into account the preferred shares, net financial debt excluding Gas Natural Fenosa was €9.775 billion at 31 December 2011, compared with €5.265 billion at the same date the previous year.



### Liquidity

The Group's liquidity position excluding Gas Natural Fenosa amounted to €5.989 billion at the year end (including undrawn credit lines), despite the transactions described above. Furthermore, this liquidity was further increased in January 2012 due to sale of the aforementioned treasury stock, combined with a €750 million bond issue.

The Group's consolidated net debt at year end 2011 stood at €11.663 billion, compared to €7.224 billion at 31 December 2010. Taking the preferred shares into account, net debt at year end 2011 amounted to €14.842 billion, versus €10.972 billion at 31 December 2010.

During 2011, payments on investments reached €6.255 billion. Operating investments are explained in further detail in the sections relating to each of the business areas.

In relation to the section on divestments, it is worth mentioning the major divestments carried out by Gas Natural Fenosa.

It is also worth referring to the sale of 88,011,085 shares in YPF (representing a 22.38% stake in the company) and the decision of the Petersen Group to exercise its 10% call option. This sale was partly implemented by means of a loan of \$626 million by Repsol to the Petersen Group.

During 2011, investments reached €6.255 billion.

7.03	7.05	BRASKER	1.93	1.93
0.35	0.34	BRADSP	7.92	7.92
2.14	2.13	COPEL PR	7.10	7.10
0.89	0.87	NET SERV	4.84	4.84
3.30	3.30	SADIA	1.09	1.09
0.49	0.49			
1.95	1.96			



### Share prices

The shares of Repsol YPF, S.A. are listed on the continuous market of the Spanish stock exchanges (Madrid, Barcelona, Bilbao and Valencia) and of Buenos Aires (Bolsa de Comercio de Buenos Aires). Until 4 March 2011, the

shares were listed in New York, in the form of American Depositary Shares (ADS) (New York Stock Exchange). Since 9 March 2011, the ADS programme has been listed on the OTCQX market.

Dividends paid in January 2011 by Repsol YPF to its shareholders amounted to €1.282 billion, consisting of an interim dividend on earnings for fiscal year 2010 of €0.525 per share, which was paid in January 2011, and a final dividend for 2010, also totalling €0.525 per share, paid in July 2011. Furthermore, the Board of Directors adopted a resolution on 30 November 2011 to allocate an interim dividend on earnings for 2011 of €0.5775 per share, marking a 10% increase on the interim dividend for 2010, paid on 10 January 2012.

As previously stated, on 20 December 2011, Repsol acquired a total of 122,086,346 treasury shares with a par value of one euro per share, representing 10% of its share capital, in furtherance of the resolution adopted unanimously at the Board of Directors meeting held on 18 December. The decision to acquire the stock was reached after receiving news that the creditor banks of Sacyr Vallehermoso had decided not to renew the credit facility previously awarded to the company in order to acquire 20% of the capital of Repsol, or to condition partial refinancing on the sale of 10% in Repsol.

This package was acquired at a price of €21.066 per share.

In 2011, Repsol YPF acquired 6,685,499 additional treasury shares, representing 0.55% of share capital, with a par value of €1 each and for a total of €125 million. These shares were sold for a gross cash amount of €140 million, which gave rise to a capital gain totalling €15 million.

Within the framework of the Share Acquisition Plan approved by shareholders at the General Meeting held on 15 April 2011, the company acquired a total of 298,117 shares in Repsol YPF, S.A., representing 0.024% of its share capital at a cost of €6.6 million. These were then delivered to Group employees in accordance with the plan.

The aforementioned acquisitions were carried out by virtue of the powers that the General Shareholders' Meeting of 30 April 2010 vested in the Board of Directors, authorizing "the derivative acquisition of Repsol YPF, S.A. shares, on one or more occasions, via sale-purchase, swap or any other onerous transaction, directly or through subsidiaries, up to a maximum number of shares so that the sum of those acquired shares already held by Repsol YPF, S.A. and any of its subsidiaries, does not exceed 10% of share capital of the company, for a price or consideration that shall not be lower than the par value of the shares and not more than its quoted price on the stock exchange".

The authorization remains valid for five years running from the date of the General Shareholders' Meeting, and nullifies the equivalent resolution ratified at the ordinary General Shareholders' Meeting held on 14 May 2009, in relation to any part thereof that had not been used.

At 31 December 2011, the treasury shares held by Repsol YPF and Group companies represented 10% of its total share capital.

Million euro

	CONSOLIDATED GROUP		CONSOLIDATED GROUP EXC. GAS NATURAL FENOSA	
	2010	2011	2010	2011
I Net debt	7,224	11,663	1,697	6,775
II Preferred shares	3,748	3,179	3,568	3,000
III Net debt, including preferred shares	10,972	14,842	5,265	9,775
IV Capital employed	36,958	41,885	30,777	36,329

## Financial prudence

In line with its prudent financial policy, Repsol YPF keeps sufficient cash resources and other net financial instruments available, including untapped lines of credit, to cover the debts falling due over at least the next two years, and covering 49% of its entire gross debt and 41% of its debt including preferred shares. In the case of Repsol YPF excluding Gas Natural Fenosa, these same resources cover 55% of gross debt and over 43% of the debt including preferred shares.

Financial investments totalled €5.137 billion, of which €4.129 billion relate to Repsol YPF, excluding Gas Natural Fenosa. The Group has also committed unused lines of credit at its disposal for an amount of €4.225 billion (excluding Gas Natural Fenosa), down from the €4.666 billion at the end of 2010 (excluding Gas Natural Fenosa). For the consolidated Group as a whole, the amount in committed, unused credit lines was €5.482 billion and €5.690 billion as of 31 December 2011 and 2010, respectively, 80% of which matures after 31 December 2012.

Accordingly, net debt and the net debt to capital employed ratio, in which capital employed refers to net debt plus net equity, provide a true and fair view of the volume of necessary borrowings and their relative weighting in the funding of capital employed in transactions.

At year-end 2011, the Group's net debt to capital employed ratio (excluding Gas Natural Fenosa) stood at 18.6% versus 5.5% reported at the end of the previous year. Taking into account the preferred shares, this ratio was 26.9%, compared with 17.1% in 2010.

These ratios rose by 7 points due to the impact of the non-recurrent acquisition of 10% of treasury shares. The net debt to capital employed ratio for the consolidated Group at year-end 2011 stood at 27.8%, in comparison to 19.5% at 31 December 2010. Taking preferred shares into account, this same ratio stood at 35.4% versus 29.7% for 2010.

## NET DEBT

Million euros

	CONSOLIDATED GROUP		CONSOLIDATED GROUP EXC. GAS NATURAL FENOSA	
	2010	2011	2010	2011

**NET DEBT**

Million euros

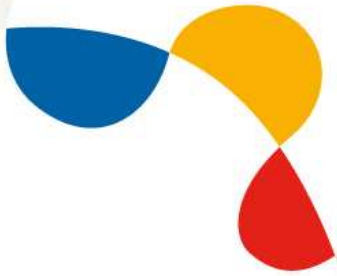
	CONSOLIDATED GROUP		CONSOLIDATED GROUP EXC. GAS NATURAL	
	2010	2011	2010	2011
<b>OPENING NET DEBT</b>	<b>10,928</b>	<b>7,224</b>	<b>4,905</b>	<b>1,697</b>
EBITDA	(9,196)	(8,440)	(7,688)	(7,014)
Variation in working capital	1,693	2,239	1,316	1,708
Investments <sup>(1)</sup>	5,091	6,207	4,468	5,547
Divestments <sup>(2)</sup>	(4,483)	(1,004)	(3,804)	(91)
Dividends paid (including those from affiliates)	806	1,686	759	1,649
Treasury share transactions	-	2,557	-	2,557
Currency translation differences	617	13	535	11
EDisposals of ownership interests in subsidiaries without loss of control	(489)	(2,327)	(489)	(2,327)
Taxes paid	1,627	1,784	1,490	1,690
Changes in the consolidation scope <sup>(3)</sup>	(372)	71	(395)	(9)
Redemption of US preferred shares	-	535	-	535
Interest and other movements	1,002	1,118	600	822
<b>NET DEBT AT YEAR END</b>	<b>7,224</b>	<b>11,663</b>	<b>1,697</b>	<b>6,775</b>

(1) There were financial investments of €48 million and €15 million for the consolidated Group in 2011 and 2010, respectively, that do not appear in this table.

(2) Similarly, there were financial divestments of €39 million and €88 million for the consolidated Group in 2011 and 2010, respectively. In addition, it should be pointed out that the divestment by Gas Natural Fenosa of the Arrúbal combined cycle plant in 2011 included financing terms for the buyer.

(3) In 2010 this relates to the deconsolidation of Refap's debt.

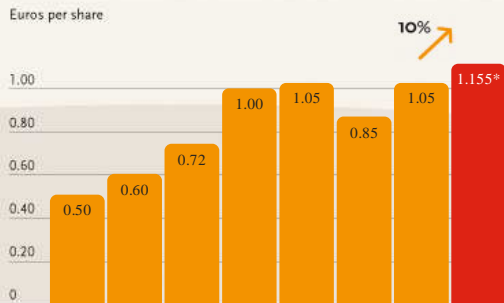




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## Repsol Shares

### Dividend



\* Considering the 2011 gross interim dividend of 0.5775 euros per share, paid on 10 January 2012, and the implementation of the new remuneration system for shareholders.

Despite the complex international financial situation, Repsol shares ended 2011 with the second highest increase in market capitalisation in the Ibex 35

In 2011, which was another complicated year for the stock market, Repsol was one of the stocks that rose the most in the Ibex 35, the benchmark share index in Spain. The positive performance of Repsol's businesses was reflected in its share price, which rose by 13.8% over the course of the year and represents the second consecutive year with share price increases (11.3% in 2010). The performance of Repsol shares contrasted with that of the Ibex 35, which fell by 13.1% in 2011 and by 17% in 2010. Only eleven stocks in the Ibex 35 ended the year with positive results, among them Repsol, which ended 2011 with a six-month high and the second highest increase in market capitalisation (+€3.522 billion), reaching a total of €28.977 billion.

### Shareholder remuneration

Repsol's Board of Directors adopted a resolution to propose to the General Shareholders' Meeting a new remuneration system, under which shareholders may choose between receiving cash or Repsol paid-up shares, in line with the practice adopted by other companies in the Ibex 35.

The option would be structured through an increase in outstanding capital, which would be executed around the same dates as those on which the company has traditionally paid the final dividend.

Under this system, shareholders may choose between selling the free assignment rights allocated through the share issue, or receiving the relevant shares. Repsol would assume a firm purchase commitment with shareholders to acquire the free assignment rights at a guaranteed price.

On 10 January 2012 Repsol paid a gross interim dividend charged against 2011 profits totalling €0.5775 per share. Taking that dividend into consideration, together with the execution of the new remuneration system that replaces the traditional supplementary dividend, the company projects that shareholder compensation for 2011 will be approximately 10% higher than that received against 2010 results.

## Stock market performance





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## Board of Directors

### Chairman and CEO

**Antonio Brufau Niubó**  
Chairman of the Delegate Committee

### Vice Chairmen

**Isidro Fainé Casas**  
Institutional External Director on the Delegate Committee

**Juan Abelló Gallo**  
Institutional External Director on the Delegate Committee  
Member of the Strategy, Investment and Corporate Social Responsibility Committee

### Members

**Paulina Beato Blanco**  
Independent External Director  
Member of the Audit and Control Committee

**Artur Carulla Font**  
Independent External Director  
Chair of the Nomination and Compensation Committee

**Luis Carlos Croissier Batista**  
Independent External Director  
Member of the Strategy, Investment and Corporate Social Responsibility Committee

**Ángel Durán Adeva**  
Independent External Director  
Chair of the Audit and Control Committee

**Javier Echenique Landiribar**  
Independent External Director  
Member of the Delegate Committee  
Member of the Audit and Control Committee

**Mario Fernández Pelaz**  
Independent External Director  
Member of the Nomination and Compensation Committee

**María Isabel Gabarró Miquel**  
Independent External Director  
Member of the Nomination and Compensation Committee  
Member of the Strategy, Investment and Corporate Social Responsibility Committee

**José Manuel Loureda Mantiñán**  
Institutional External Director  
Member of the Nomination and Compensation Committee /span>  
Member of the Strategy, Investment and Corporate Social Responsibility Committee

**Juan María Nin Génova**  
Independent External Director  
Member of the Nomination and Compensation Committee  
Chair of the Strategy, Investment and Corporate Social Responsibility Committee

**Pemex Internacional España, S.A.**,  
represented by **Marco Antonio de la Peña Sánchez**  
Independent External Director  
Institutional External Director on the Delegate Committee  
Member of the Strategy, Investment and Corporate Social Responsibility Committee

**Henri Philippe Reichstul**  
Independent External Director  
Member of the Delegate Committee

### Member and Secretary

**Luis Suárez de Lezo Mantilla**  
Executive Director





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## Executive Committee



**Antonio Brufau Niubó**  
Chairman, CEO

**Miguel Martínez San Martín**  
Executive Director of Finance and Investee Companies

**Nemesio Fernández-Cuesta**  
Executive Director of Upstream

**Pedro Fernández Frial**  
Executive Director of Downstream

**Luiz Suárez de Lezo Mantilla**  
Executive Director, General Counsel and Secretary to the Board of Directors

**Begoña Elices García**  
Executive Director of Communications and Chairman's Office

**Antonio Gomis Sáez**  
Executive Director of Repsol Argentina

**Cristina Sanz Mendiola**  
Executive Director of Human Resources and Organisation

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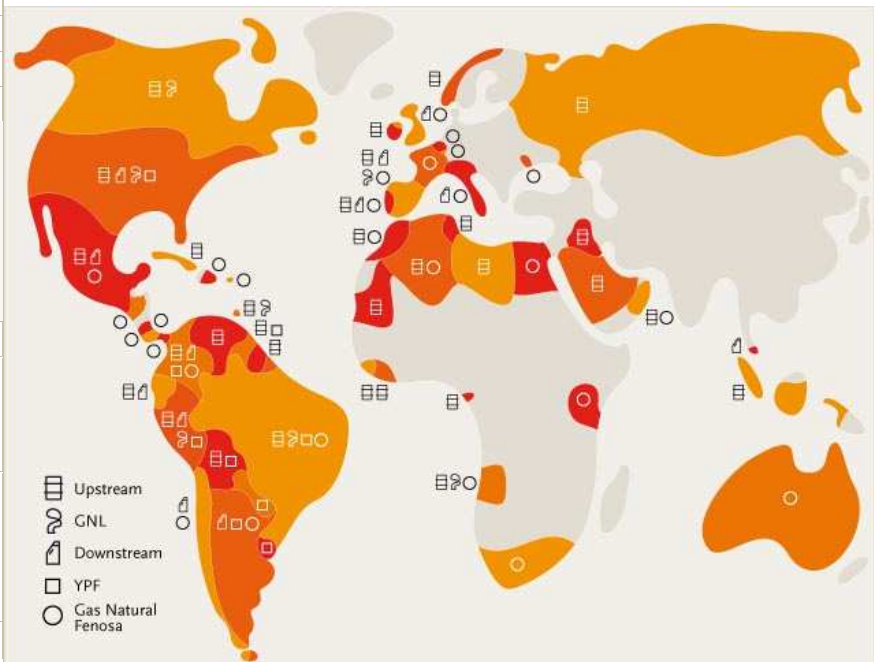
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## Upstream: Exploration and Production

The Repsol Upstream division comprises the oil and natural gas exploration and production activities excluding those performed by YPF. For information relating to the exploration and energy production activity in Argentina, see the section relating to this company and its subsidiaries.

The Repsol Upstream division manages its project portfolio with the objective of achieving profitable, diversified and sustainable growth, with a commitment to safety and the environment. Its strategy is underpinned by the following objectives: increasing output and reserves, diversifying its business geographically by increasing its presence in Organisation for Economic Co-operation and Development (OECD) countries, achieving operating excellence and maximising returns on its assets. To this end, a number of measures have been taken during the last few years: there was a successful investment in human capital to promote growth; the organisational structure was redefined to reflect the strategic objectives and oriented towards improving the quality of operations; technical and commercial processes have been redesigned and standardised, and technological capacities have been developed to operate successfully in deep waters.



As part of its strategy for geographic diversification, 2011 saw the Group successfully incorporate areas offering great potential in Alaska, Russia, Ireland, Iraq, Tunisia and Portugal

	OPERATING INCOME		
	2010	2011	Variation 2011/2010
North America and Brazil	2,911	419	(86%)
North Africa	642	99	(85%)
Rest of the world	560	895	60%
<b>TOTAL</b>	<b>4,113</b>	<b>1,413</b>	<b>(66%)</b>



### Strategic areas

Geographically, the Upstream division's strategy is based on key traditional regions, located in Latin America (mainly Trinidad and Tobago, Peru, Venezuela, Bolivia, Colombia and Ecuador) and in North Africa (Algeria and Libya), as well as in strategic areas for short and medium-term growth that have been consolidated in recent years. Of particular importance among these latter areas are the US Gulf of Mexico (with the important Shenzi field, in operation since 2009, one of the company's key strategic projects) and offshore fields in Brazil.

In addition, strategic growth in the medium term will also be bolstered by major gas projects currently being developed in Venezuela, Peru, Bolivia and Brazil, and in the longer term, by the increasingly important asset portfolio in

Norway, Canada, West Africa, Indonesia, Alaska and Russia.

As part of its strategy for geographic diversification, 2011 saw the Group successfully incorporate areas offering great potential in Alaska, Russia, Ireland, Iraq, Tunisia and Portugal.

## Exploratory successes

FINISHED EXPLORATION WELLS							2011 <sup>(1)</sup>	
	Positive		Negative		Under evaluation		Total	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	-	-	1	-	-	-	1	-
South America	2	-	1	-	-	-	3	-
Trinidad and Tobago	-	-	-	-	-	-	-	-
Other countries in South America	2	-	1	-	-	-	3	-
Central America	-	-	-	-	-	-	-	-
North America	-	-	1	-	-	-	1	-
Africa	1	-	4	2	-	-	5	2
Asia	-	-	1	-	-	-	1	-
<b>TOTAL</b>	<b>3</b>	<b>-</b>	<b>8</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>4</b>

FINISHED DEVELOPMENT WELLS							2011 <sup>(1)</sup>	
	Positive		Negative		Under evaluation		Total	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	-	-	-	-	-	-	-	-
South America	75	22	6	2	-	-	81	24
Trinidad and Tobago	2	-	-	-	-	-	2	-
Other countries in South America	73	21	6	2	-	-	79	23
Central America	-	-	-	-	-	-	-	-
North America	2	-	1	-	-	-	3	-
Africa	3	-	-	-	-	-	3	-
Asia	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>80</b>	<b>23</b>	<b>7</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>87</b>	<b>25</b>

The company is meeting its commitments and the next stage of growth is now materialising, based largely on the company's exploratory success and on the efficient development and start-up of explored areas. This emerging future growth is reflected in a number of strategic projects currently under different stages of development and which have gained real momentum between 2009-2011, such as the US Gulf of Mexico (Shenzi, in production since 2009), Brazil (Guará, Carioca and Piracucá/Panoramix), Venezuela (Cardón IV and Carabobo), Bolivia (Margarita-Huacaya), Peru (Kinteroni), Algeria (Reggane) and Libya (I/R).

Many of these projects are being undertaken in offshore areas - a key priority for Repsol where the company is cementing its position as one of the most competitive companies with an unrivalled track record in exploration and production. Over recent years, Repsol has stepped up exploration activity considerably and is harnessing its technical know-how on the path to becoming a major player in offshore exploration.

When operating, particularly in deep waters, Repsol applies best practices and recommendations taken from the industry's most stringent standards, and ensures strict compliance with all applicable regulations with the aim of becoming one of the best companies once the moratorium in the Gulf of Mexico has been lifted.

In September, the Repsol-BSC Research Centre was unveiled in Barcelona as a leading research centre to be used to improve upon and channel cooperation between Repsol and the Barcelona Supercomputing Centre (BSC). This collaboration will allow the parties to tackle a range of different research projects in areas of interest to Repsol operations. The centre reflects the company's commitment to technological research and the advantages that the BSC can offer to Spanish industry. Initial priorities are to continue with the Caleidoscopio project and to focus on improving underground imaging through seismic and electromagnetic technologies; these being of huge importance to deep water operations, among others.

At year-end, Repsol's Upstream division was involved in oil and gas exploration and production blocks in 31 different countries, either directly or through investee companies. The company was the operator in 23 of these countries.

Over the last five years, Repsol has stepped up its onshore and at sea exploratory activity considerably, making major gas and oil discoveries worldwide. In addition, Repsol's Upstream unit posted a record replacement rate of proven reserves in 2011, hitting 162%, outstripping the already admirable ratio of 131% for 2010. The unit has already deployed further resources and assets to provide a considerable boost to its future results.

## Results

PRODUCTION WELLS BY GEOGRAPHICAL AREA				AT 31 DECEMBER 2011 <sup>(1)</sup>	
	Oil		Gas		
	Gross	Net	Gross	Net	
Europa	8	6	-	-	
South America	1,056	357	163	64	
Trinidad and Tobago	99	69	48	16	



**PRODUCTION WELLS BY GEOGRAPHICAL AREA** AT 31 DECEMBER 2011<sup>(1)</sup>

	Oil		Gas	
	Gross	Net	Gross	Net
Other countries in South America	957	288	115	48
<b>Central America</b>	-	-	-	-
<b>North America</b>	14	4	-	-
<b>Africa</b>	113	27	79	24
<b>Asia</b>	-	-	-	-
<b>TOTAL</b>	<b>1,191</b>	<b>394</b>	<b>242</b>	<b>88</b>

**NET PRODUCTION OF LIQUIDS AND NATURAL GAS BY GEOGRAPHICAL AREA**

	2010			2011		
	Liquefied	Natural Gas	Total	Liquefied	Natural Gas	Total
	Mb	bcf	Mboe	Mb	bcf	Mboe
<b>Europe</b>	1	2	1	1	2	1
Spain	1	2	1	1	2	1
<b>South America</b>	26	390	96	26	370	92
Bolivia	2	33	8	2	35	8
Brazil	3	1	3	2	-	2
Colombia	2	-	2	1	-	1
Ecuador	6	-	6	9	-	9
Peru	3	23	7	3	37	10
Trinidad and Tobago	6	282	56	5	250	49
Venezuela	4	51	14	5	47	13
<b>Central America</b>	-	-	-	-	-	-
<b>North America</b>	10	3	11	10	3	10
United States	10	3	11	10	3	10
<b>Africa</b>	16	12	18	4	12	7
Argelia	1	12	3	1	12	3
Libya	15	-	15	3	-	3
<b>Asia</b>	-	-	-	-	-	-
<b>TOTAL</b>	<b>53</b>	<b>407</b>	<b>126</b>	<b>40</b>	<b>387</b>	<b>109</b>

**ACREAGE**
**2011**

km <sup>2</sup>	Developed <sup>(2)</sup>		Undeveloped <sup>(3)</sup>	
	Gross <sup>(4)</sup>	Net <sup>(5)</sup>	Gross <sup>(4)</sup>	Net <sup>(5)</sup>
<b>Europe</b>	21	16	31,586	18,252
<b>South America</b>	1,465	401	116,681	49,337
Trinidad and Tobago	170	63	5,409	2,300
Other countries in South America	1,295	338	111,272	47,037
<b>Central America</b>	0	0	5,269	2,108
<b>North America</b>	18	5	16,385	8,172
<b>Africa</b>	613	170	185,750	121,893
<b>Asia</b>	0	0	58,909	24,979
<b>TOTAL</b>	<b>2,116</b>	<b>591</b>	<b>414,580</b>	<b>224,740</b>

**REPSOL'S ACTIVITY BY GEOGRAPHIC AREA**
**2011**

	Acreage					
	No. of blocks		Net area (km <sup>2</sup> ) <sup>(7)</sup>		No. of exploration wells being drilled <sup>(6)</sup>	
	Development	Exploration	Development	Exploration	Gross	Net
<b>Europe</b>	11	38	348	17,920	-	-
<b>South America</b>	51	31	6,020	43,718	8	2
Trinidad and Tobago	7	-	2,363	-	-	-
Other countries in South America	44	31	3,658	43,718	8	2
<b>Central America</b>	-	1	-	2,108	-	-
<b>North America</b>	7	444	479	7,698	-	-
<b>Africa</b>	5	34	2,692	119,371	2	-
<b>Asia</b>	-	9	-	24,979	-	-
<b>TOTAL</b>	<b>74</b>	<b>557</b>	<b>9,539</b>	<b>215,792</b>	<b>10</b>	<b>2</b>

Operating income for the Upstream division in 2011 totalled €1.413 billion, in comparison to the €4.113 billion posted a year earlier. EBITDA amounted to €2.72 billion, versus the €2.478 billion in 2010. The 2010 result includes capital gains of €2.847 billion, a consequence of the agreement reached between Repsol and Sinopec to develop joint exploration and production projects in Brazil.

Without taking into account this capital gain and the variation between both years in terms of the effect of the result of the asset impairment test, operating income dropped in 2011 due to the interruption of operations in Libya, slumping production mainly due to the aforementioned suspension, and the depreciation of the dollar against the euro, all of which was partially

offset by rising crude oil and gas prices and lower exploration costs.

The average realization price of the Repsol's basket liquids hydrocarbons stood at US\$83.3 per barrel (€59.8 per barrel), versus US\$72.6 per barrel (€54.7 per barrel) in 2010. The average price of gas was US\$3.5 per thousand cubic feet, 28.3% up on the same figure for 2010. These variations are in line with those experienced by benchmark prices on international markets.

The lifting cost hit \$3.6 per barrel. This figure is higher than the 2010 cost (\$3 per barrel), largely due to the drop in production, chiefly in Libya and Trinidad and Tobago, and to a lesser extent because of increased costs. The finding cost of proven reserves averaged \$15.2 per equivalent barrel over the 2009-2011 period.

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(1) A gross well is a well in which Repsol owns a working interest.

The number of net wells is the sum of the fractions of interest held in gross wells.

\* Less than one exploratory well.

(2) Developed acreage is the area assignable to production wells. The amounts shown belong to the acreage, both in terms of exploration and development.

(3) Undeveloped acreage covers the surface area in which no wells have been drilled, or where wells have not been completed to the point of permitting oil and gas production in economically viable quantities, regardless of whether said area contains proven reserves.

(4) Gross acreage is the area where Repsol owns a working interest.

(5) Net acreage is the sum of the fractions of interest held in gross acreage.

(6) A gross well is a well in which Repsol owns a working interest. The number of net wells is the sum of the fractions of interest held in gross wells.

(7) Gross acreage is the area where Repsol owns a working interest. Net acreage is the sum of the gross area in each acreage according to their respective working interests.



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# Upstream

## Discoveries

Repsol's exploration results over recent years have been at all-time highs. The company has achieved numerous and important discoveries in priority areas for Repsol, including Brazil, the United States, Venezuela, Peru, Bolivia and Algeria. These discoveries have paved the way for strategic development projects to ensure future organic growth for the company. These projects are currently under development with the aim of bringing them online as soon as possible. Some of these discoveries, such as those in Brazil, Venezuela and Peru, were among the largest in the world for their respective years.

In 2011 there were three new discoveries at exploratory wells: Gávea and Malombe in Brasil and A1-130/4 in Libya.





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## Upstream

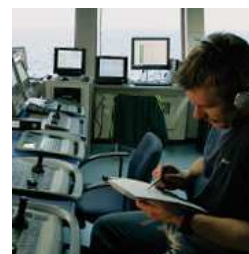
### Production

Repsol's hydrocarbons output in 2011 (excluding YPF) was 298,791 boe/d, down 13.2% on figures for 2010.

The conflict in Libya caused production within the country to plummet to a quarter of the annual output reported in 2010, and also accounts for nearly two thirds of the drop in production worldwide.

Furthermore, gas production in Trinidad and Tobago fell away over the second half of the year due to maintenance work on both the Atlantic liquefaction trains of Atlantic LNG and the production platforms. Contributing factors also included the natural decline of Albacora Leste (Brazil), coupled with Repsol's reduced interest in this asset following the corresponding agreement with Sinopec, and likewise the effects of the 2010 moratorium on drilling in the Gulf of Mexico, which continued to be felt over the first half of 2011.

On a more positive note, output in Peru climbed by 35% (primarily the supply of gas throughout 2011 to the Peru LNG liquefaction plant, which was brought online in 2010) and contracts were revised in Ecuador, although these plus points failed to offset the aforementioned drops.



### Reserves

At 31 December 2011, Repsol's proven reserves (excluding YPF), estimated in accordance with the US Securities and Exchange Commission (SEC)'s guidelines and the criteria set forth in the Petroleum Resources Management System of the Society of Petroleum Engineers (PRMS-SPE), totalled 1,167 Mboe, of which 393 Mboe (34%) comprised crude oil, condensate and liquefied gases, and the remaining 774 Mboe (66%) natural gas.

These reserves are mainly located in Trinidad and Tobago (31%). 52% is located in the other South American countries (Venezuela, Peru, Brazil, Ecuador, etc.), 12% is in North Africa (Algeria and Libya), 4% is in the Gulf of Mexico (United States) and about 1% in Spain.

In 2011, the aforementioned reserves fared well, with a total addition of 177 Mboe, most notably due to the Perla field in Venezuela, the Reggane project in Algeria, the initial declaration of recoverable hydrocarbons at Sapinhoa in Brazil and the revision of the Kinteroni development plan in Peru.

In 2011, Repsol reported a reserves replacement ratio (measuring total additions of proven reserves over the period relative to production for the period) of 162% for crude oil, condensate, LPG and natural gas (141% for crude oil, condensate and LPG, and 174% for natural gas).

### Investments

Operating investments in the Upstream business totalled €1.813 billion in 2011, 62% up on the same figure for fiscal year 2010 (€1.119 billion). Investment in development accounted for 43% of the total and was carried out mainly in the United States (19%), Bolivia (17%), Trinidad and Tobago (15%), Venezuela (13%), Peru (12%) and Brazil (12%). Exploration investments represented 40% of total investments and concentrated mainly in the United States (38%), Brazil (20%) and Angola (14%). Remaining investments relate largely to the acquisition of Eurotek in Russia.



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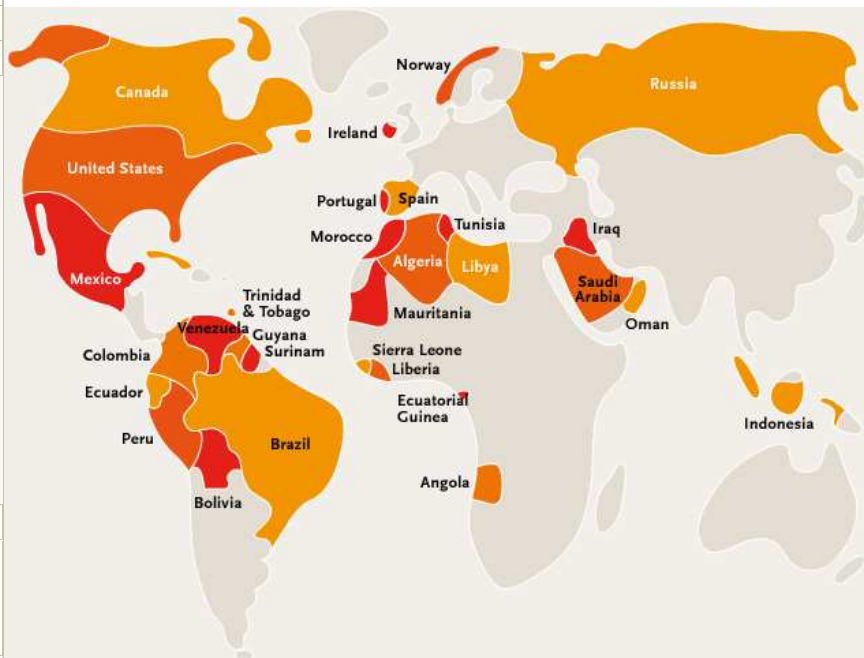
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## Operations by country



### The Upstream division around the world

The Upstream division holds mining rights to 631 blocks with a net surface area of 227,855 km<sup>2</sup> at the end of 2011. Of these, 545 blocks are exploratory and have a net surface area of 218,273 km<sup>2</sup>.

Repsol completed 11 exploratory wells in 2011, three of which obtained positive results. At the end of the year, 10 exploratory wells were being drilled or nearing completion.

### Spain

At the end of 2011, Repsol held mining rights to 30 blocks in Spain: 19 for exploration, with a net surface area of 7,221 km<sup>2</sup>, and 11 blocks in operation that have a total net area of 348 km<sup>2</sup>.

Through its facilities in Casablanca, Rodabaldo and Boquerón (Mediterranean Sea), Poseidón (Cadiz Bay) and Gaviota (Bay of Biscay), in 2011 Repsol produced a total of 0.8 million barrels of oil equivalent (MMboe) (around 2,073 barrels of oil equivalent per day (boe/d)). Net proven oil reserves at the end of the year are estimated to total 5.9 MMboe.



Exploration  
 Production

### 2011 milestones

- In June 2011 a favourable Environmental Impact Report (EIR) was received for the Siroco A-D permits to drill the Siroco A-1 exploratory well. In order to protect the environment, the period February-April was set for the drilling of the exploratory well, which is planned for 2013. The second exploration period in the area was extended in 2011 to August 2013.

Repsol obtained the Siroco A-D permits in the Alboran Sea in 2004. Since that time it has performed 3-D seismic tests and studied the sea floor as well as geophysical and geological aspects to determine whether or not there is gas in this area, as well as to determine the location of the

exploratory well.

- As part of the work to begin production at the Lubina and Montenegro reservoirs in the future, during the year the submarine operating and control equipment was installed at the Casablanca platform.



Only the EIR covering the installation of submarine equipment and the connection to the control equipment already installed at the platform has yet to be received. The delay in obtaining the official permits has meant that the scheduled production start-up for these fields has been pushed back to the fourth quarter of 2012.

Repsol made these two oil discoveries in Spanish Mediterranean waters in 2009 through the Montenegro D-5 and Lubina-1 wells located 45 kilometres off the coast of Tarragona. Repsol operates both wells.

- In June, the company acquired a 40% interest in the Bezana and Bigüenzo blocks, situated on the Cantabrian coast. The company Petroleum O&G España (60%) is the operator of these blocks.

## Angola

On 31 December 2011 Repsol held mining rights to 12 blocks (with service contracts) in the country. In 2011, 2,245 km of 2-D2-D seismic data were purchased.

### 2011 milestones

- In January 2011, the company was awarded three exploratory blocks (22, 35 and 37) during the exploration tender process that took place in this country. Repsol is the operator of block 22, with a 30% interest. The three blocks are located in the area of Kwanza, in deep waters off Angola, in a basin that Repsol geologists view as a continuation of the oil-rich Santos basin, located in Brazilian offshore waters. In December, Repsol signed contracts with Sonangol to acquire interests in these blocks, which were added to the company's official acreage during the first quarter of 2012.



Q Exploration

## Saudi Arabia

On 31 December 2011, Repsol held mining rights to one exploration block in the country (Block C) in the Rub Al'Khali basin, with a net surface area of 7,952 km<sup>2</sup>.



Q Exploration

## Algeria

In Algeria, Repsol held mining rights to four blocks at the end of 2011: 1 for exploration, with a net surface area of 3,121 km<sup>2</sup>, and three blocks under development that have a net surface area of 1,125 km<sup>2</sup>.

Net output for the year was 1 million barrels of liquids and 12.1 billion standard cubic feet (Bscf) of natural gas, with net total production equivalent to 3.1 MMboe (8,590 boe/d), originating especially from the TFT block (operated jointly by Sonatrach and Total) and, to a lesser extent, the Issaouane block operated by Repsol. Proven net reserves of liquids and natural gas at the end of the year were estimated to total 33.8 MMboe. In 2011, 1,394 km of 3-D seismic data and 557 km of 2-D2-D seismic data was obtained.



Q Exploration

A Development/Exploration

### 2011 milestones

- At the end of 2011, the Algerian authorities granted final approval for the development plan presented for the important Raggane gas project. This relevant milestone will allow the work to develop the area to commence in 2012, such as the drilling, extension and completion of wells to start extracting gas in 2016.

Repsol is the project operator and holds a 29.25% stake, while RWE owns 19.5%, Edison 11.25% and the remaining 40% is held by the Algerian state-owned company Sonatrach.

- In 2011, seismic data regarding the exploratory block Sud-Est Illizi were acquired, reprocessed and interpreted. This generated the information that

was necessary for the exploratory drilling campaign that is expected to start in 2012. In January 2011, Repsol signed a contract for the exploration and operation of the Sud-Est Illizi block in Algeria with the National Agency for Valuation of Hydrocarbon Resources (ALNAFT) and Sonatrach. The consortium carrying out the exploration activities is formed by Repsol (52.5%) as the operator, the Italian company Enel (27.5%) and the French-Belgian concern GdF-Suez (20%).

## Bolivia

On 31 December 2011, Repsol held mining rights to 29 blocks in Bolivia, located in the Beni, Pie de Monte, Subandino Sur and Subandino Norte basins: four for exploration, with a net surface area of 6,749 km<sup>2</sup>, and 25 blocks in operation that have a total net area of 1,561 km<sup>2</sup>. Net output for the year was 1.7 million barrels of oil, including condensed and liquid products separated from natural gas, and 35.4 Bscf of natural gas. Net total equivalent production was 8 MMboe (21,821 boe/d) and was fundamentally concentrated in the San Alberto and Sábalo fields (in which Andina has a stake and which are operated by Petrobras).



Q Exploration  
 A Development/Exploration



One of the Company's main objectives in Bolivia is the full development of the Margarita-Huacaya area. This key project is operated by a consortium comprising Repsol (operator, with a 37.5% stake), BG (37.5%) and PAE (25%) and is located in the northern reaches of Tarija state. The objective of the joint development project for the Margarita and Huacaya fields (the latter, discovered in 2008, was one of the five largest discoveries made in the world that year according to the publication Information Handling Services (his)) is to step up gas production in two phases, entailing a further increase of 6 Mm<sup>3</sup>/d for each phase.

### 2011 milestones

- A significant milestone was reached in the Margarita-Huacaya area in November 2011 within the development of the Phase when recompletion work was successfully finished at the Margarita 4st (MGR 4st) well with the objective of definitively finishing the drilling work.
- The production tests carried out determined that it was the well with the highest flow rate in the Subandina basin, with an output totalling 5.4 Mm<sup>3</sup>/day. These tests required the construction of a specially-designed burn pit measuring more than 50 x 60 metres and 25 metres deep, and eight-inch lines as burners, which is the largest built in Bolivia to date. Output is expected to reach 9 Mm<sup>3</sup>/day during the second quarter of 2012. The results obtained exceeded initial projections and corroborated from a technical perspective the possibility of producing the established flow in Phase I. More than 1,500 workers are currently engaged with this project and the construction of collection and export lines.
- Final development work on Phase 1 of the project continued in 2011 with the ultimate aim of increasing the field's natural gas processing capacity from 3 to 9 Mm<sup>3</sup>/day. This output is expected to be attained during the second quarter of 2012. In 2011, the construction work on the gas processing plant and the collection (GTS) and evacuation (EXS) systems advanced according to plan.
- In May 2011, the work to adapt and eliminate bottlenecks in the current facilities at Margarita-Huacaya ended. This improved the processing capacity and increased the total output of natural gas at the field, which rose from 2.3 Mm<sup>3</sup>/day (up until May 2011) to 3 Mm<sup>3</sup>/day. This work included the adaptation of the facilities, changes in valves, discharge lines, filters and compressors.
- In June 2011, Repsol made the final investment decision (FID) for Phase II of the development of Margarita-Huacaya, the aim of which is to reach an output of 14-15 Mm<sup>3</sup>/day in 2013-2014.



## Brazil

At the end of 2011, Repsol has mining rights to 15 blocks in Brazil: 13 for exploration (surface area of 1,619 km<sup>2</sup>) and 2 development wells (surface area of 78 km<sup>2</sup>) located in the Santos, Espírito Santo and Campos basins. Repsol is the operator of seven of these blocks. Net production for the year was 1.9 million barrels of liquids and 0.2 Bscf of natural gas, with a net total equivalent production of 2 MMboe (5,345 boe/d) from the block. Net proven reserves in this block were estimated at 35.6 MMboe at 31 December 2011.

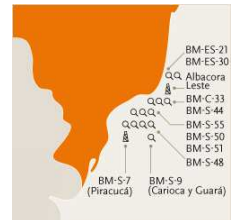
Two exploratory wells were completed during the year and both obtained positive results, while a further five were being drilled at 31 December.

The two new exploratory discoveries in 2011 at the Gávea and Malombe wells have meant that the company's important Brazilian offshore exploration successes over the past few years have continued and large discoveries have been made, particularly in the prolific BM-S-9 block located in the Santos basin. The discoveries in this block have generated two important development projects in the Guará and Carioca areas, where significant steps towards the start of production were made in 2011, and which contribute significantly to the growth in the company's output. The BM-S-9 block also originated the Abaré Oeste and Iguazú discoveries in 2009 and the Abaré discovery in 2011 (under final evaluation), which increases the potential for resources that may be developed in the area.

As part of the Guará and Carioca assessment plan, four appraisal wells turned in positive results in 2011 (Guará Norte, Guará Sul, Guará ADR1 and Carioca NE), thus reconfirming the considerable oil and gas potential of both areas.

All of these positive results took place within the framework of the alliance created in 2010, which has been fully operational during 2011. The alliance between Repsol (60%) and the Chinese company Sinopec (40%) has given rise to the creation of the company Repsol Sinopec Brasil, one of the largest private energy companies in Latin America.

Repsol Sinopec Brasil is one of the leading independent energy companies spearheading exploration and production in Brazil. It occupies a strategic position in the areas offering the greatest potential along the Brazilian pre-salt layer, and is leading exploratory efforts in the hydrocarbon-rich Santos basin alongside Petrobras and BG. The company boasts a significant and well-diversified portfolio of assets within the country, which includes a field already in production (Albacora Leste) and major discoveries over recent years, along with the Piracucá field, located within the BM-S7 block and currently under development, and Panoramix, in the BM-S-48 (674) block.



Q Exploration  
A Development/exploration



### 2011 milestones

- In December 2011, a fundamental step forward was taken with respect to the project in the Guará area (which was then renamed "Sapinhoá"), consisting of the presentation of the commercial viability report to the Brazilian authorities (ANP), together with the final assessment plan report. Both projects advanced in 2011 and will start production in 2013. Three appraisal wells were drilled (Guará Norte, Guará Sul y Guará ADR1) and positive results were obtained. Extended well tests (EWT), started towards the end of 2010, were also completed in 2011, with extremely positive results, not only in relation to the productivity but also the connectivity and permeability of the reservoir. An output totalling more than 30,000 barrels per day was obtained.



In 2011, the "Cidade de Sao Paulo" FPSO production unit arrived at the Brasfels shipyard in Angra dos Reis (Brazil) to undergo final construction (integration of the topsides). The work is expected to be completed during the second half of 2012, enabling production in the south Guará area to get under way as planned (2013).

- Also in 2011, Repsol signed a lease agreement for a second-generation production platform ("FPSO Charter 4") to cover the northern Guará area, while high-resolution 3-D seismic work started in the "Norte de Guará" area, and the decision was reached to acquire the submarine equipment required for production.
- At the start of 2011, the drilling of the Carioca NE appraisal well in the Carioca area was completed with positive results. This confirmed the



potential of the area and definitive data was obtained to profile the field's development plan and the future start of production, initially planned for 2017.

The extensive production testing (EWT) at Carioca NE started in mid-October 2011 and it is expected to end in 2012. The preliminary results at the end of 2011 are better than initially expected.

After the analysis of the final results obtained, the consortium expects to carry out more appraisal work so as to gauge the total potential of the Carioca area. For such purpose, the Brazilian authorities (ANP) have approved an additional programme of activities; pushing the deadline for submission of the commercial viability report back to 31 December 2013. Meanwhile, the work flow for the development project and production start-up for the Carioca area is continuing as planned.

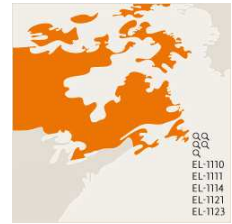


- In 2011, work continued on the evaluation and development plan for the Piracucá field (block BM-S7). In 2011, drilling work was carried out in order to obtain information on the best option for full development of the block.
- The evaluation plan for the Panoramix discovery, located within the BM-S-48 (674) block, was presented to the Brazilian authorities (ANP) in August of 2011. The plan envisages the drilling of an appraisal well over the coming three years, with contingent drill stem tests (DST) and the possibility of a second well. Repsol Sinopec Brasil and its partners, Statoil and Petrobras, announced an important exploration discovery in ultra-deep waters in the BM-C-33 block off Brazil using the Gávea well.  
  
The well, located 190 kilometres off the coast of Rio de Janeiro, was drilled under 2,708 metres of water, reaching a final depth of 6,851 metres.  
  
The consortium is currently analysing the results obtained before pressing on with the area exploration and evaluation process.  
  
Repsol Sinopec Brasil is the operator of the consortium, with a 35% stake. Statoil holds another 35%, with Petrobras owning the remaining 30%. According to IHS, Gávea is one of the ten largest discoveries made in 2011.
- On 4 November, a new gas discovery using the Malombe well was announced in the Brazilian post-salt layer of block BM-ES-21, located in the Espírito Santo basin. Repsol Sinopec Brasil owns 11.1% of the consortium and Petrobras, the operating company, holds the remaining 88.9%.  
  
The discovery is located 135 kilometres from the city of Vitória. The well was drilled in the south-east of the Peroá field, under 900 metres of water.  
  
The discovery was confirmed after conducting a battery of tests that detected gas at a depth of 2,600 metres. The consortium, which will continue to carry out work within the block, will present an assessment plan to the Brazilian National Oil Agency (ANP) to delimit the discovered reservoir and provide estimated volume and productivity.
- In addition, the positive findings obtained at the Abaré and Tingua wells are currently being finalised and assessed. Repsol Sinopec Brasil and its partners Petrobras and BG, announced a new discovery of high-quality oil using the Abaré well, in the Carioca area, located in the BM-S-9 block, increasing the potential of this area. The discovery can be found 35 kilometres to the south of the Carioca discovering well and 293 kilometres off the east coast of the state of São Paulo. The analyses have revealed the existence of high-quality oil, with an API of 28°, in carbonate reservoirs at depths of 4,830 metres. Formation testing is envisaged to gauge the productivity of these stores.
- In August of 2011, the Tingua well finished drilling at the BM-S-44 (S-M-172) block in the Santos basin. The partners in the venture are Repsol Sinopec Brasil (25%) and Petrobras (75%), the latter being the operating company.  
  
The companies found a column of nearly 40 metres of crude oil in the pre-salt carbonate reservoir. The samples of oil and gas are being evaluated, as is the potential of the block.
- In February 2012, Repsol announced an important oil discovery in the deep waters in the Campos basin.  
  
The discovery was made by the Pao de Açúcar well in block BM-C-33, where Repsol Sinopec Brasil is the operating company with a 35% stake. The well has encountered two reservoirs of oil and gas at a total depth of 500 metres, which would be one of the largest discoveries made by the company in Brazil.  
  
Pao de Açúcar thus joins the discoveries Seat and Gávea, all of which are located in block BM-C-33. These three wells corroborated the high potential of the Campos basin, which could confirm the existence of a large reservoir of oil and gas similar to that in the Santos basin. Repsol and its partners in the discovering consortium expect to carry out additional work in 2012 to confirm the large size of the discovery.  
  
The important exploration discoveries made in recent years, coupled with the development projects that are currently materialising and the agreement reached with Sinopec, all bolster the company's strategy in

Brazilian offshore, one of the areas offering the greatest growth in oil and gas reserves worldwide, and represent one of the key growth projects for the Upstream division.

## Canada

On 31 December 2011, Repsol owned mining rights to five exploration blocks in Canada with a net surface area of 2085 km<sup>2</sup>. In 2011, 1,786 km<sup>2</sup> of 3-D seismic data were obtained.



Q Exploration

### 2011 milestones

- At the end of the year, Repsol obtained two new exploration blocks in the east of Canada during the offshore licensing round in 2011. The company has a 10% interest in the consortium together with two partners with experience in the area (Chevron and Statoil). These blocks (NL11-02-01 and NL11-02-02) are located in the Flemish Pass basin off the coast of Newfoundland and Labrador and they are next to block EL-1123 (Repsol 25%, Statoil 75% and operator) and the Mizzen discovery (operated by Statoil).

These two new blocks have been included in the company's official acreage during the first quarter of 2012, and they are in addition to those obtained in 2008-2010 in the offshore areas of Newfoundland-Labrador, Central Bridge and Jeanne d'Arc, and make up a growing number of exploration projects. In 2011, seismic work continued to be carried out to define the inventory of drillable sites in this country.



## Colombia

At the end of 2011, Repsol held mining rights to 11 blocks in Colombia: six for exploration, with a net surface area of 8,020 km<sup>2</sup>, and five blocks in operation that have a total net area of 216 km<sup>2</sup>. Net output during the year was 1.4 million barrels of oil (3,713 boe/d). Net proven oil reserves at the end of the year were estimated to total 2.6 million barrels. Over the course of 2011, an exploration well was completed and 1,501 km<sup>2</sup> of 3-D seismic data were obtained.



Q Exploration  
A Development/exploration

### 2011 milestones

- In April, an agreement was reached with the Colombian company Ecopetrol (ECP) under which Repsol will acquire a 50% interest in the offshore blocks RC-11 and RC-12 (ECP 50% and operator). The asset offers medium-high potential and is found in shallow waters off the Colombian coast.

In January 2011, Repsol announced the signing of an agreement with ECP and the Brazilian company Petrobras to acquire a 30% stake in the Tayrona offshore exploration block, located close to the La Guajira peninsula, in Colombia's Caribbean waters. ECP holds a 30% interest and Petrobras, which will continue to be the operating company, holds the remaining 40%. In 2011, 1,500 km<sup>2</sup> of seismic work was carried out to

pinpoint the location of drilling prospects.

- In October 2011, drilling was completed on the Caño Rondón Este well within the Rondón block. The findings will be assessed after production tests have been conducted. In July, drilling was completed on the Chipirón T well within the Chipirón block. The well discovered oil at three levels and the positive results obtained from the well are currently undergoing appraisal work. Both wells had yet to be definitively completed at the end of the year.

## Cuba

At the end of 2011, Repsol held mining rights to an expiration block off the coast of Cuba which covers seven exploration areas (N 25/26/27/28/29/35/36), which have a total net surface area of 2,108 km<sup>2</sup> and are governed by the same agreement.

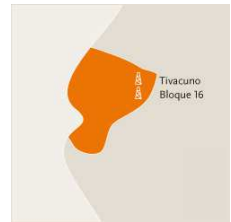
Repsol signed a lease contract in January 2010 with Saipem to use the Scarabeo-9 drilling rig, which complies with all the technical requirements and all limitations established by the US authorities for drilling operations in Cuba. The drilling rig reached Cuban waters in January of 2012 and started drilling the Jagüey exploration well on 31 January.



Q Exploration

## Ecuador

At the end of 2011, Repsol had mining rights in Ecuador to two development blocks covered by a new service agreement taking effect in 2011 and involving a net surface area of 752 km<sup>2</sup>. Net output during the year totalled 8.6 million barrels of oil (23,495 barrels per day), most originating from block 16. Net proven oil reserves at the end of the year were estimated to total 26.1 million barrels. In 2011, no exploration wells were completed in Ecuador.



A Development/exploration

In 2011, the Company operated blocks 16 and Tivacuno normally after the agreed application of the new service agreements by the Ecuadorian government. The agreement covering block 16 was concluded on 23 November 2010, in accordance with the deadline established by the legislation reforming the Oil and Gas Act. The effective date of this agreement was 1 January 2011. The agreement for the Tivacuno block was concluded on 22 January 2011 and it entered into force on 21 February 2011. The agreements are enforced for the period 2011-2018. Repsol has a 55% interest in both contracts. The partners, holding equal interests in both blocks, are OPIC (31%) and Sinochem (14%).

## United States

On 31 December 2011, Repsol's Upstream division held mining rights to 445 blocks located in the Gulf of Mexico off the coast of the United States (Green Canyon, Alaminos Canyon, Atwater Valley, Garden Banks, Keathley Canyon, Mississippi Canyon and Walker Ridge) and Alaska (in the North Slope, Beaufort Sea and Chukchy Sea basins). A total of 439 of these are for exploration, with a net surface area of 5,613 km<sup>2</sup>, and the other six are in operation (39 km<sup>2</sup>). Net output for the year was 10 MMboe per day.

Net proven reserves at the end of the year were estimated to total 49.8 MMboe. In 2011, no exploration wells were finished. 3-D seismic data covering 16,208 km<sup>2</sup> were purchased.

In 2011, Repsol continued to strengthen its project portfolio in the United States, in line with its strategy of increasing its presence in OECD countries, through the start of the important exploration project on the North Slope of Alaska and in two areas of non-conventional resources within the large Mississippian Lime reservoir.

Also worthy of note is the Company's presence in deep waters in the US Gulf of Mexico, where the company holds a 28% interest in the important Shenzi oil production project, along with an impressive number of exploratory blocks, which proved their potential in 2009 following the discovery made at the Buckskin well. This region is considered to be one of the most profitable and with the best deep-water exploration potential in the world.

The Shenzi field, which started production in March of 2009 through its own platform, is one of the largest discoveries made to date in deep waters in the Gulf of Mexico. At year-end, twelve wells were producing at the Shenzi platform, plus two further wells at the neighbouring Marco Polo platform.



Q Exploration

A Development/exploration



## 2011 milestones

- In December, the company announced an agreement with the US oil company Sand Ridge Energy regarding the acquisition of the 16% and 25% stakes in two areas of non-conventional resources at the Mississippian Lime oilfield in the states of Kansas and Oklahoma. The agreement was confirmed in January 2012.

Through this operation, production and reserves will flow to the company starting in 2012. Repsol's net output is expected to peak in 2019 at 90,000 boe/d. More than 200 productive horizontal wells are expected to be drilled in 2012 and the number will exceed 1,000 in 2014, with a surface area of 6,000 km<sup>2</sup>. Mississippian Lime is an oil play offering high historical output and proven resources, rich in light oil and gas produced from fractured carbonates. There is already a heavy presence of infrastructure within the area, which has been operating there for over 30 years and will allow for a rapid start-up of production and marketing of the resulting oil and gas.

- In March 2011, an agreement was reached with companies "70 & 148, LLC" and "GMT Exploration, LLC" covering the entry of Repsol into the blocks that these companies have on the North Slope (one of the most prolific areas of Alaska) for joint exploration. After the agreement, Repsol has a 70% stake in these blocks and is the operator. The project involves more than 150 blocks covering approximately 2,0 km<sup>2</sup> located close to large fields already in production. Repsol has committed to conducting the first assessment phase of these sites and to making the investments that are necessary to explore and verify the financial feasibility of the project.



- Exploratory drilling activities started in the first quarter of 2012. The project has two parts: one is already being delineated and the other consists of a group of exploratory probes. The blocks lie directly south of the blocks located in the Beaufort Sea (71 blocks), in which the company has a 20% stake.

The Alaskan North Slope is a particularly promising area, offering a number of major discovered reservoirs and relatively low exploratory risk.

Thanks to the new exploration project, Repsol has increased its presence in OECD countries while strengthening its strategy of balancing its exploration portfolio with low-risk assets through onshore opportunities within a stable environment. 70 & 148, LLC and GMT Exploration, LLC are two private companies based in Denver (Colorado), both engaged in oil exploration activities. Both have worked jointly on exploratory ventures in Alaska for over a decade, and comprise one of the largest consortiums operating in the state. The company has high expectations that its international experience, together with a partner with local knowledge, will generate value in the short and medium term.

- In 2011, two production wells were drilled at the Shenzi field. Repsol received authorisation for SB-201 on 15 March from the US government to continue drilling (suspended in 2010 due to the moratorium, which was eventually lifted in October 2010). The drilling was completed in May and the well came on-line in June, with an initial output of 17,000 boe/d. Drilling at the second authorised production well (SB101) was finished in September, and the well came on line in October. To date, the reservoirs have been matching previously modelled performance levels.

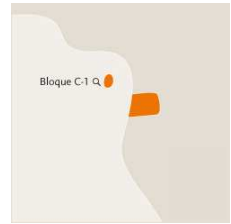
In 2011, the construction of facilities and the drilling of injection wells continued as part of the water injection project at Shenzi to maintain pressure and increase production levels.

- After receiving authorisation, the appraisal well was drilled at the Buckskin discovery. This appraisal well was completed in October and obtained positive results, thereby confirming the great potential of resources at the reservoir. Important information was also obtained to assist with the definition of the plan for the future development of the field, oriented towards starting production between 2017 and 2018. As the project operator in the exploratory phase, Repsol made this important discovery in 2009 at a total depth of 9,000 metres, which made it the deepest well operated by Repsol to date and one of the deepest drilled in the area.

The project portfolio in various phases with acreage exceeding 400 blocks that the company is consolidating in the United States, makes this country one of the company's strategic growth areas.

## Equatorial Guinea

On 31 December 2011, Repsol held mining rights to an exploration block in this African country with a net surface area of 361 km<sup>2</sup>.



Q Exploration

## Guyana

At the end of 2011, Repsol had mining rights to an exploration block off the coast of Guyana that had a net surface area of 3,780 km<sup>2</sup>. Repsol holds a 15% stake in this block (Georgetown) and is the operator.

In 2011, no exploratory wells were drilled, but 8,192 km of 2-D seismic data were acquired.



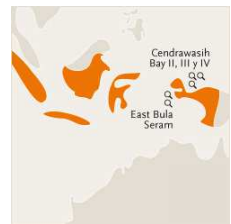
Q Exploration

The work prior to the start of the Jaguar-1X exploratory well was completed during the year, and this well started to be drilled in February 2012 using the Atwood Beacon jack-up platform. The well is expected to reach its final depth during the third quarter of 2012. Jaguar-1X is a shallow-water well but it is subject to high pressure and temperatures due to its depth and the geological characteristics of the area.

## Indonesia

At the end of 2011, Repsol had mining rights to five exploration blocks in Indonesia, with a net surface area of 11,791 km<sup>2</sup>. In 2011, 4,735 km of 2-D-2 seismic data were purchased.

In the third quarter of 2010, Repsol reached an agreement with the Indonesian company Niko Resources Ltd. to acquire a 45% interest in the Seram and East Bula exploratory blocks. This transaction was formally approved by the Indonesian government.



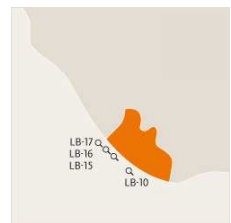
Q Exploration

## Liberia

On 31 December 2011, Repsol owned mining rights to five exploration blocks in Liberia with a net surface area of 3,032 km<sup>2</sup>.

### 2011 milestones

- An agreement was reached in the second quarter of 2011 to increase Repsol's interest in the LB-15, LB-16 and LB-17 blocks by a further 10% from the previous 17.5% to the current 27.5%. A deal was also reached for Repsol to acquire a 10% interest in the LB10 exploration block.



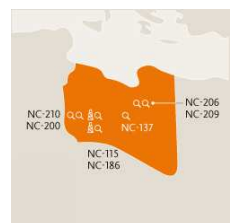
Q Exploration

## Libya

At the end of 2011, Repsol had mining rights to nine blocks in this North African country. Of these, seven are exploratory and cover a net surface area of 16,185 km<sup>2</sup>. The two operating blocks have a net area of 1,566 km<sup>2</sup>. Net proven oil reserves at the end of the year were estimated to total 110.9 million barrels. In 2011, two exploratory wells were completed in the country, one of which gave negative results and one ended with positive results. In addition, 474 km of 3-D seismic data and 50 km of 2-D-2 seismic data were obtained.

Owing to the armed conflict that ravaged the country for most of 2011, production in Libya came to a complete halt at the start of March. During most of February, production was close to 50% of capacity. During the second and third quarter of 2011, Repsol did not obtain any output from the fields.

After the conflict was resolved, production restarted in October at blocks NC-115 and NC-186. Over the course of 2012, production levels are expected to be close to those before the conflict.



Q Exploration

A Development/exploration



## 2011 milestones

- In January, a new exploration discovery was made at the NC-115 block in the Murzuq basin in Libya using the A1 130/4 well.



## Iraq

At the end of 2011, Repsol had mining rights to two exploration blocks in Iraq, with a net surface area of 2,753 km<sup>2</sup>.

### 2011 milestones

- After negotiations with Iraqi authorities, the Minister of Natural Resources confirmed the awarding of the Piramagrum and Qala Dze exploratory blocks to Repsol, under a production sharing contract (PSC). These exploration agreements were signed in July 2011. In the second half of the year, Repsol opened an office in Erbil (Kurdistan).



Q Exploration

## Ireland

At the end of 2011, Repsol had mining rights to two exploration areas (Dunquin and Newgrange projects), which have a net surface area of 969 km<sup>2</sup> in total.

In 2011, 27,215 km of 2-D2-D seismic data were purchased.

### 2011 milestones

- In 2011, Repsol acquired a 25% stake in the deep water Dunquin project from ExxonMobil (the operating company) and from Eni. This exploration project is located off the southeast coast of the country, in the Porcupine basin. The area is in the second exploration period and drillable prospects have already been identified. It is estimated that they could start to be drilled in 2013. This operation allows for the entry of Repsol into a proven oil system and in an OECD country with favourable contractual terms and market conditions.



Q Exploration



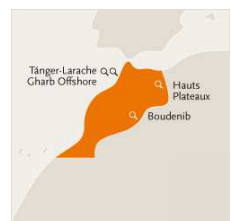
- Repsol took part in the "2011 Irish Atlantic Margin" exploratory licensing round, obtaining 40% of the "Newgrange" exploratory project in the South Porcupine/Goban Spur basin in southern Ireland.

## Morocco

At the end of 2011, Repsol held mining rights to four exploration blocks located in the Rharb basin (offshore), Bechar and Missouri (onshore) basins, which have a total net surface area of 72,631 km<sup>2</sup>. In 2011, two exploration wells were drilled with negative results.

### 2011 milestones

- Last year, two agreements (prospecting licences) were entered into, under which Repsol will carry out the initial studies to assess the non-conventional resource potential (shale gas) in two large areas of the country, in the Boudenib and Hauts Plateaux blocks.



Q Exploration

## Mauritania

On 31 December 2011, Repsol had mining rights in this African country covering an exploration block (TA-10) with a net surface area of 15,166 km<sup>2</sup> located in the Taoudenni basin. The company is the operator of this block and it controls a 70% interest, while the remaining 30% pertains to RWE Dea. In 2011, no exploration wells were drilled.



Q Exploration

## Mexico

At the end of 2011, Repsol had multiple service contracts (MSC) involving the Reynosa-Monterrey development block (440 km<sup>2</sup> net), which is located in the

north of the country, in the Burgos basin. The contract was awarded in 2003 during the first international tender process called by the Mexican state-owned company Pemex involving the development and production of gas fields in Mexico. Repsol started this operation in March 2004. The area had 15 gas fields that had already been discovered and were in operation, and the objective was to substantially increase production by making additional development investments. Under this contract, Repsol became the first international company to participate in the development and operation of oil and gas fields in Mexico.



At the time that Repsol took over the operation in 2004, total production was 10.5 million standard cubic feet per day (MMscf/d). After the intense drilling campaign carried out in recent years and the investments made in pipelines and additional access points, in addition to the 3-D seismic data obtained, production increased fourfold. Average production was 34.14 MMscf/d in 2011 from 48 producing wells.



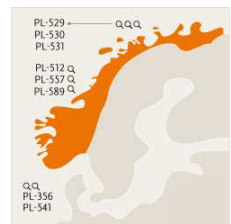
Development/exploration

## Norway

At the end of 2011, Repsol held mining rights to eight exploration blocks in Norway with a net total surface area of 986 km<sup>2</sup>, and was the operator of two of them (PL-541 and PL-531). In 2011, 67,308 km of 2-D seismic data and 4,490 km<sup>2</sup> of 3-D seismic data were obtained. In 2011, an exploration well was drilled with negative results.

### 2011 milestones

- In January, Repsol acquired a 10% interest in block PL-529 from the operating company Eni. This block is located in deep waters in the south-eastern part of the Barents Sea. A 3-D seismic survey of the block has already been conducted, which provided detailed information of the primary prospect, B0nna, which is expected to be drilled in the spring of 2012.
- Also effective from 1 January 2011, a 10% stake in the PL-530 licence was obtained by acquiring an interest in the operating company GdF, which holds a 30% share of the licence. Drilling work on the Heilo exploration well was completed in October, with the well turning in negative findings.



Exploration



- On that same effective date, Repsol obtained a 20% share of block PL-531 from the company Marathon, which maintains a 10% interest but transferred operating control to Repsol. The drilling of an exploratory well is initially planned for 2013 and it will be the first operated by Repsol in Norway, specifically in the Barents Sea.
- In September 2011, bids were presented for exploration areas as part of the APA2011 (Award on Predefined Areas) in the North Sea and the Norwegian Sea. At the start of 2012, it was announced that Repsol had been awarded six new licences and appointed as the operating company for one of them.

## Oman

At the end of 2011, Repsol held mining rights to an exploration block in this country with a net surface area of 2,482 km<sup>2</sup>.



Exploration

## Peru

At 31 December 2011, Repsol had mining rights to seven blocks in this country: five exploration blocks with a net surface area of 20,866 km<sup>2</sup> and two development blocks with a net surface area of 202 km<sup>2</sup>. In 2011, net oil and gas production in Peru was 9.6 MMboe (26,166 boe/d), originating from blocks 56 and 88 (Camisea reservoir). Net production of crude oil was 2.9 million barrels, including condensed and liquid products, and natural gas totalled 37.2 Bscf.

Proven reserves of crude oil and gas were estimated to be 284.8 MMboe at the end of the year. In 2011, 135 km of 2-D2-D seismic data were obtained. During the year, the supply of natural gas from the Camisea field, where Repsol has a 10% interest, continued normally to the Peru LNG liquefaction plant, in which the company has a 20% stake. The Camisea field comprises

blocks 56 and 88, where production is intended for the local market and to supply the Peru LNG liquefaction plant.

### 2011 milestones

- The drilling and completion phase was finished during the year, along with testing of the development wells as part of the development programme for the Kinteroni Sur field. This phase started in August 2010. The wells have been prepared for the start of production, and only the surface facilities must be completed together with the pipeline system to the Malvinas plant. The drilled development wells turned in better-than-expected results.

In terms of the surface facilities, 2011 witnessed the start of preliminary on-site work on the production installations at Kinteroni and Nuevo Mundo, while extraction pipelines were also constructed. The processes for the purchase of materials with long delivery times (LLI) were completed so that they will be available when necessary during the construction phase. Production in the south part of Kinteroni is expected to start during the second half of 2012.

The required environmental permits to start the exploration phase in the north part of Kinteroni were obtained from the authorities in 2011. The exploratory drilling campaign is expected to start in 2012.



The Kinteroni field is in lot 57, which is located in the central-western part of Peru, east of the Andes, in the Ucayali-Madre de Dios basin. The agreement was concluded in January 2004 and covers five exploratory periods (the fourth is currently underway). Kinteroni was discovered in January 2008 and was one of the world's largest at the time. The partners of the block are Repsol, with 53.84% (operator) and Petrobrás, holding 46.16%. The final investment decision to develop the south part of the Kinteroni field was taken in July 2009 and it was reported as a commercial discovery to the Peruvian authorities in November 2009. The initial development plan was sent to the local authorities in May 2010.



Q Exploration  
A Development/exploration



- In the exploration licensing round of 2011, Repsol was awarded, pending final official confirmation, three exploration blocks (180, 182 and 184) in the Huallaga basin.

## Russia

At the end of 2011, Repsol held mining rights to seven exploration blocks (net surface area of 4,272 km<sup>2</sup>).

In 2011, 549 km of 2-D2-D seismic data were obtained.

### 2011 milestones

- In December 2011, an important agreement was entered into, and confirmed in 2012, for the creation of a joint company (AROG) together with Alliance Oil Company. Repsol will hold a 49% interest and its partner will have the remaining 51% stake. This company will serve as a growth platform for both companies in the Russian Federation, the largest producer of gas and oil in the world. The joint company will be valued at approximately \$840 million after both shareholders have contributed assets and capital.

Alliance will transfer its Upstream affiliates Saneco and Tatnefteodatcha to AROG. These affiliates have assets with a current production capacity of approximately 20,500 barrels per day, and licences for exploration and production of 2P reserves (proven and probable) at 31 December 2010 totalling approximately 171.5 million barrels. These assets are valued at approximately \$570 million. Repsol will contribute capital and acquire the rest from Alliance to reach a shareholding of 49% in the joint company. As well as exploiting the assets to be contributed by Alliance Oil, the agreement envisages the parties seeking out further exploration opportunities and achieving growth through production assets in Russia.



Q Exploration



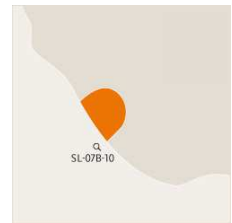


Repsol currently owns a 3.7% stake in the equity of Alliance Oil due to the merger of West Siberian Resources and the Russian energy giant in 2008. The aim of this important new agreement is to combine Alliance Oil's knowledge and privileged access to exploration and production opportunities in Russia with the know-how and technical capacity of Repsol, thus forging a long-term exploration and production alliance.

- In December, the company announced an agreement to acquire the Russian company Open Joint Stock Company Eurotek (Eurotek), which holds exploratory and production licences in West Siberia. The acquired assets include the licences for the Syskonsyninskoye (SK) gas field, which is currently at an advanced stage of development and will enter into production in 2012, and also the Yuzhno-Khadyryakhinskoye (YK) gas field, which is currently in the final stage of delineation and could start producing in 2016. In 2012, Repsol will incorporate these assets into the joint venture with Alliance Oil, as part of its commitment to contribute assets and capital to the joint venture. The YK and SK fields will provide AROG with roughly 115 MMboe of additional 2P reserves (proven and probable), combined with the 171.5 million barrels of oil that Alliance has contributed to the joint venture through its Upstream Saneco and Tatnefteodatcha affiliates.
- The acquisition of 74.9% of the shares in the Russian company Eurotek-Yugra was completed in this company holds exploration and production licences for the Karabashsky 1 and 2 blocks in the prolific West Siberia basin. Through this company, five new exploratory licences were secured during the 2011 round, also located within the West Siberia basin.

## Sierra Leone

At the end of 2011, Repsol had mining rights to one offshore exploration block in Sierra Leone, with a net surface area of 1,273 km<sup>2</sup>. The company has a 25% interest in the SL-07B-10 block, which originates from the retained areas of the former SL-6 and SL-7 blocks awarded in January 2003. The partners are Anadarko (55% and the operator) and Tullow (20%). The depth of the water in the block varies between 100 and 3,800 metres. At the end of 2011, two exploratory wells were being drilled (Mercury-2 and Júpiter-1).



Q Exploration

### 2011 milestones

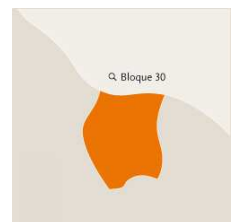
- During the year, the preliminary work for the drilling of the Júpiter-1 well was performed, which started in November at a water depth of 2,200 metres. In February 2012, it was announced that a 30-metre column of hydrocarbons had been found.

The work for the drilling of the Mercury-2 well started in 2011, and the drilling is expected to end during the second quarter of 2012.

Repsol is a pioneering company in the exploration of this African region. The company's operations, which started in 2003, have resulted in the discovery of a high potential area that will continue to be explored together with its partners Anadarko and Tullow (after the two exploration discoveries in deep waters in 2010 with the Mercury-1 well and in 2009 with the Venus B-1) well.

## Surinam

In December 2011, Repsol held mining rights in this country to an exploration block that has a net surface area of 4,997 km<sup>2</sup>. Repsol Exploración Surinam is the operator of the block and it holds a 40% interest, while Noble Energy holds 45% and Petro Hunt has the remaining 15%.



Q Exploration

## Trinidad and Tobago

At the end of 2011, Repsol had mining rights in Trinidad and Tobago to 27 offshore operating blocks (net surface area of 2,363 km<sup>2</sup>), including 30% of the offshore exploration and production assets of the company bpTT in Trinidad and Tobago through the stake held in the company BPRY. Net output for the year was 4.6 million barrels of liquids and 249.9 Bscf of natural gas, with a net equivalent output of 49.1 MMboe (134,576 boe/d). Net proven

reserves of oil and natural gas were estimated at 360.1 MMboe at 31 December 2011. Over the course of 2011, no exploratory well was drilled in this country, but 105 km<sup>2</sup> of 3-D seismic data were obtained.

In terms of oil and gas reserve production, in Trinidad and Tobago Repsol remained one of the largest private companies, together with BP, which owns 30% of bpTT. Production from these various fields will be sent to the liquefaction trains at the Atlantic LNG plant, in which Repsol also owns an interest. In 2011, bpTT carried out stoppages for maintenance work on the Cannonball, Kapok and Inmortelle fields and on trains 1 and 4 at the Atlantic LNG facility, dragging down production figures at bpTT in comparison to 2010.



Repsol is the operator of the TSP marine blocks, holding a 70% interest. In February 2011, 3-D seismic data collection ended and it was intended to complete the available information regarding the area and assess the remaining exploration potential of this asset. In 2011, processing of the available seismic data was completed. The objective is to define the existence of possible exploration opportunities during 2012.

On 25 August, the bpTT consortium (70% BP, 30% Repsol) announced the start-up of gas production at the Serrette field. This dry gas field features an unmanned platform, connected by a 26-inch pipeline running 50 kilometres to bpTT's "Cassia B" platform.



Development/exploration

## Venezuela

At 31 December 2011, Repsol held mining rights to nine blocks in Venezuela: one for exploration, with a net surface area of 207 km<sup>2</sup>, and eight blocks in operation that have a net surface area of 849 km<sup>2</sup>. Net production for the year was 4.9 million barrels of oil and liquids separated from natural gas and 47.1 Bscf of natural gas, for a total equivalent of 13.2 MMboe (36,288 boe/d), mainly originating from the Quiriquire, Barúa Motatán, Mene Grande and Yucal Placer blocks. Proven net reserves of crude oil and natural gas were estimated to be 159.4 MMboe at the end of the year.



Exploration  
Development/exploration



## 2011 milestones

- A natural gas supply agreement covering the production of the large gas project at the Perla megafield, in the Cardón IV block, was entered into in December 2011. This relevant event led to the start of the project's development stage. The supply contract, which runs until 2036, envisages a mutual undertaking to deliver and purchase over 8.7 Tcf of natural gas, and the facility will help meet domestic gas demand in Venezuela, which is expected to grow over the coming years on the back of rising consumption in domestic, industrial, petrochemical and electrical power processes. Given the large volume of resources, the Perla field offers additional possibilities to export natural gas that the partners Repsol and Eni will analyse, together with PDVSA and the Venezuelan authorities.

The Perla megafield was discovered by Repsol and Eni in 2009 within the Cardón IV block, which is located in shallow waters off the Gulf of Venezuela, roughly 50 kilometres from the coast. A total of five wells have now been drilled. These will be brought on stream through platforms and underwater connections, which will take the gas to the coast for processing and evacuation to the Venezuelan distribution network.

In 2011, two appraisal wells (Perla 4 and Perla 5) were drilled and turned in positive findings. In January 2011, the Perla 4 well was completed. At the beginning of February, production tests were finished and gave rise to results that reconfirmed the large size of the reservoir. After the production tests performed at the Perla 4 well, the resources recognised by the Venezuelan Ministry of Oil amount to 9.43 Tcf.

During the second quarter of the year, the Perla 5 well was completed and production tests were performed. Of the five wells drilled to date, this has the most production potential and is the first to be slanted at a considerable angle (82°) in offshore Venezuela. Following final completion, it is estimated that the well will be able to produce between 100 and 130 Mscf/d. Perla 4 and Perla 5 had a dual objective: to assess the lateral continuity of the discovery and to form part of an early production programme.

In 2011, the field development plan was fully defined, envisaging production start-up under Phase I to take place in 2013. Also, in 2011 it

was decided to push forward the bidding process for construction of the offshore facilities.

The Perla project has been structured into three phases so as to bring development of the field in line with changing gas demand/consumption. Target production levels for each phase are 300 Mscf/d for the first, 800 Mscf/d for the second and 1,200 Mscf/d for the third.

During the evaluation period, Repsol and Eni are participating equally with 50% a piece. Following the evaluation stage, however, PDVSA will be entitled to acquire up to 35% of the venture, meaning that Repsol and Eni would each control 32.5%.



- Moving on to the Carabobo heavy crude oil project, conceptual engineering work for the early accelerated production project was completed in 2010 and the initial development plan was agreed upon. Similarly, procurement processes were initiated to acquire drilling equipment and machinery for the stratigraphic and development wells and 3-D seismic equipment for the area. The conceptual engineering for the construction of an upgrader with a capacity to process 200,000 barrels per day started in March 2011. Once the upgrader is operational, which is expected to take place in 2017, the quality of the crude oil will increase to 32° API.

These different phases envisage, in principle, the possibility of starting early accelerated production during the second half of 2011, reaching a production plateau of 400,000 barrels of oil in 2017 with the start-up of the upgrader.



In February 2010, the Venezuelan government awarded the Carabobo project to a consortium of international companies headed by Repsol, which holds an 11% stake. This project consists of the development, together with PDVSA, of the heavy crude reserves in the Carabobo 1 Norte and Carabobo 1 Centro blocks, located in the oil-rich area of Orinoco. This area is one of those that have the largest reserves of undeveloped oil in the world. Production at Carabobo will reach 400 barrels per day for 40 years. Part of the heavy crude oil obtained from the project will be sent to Repsol's Spanish refineries, which will allow the company to profit from its investment in advanced deep conversion techniques at the refineries.

## Tunisia

In December 2011, Repsol held mining rights in this country to three exploration blocks that have a net surface area of 7,560 km<sup>2</sup>.

### 2011 milestones

- The company was awarded, officially confirmed during the first quarter of 2012, three exploration blocks off the coast of Tunisia in an area of high potential where no exploratory wells have been drilled to date. The blocks are located in waters with a depth of up to 400 metres. If current estimates are confirmed in the next few years, the block could well become a new oil area.



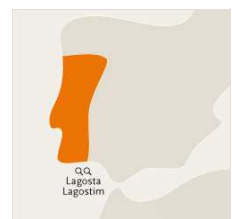
🔍 Exploration

## Portugal

At the end of 2011, Repsol held mining rights to two exploration blocks (net surface area of 4,473 km<sup>2</sup>).

### 2011 milestones

- In October 2011, the exploratory contracts were signed for the Lagosta and Lagostim blocks in Portuguese national waters. The two blocks have a water depth of between 500 and 1,500 metres, and are located between 15 and 100 kilometres from the coastline.







Annual Report  
2011



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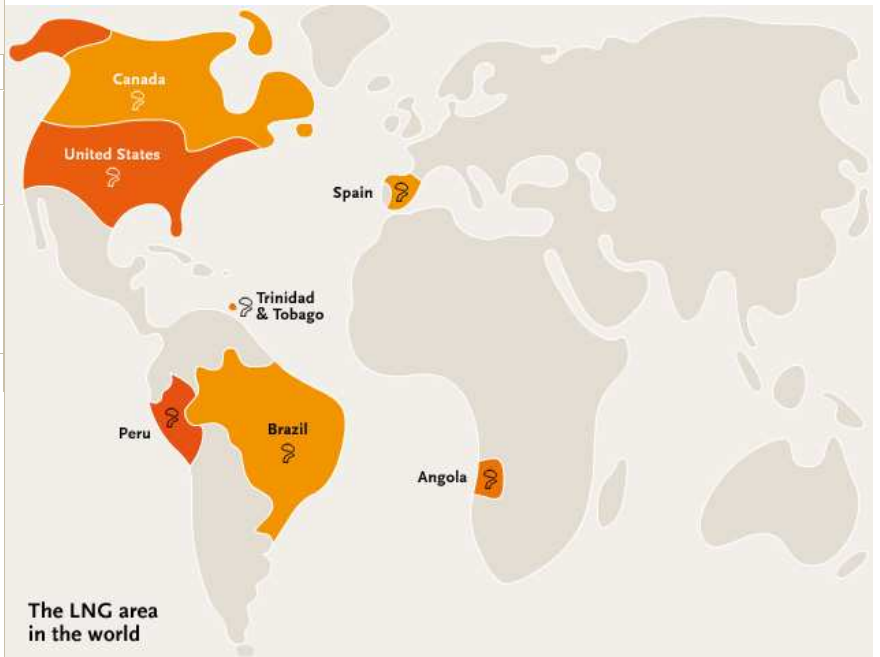
Español

# Liquid Natural Gas

## LNG

LNG activities include the liquefaction, transportation, marketing, and regasification of liquefied natural gas, in addition to electricity generation activities at the Bahía de Bizkaia Electricidad (BBE) plant in Spain and natural gas marketing in North America. Since 1 January 2008, the information in this section refers solely to the Repsol Group's LNG marketing segment. For information relating to YPF's LNG activities, see the chapter regarding this company and its subsidiaries.

The LNG market in 2011 was affected by an increase in demand from Japan, caused by the earthquake that rocked the country on 11 March and the ensuing nuclear crisis. This brought about a steady increase in prices in the Far East, which over the fourth quarter of the year reached figures upwards of \$17 and \$18 per million Btu, and caused a significant de-coupling with European pricing points, and even more so with the Henry Hub, which remained unchanged at around \$4 per million British thermal units (Btu).



## From the Atlantic to the Pacific

The market was also characterised by low fleet availability, coupled with high spot fleet prices stemming from the longer travel times caused by the rerouting of large amounts of LNG from the Atlantic Basin to the Pacific on account of the price de-coupling and the slump in demand throughout Europe.

In Spain, the most noteworthy event was the fall in demand for LNG, together with an increase in gas supplied by pipelines following the commissioning of the Medgaz pipeline.

In the electricity production market, the arithmetic average price in the Spanish electricity pool was €49.9 per MWh in 2011, which is 35% higher than in 2010. Gross demand for electricity on the Iberian Peninsula in 2011 was 255,179 GWh, 1.8% less than in 2010. Most technologies saw a decline in production compared with the preceding year, such as hydroelectricity



(-28%) and combined cycle (-22%), while coal-fired plants doubled production compared with 2010. The output of electricity generated using solar energy grew by 43%, with a 26% increase in photovoltaic and a 193% increase in solar thermal electric production.

## Results

Operating income from LNG operations totalled €386 million in 2011, in comparison to the €105 million posted a year earlier. EBITDA stood at €556 million in 2011 (€277 million in 2010).

The improvement in these results is chiefly due to larger LNG volumes (the LNG Peru plant having been operational since June 2010) and LNG sales margins in 2011.



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# Liquid Natural Gas

## Assets and projects

The main milestone for 2011 was that it marked the first full year of operation of the Peru LNG liquefaction plant in Pampa Melchorita, which was brought on stream in June 2010, and in which Repsol holds a 20% interest. The other partners in Peru LNG are Hunt Oil (50%), SK Energy (20%) and Marubeni (10%). The Camisea consortium, in which Repsol also has a 10% stake, supplies natural gas to the plant.

The facility, with a nominal capacity of 4.4 million tonnes per year, processes 17 Mm<sup>3</sup>/d of gas. It boasts the two largest storage tanks in Peru (each with a capacity of 130,000 m<sup>3</sup>) and a sea terminal over one kilometre long capable of receiving ships with capacities ranging from 90,000 to 173,000 m<sup>3</sup>.

Additionally, the project envisages that Repsol will be solely responsible for marketing the liquefaction plant's entire production. The gas purchase agreement entered into with Peru LNG will run for 18 years from the start of commercial operations and is, in terms of volume, the largest LNG acquisition ever made by Repsol.

In September 2007, Repsol was awarded a contract under an international tender organised by the Federal Electricity Commission (CFE) for the supply of LNG to the natural gas terminal in the port of Manzanillo on Mexico's Pacific coast. The contract envisages the supply of over 67 billion cubic metres (bcm) of LNG to the Mexican plant over a fifteen-year period. The Manzanillo plant, which will supply gas to the CFE's power plants in mid-west Mexico, will receive gas from the Peru LNG plant. Although the launch was planned during the second half of 2011, it finally started operating in March 2012.



Production at the Peru LNG facility was 5.2 bcm/y (3.8 million tonnes/year), more than twice the figure for 2010, due to 2011 being the first full year of operation and thanks also to various improvements in the plant's operating levels.

In June 2009, the Canaport LNG regasification plant, co-owned by Repsol (75%) and Irving Oil (25%), started production. It is the first LNG regasification plant on the east coast of Canada. Located in Saint John (New Brunswick) and with an initial send-out capacity of 10 bcm/y (1 Bcf/d), the Canaport terminal is one of the largest in North America and supplies markets on the eastern coast of Canada and in the north-eastern United States. Repsol, the plant operator, supplies the LNG that fuels the terminal and is entitled to the entire regasification capacity. The third tank, which started operations in May 2010, is able to receive loads from the largest LNG carriers currently being used.

A multi-year supply agreement was signed in 2010 with Qatargas for the Canaport LNG plant. The LNG will be supplied using Q-Flex and Q-Max carriers, the largest in the world with capacities of 210,000 and 260,000 m<sup>3</sup>, respectively, making Canaport LNG one of the handful of plants worldwide

capable of receiving these ships at its terminal. This agreement bolsters Repsol's status as a reliable, diversified and flexible natural gas provider for the Canadian and north-eastern American markets.

Highlights for 2011 included the delivery of 14 loads under the agreement with Qatargas, concentrated in months of higher market prices, as well as a sharp rise in plant use in comparison to 2010, with January 2011 hitting an all-time high in terms of daily production. The growth in natural gas marketing activities in North America is also expected to continue.

## Strategic position

Repsol is involved in the Trinidad and Tobago integrated LNG project, in which it holds an interest alongside BP, BG and others in the Atlantic LNG liquefaction plant. The strategic geographical location of the facility allows it to supply markets in the Atlantic Basin (Europe, the United States, and the Caribbean) under advantageous economic conditions.

This plant has four liquefaction trains with a combined capacity of 15 million tonnes per year. Repsol holds a 20% stake in train 1, 25% of trains 2 and 3 and 22.22% of train 4. The latter is one of the largest in the world, with a production capacity of 5 million tonnes per year. In addition to its interests in the liquefaction trains, Repsol plays a leading role in the supply of gas and is one of the main purchasers of LNG.

In Spain, Repsol has a 25% share in BBE. This company owns a combined cycle power plant with 800 MWe of installed capacity. Power generated at the plant is fed to the grid for residential, commercial, and industrial consumption. The facility, which is located in the port of Bilbao, had low availability over 2011 due to the repair and subsequent replacement of a turbine casing, although the excess gas was sold without financial loss for the company.

In December 2007, Repsol and Gas Natural SDG signed a shareholders' agreement with Sonangol Gas Natural (Sonagas) with the aim of starting work on developing an integrated gas project in Angola. This initiative involves the appraisal of gas reserves to determine the investments that would be required for their development and export in the form of liquefied natural gas. In accordance with the timetable, Repsol and Gas Natural SDG, acting through the company Gas Natural West Africa (GNWA), have taken part in the exploration activities currently being undertaken by Sonagas, the operator of the consortium, in which GNWA holds a 20% interest, followed by Sonagas (40%), Eni (20%), Galp (10%), and Exem (10%).

As part of the significant structural and legal progress achieved to date, an office was set up in Luanda and gas and mining rights were awarded by the Government of Angola. The Concession Decree was approved by the Council of Ministers, ratified by the National Assembly and published in the Official State Gazette. The Risk Service Agreement was also signed in July 2010.

Moreover, drilling on the Garoupa-2 and Garoupa North wells was completed in 2011. The wells are currently under appraisal and the on-going work will eventually verify the consortium's projected gas resources in this field. For the time being, the seismic and drilling work is set to continue into 2012.

In December 2009, Repsol joined an alliance in Brazil and its members have the following stakes: Petrobras (51.1%), BG (16.3%), Galp (16.3%) and Repsol (16.3%). This alliance is carrying out Front End Engineering Design (FEED) work prior to the installation of a floating LNG plant at the BSM-9 and BSM-11 fields. These studies serve to assess the technical and financial viability of the floating liquefaction plant. In 2011, three studies were carried out in tandem with different consortiums with a view to reducing technical uncertainty in relation to what is a ground-breaking development within the LNG industry, while also stimulating competition between different contractors to therefore streamline development and construction costs. The results of these studies will also be compared with other logistical solutions for extracting gas in the Brazilian pre-salt area in order to select the best option for capitalising these resources. In the event that the project is finally declared feasible, Repsol will be guaranteed the option of participating in the construction of the plant. The final investment decision is due to be made in 2012.







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# Liquid Natural Gas

## LNG transport and marketing

The Repsol-Gas Natural LNG (Stream) 50-50% joint venture is one of the leading LNG marketing and transport companies in the world and one of the most important operators in the Atlantic Basin. One of this company's objectives is to optimise the short- and medium-term management of both partners' fleets, which include 15 gas tankers and a variety of other vessels.

In 2011, Repsol, with management support from Stream, marketed 11 bcm of LNG, up 64% on the same figure for 2010. Most of the gas emanated from Peru LNG, which was started up in June 2010, and from Trinidad and Tobago. The main destinations for the cargo were Spain, Canaport LNG and the Asian market, with sales materialising in both the Atlantic Basin (Europe and America) and the Pacific Basin. In January 2011, the agreement with Kogas entered into force for the supply of 1.9 bcm of LNG, strengthening supplies to the Asian market.

In terms of ships, at year-end 2011 Repsol owned seven LNG carriers and a further two jointly owned (50-50) with Gas Natural Fenosa, all of them under time charter agreements and with a total capacity of 1,248,630 m<sup>3</sup>. Four of these LNG carriers were added during 2010, linked to the start-up of the Peru LNG project, one from Naviera Elcano and three more from Knutsen OAS.

In addition to this, Repsol leased a further four LNG carriers in 2011 under medium-term agreements and other shorter ad hoc leases.



## Investments

Operating investments from the LNG business totalled €18 million in 2011, down on the €82 million invested in 2010. The funds were largely earmarked for the gas project in Angola and the Atlantic LNG plant, while investment for 2010 related primarily to the construction of a third tank at the Canaport LNG regasification terminal.



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## Downstream

The Repsol Group Downstream business embraces the supply and trading of crude and other products, oil refining, marketing of oil products and LPG, and the production and marketing of chemicals. The information in this section does not include YPF's activities. For information on YPF's Downstream activities, please see the section on this company and its subsidiaries contained in this Annual Report.

### Results

Operating income in the Downstream business amounted to €1.207 billion in 2011, down 7.4% on the €1.304 billion posted in 2010.



This decline is largely explained by the reduced margins reported by the Refining business, as well as by the lower volumes in the Marketing businesses, as a result of the economic crisis, despite a better showing from Chemicals in the first half of the year and the better results from the Trading division.



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## Refining

The Repsol Group owns and operates five refineries in Spain (Cartagena, A Coruña, Bilbao, Puertollano and Tarragona), with a combined distillation capacity of 896,000 barrels of oil per day (including, in the case of the Tarragona refinery, the share in Asfaltos Españoles S.A.). Installed capacity at the La Pampilla refinery (Peru), in which Repsol holds a 51.03% stake and is the operator, is 102,000 barrels of oil per day.

Repsol refineries processed 31.5 million tonnes of crude in 2011



### SOURCE OF PROCESSED CRUDE

	2010	2011
Middle East	22%	28%
North Africa	19%	6%
West Africa	11%	9%
Latin America	25%	26%
Europe	23%	31%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>



Events in 2011 were shaped by the prevailing international economic crisis. Demand for oil products dropped off in OECD countries; impacting the refining business, particularly in Europe, where refining margins fell to the lowest levels seen in several years. The year witnessed the closure of yet more refineries and this restructuring within the sector is expected to continue over the coming years across both Europe and the United States, with the closure of less complex refineries that are unable to compete as effectively. These closures, coupled with a foreseeable recovery in mid-term demand, will allow margins to rally, especially at refineries geared towards producing medium distillates and with capacity to process heavy crude products. According to the findings of the International Energy Agency, this increase in demand will largely materialise in emerging countries, headed by China and India.

**PETROLEUM PRODUCT SALES**Thousand tonnes<sup>(1)</sup>

	2010	2011
<b>SALES BY GEOGRAPHICAL AREA</b>		
<b>SALES IN EUROPE</b>	<b>32,429</b>	<b>33,548</b>
<b>Own network</b>	<b>20,963</b>	<b>20,558</b>
Light products	17,850	17,580
Other products	3,113	2,978
<b>Other sales<sup>(2)</sup></b>	<b>5,591</b>	<b>6,400</b>
Light products	3,889	4,814
Other products	1,702	1,586
<b>Exports<sup>(3)</sup></b>	<b>5,875</b>	<b>6,590</b>
Light products	1,688	1,754
Other products	4,187	4,836
<b>Sales to rest of the world</b>	<b>6,184</b>	<b>4,257</b>
<b>Own network</b>	<b>1,822</b>	<b>1,862</b>
Light products	1,469	1,579
Other products	353	283
<b>Other sales<sup>(2)</sup></b>	<b>3,383</b>	<b>1,548</b>
Light products	2,517	1,231
Other products	866	317
<b>Exports<sup>(3)</sup></b>	<b>979</b>	<b>847</b>
Light products	357	264
Other products	622	583
<b>TOTAL SALES</b>	<b>38,613</b>	<b>37,805</b>
<b>SALES BY DISTRIBUTION CHANNEL</b>		
<b>OWN NETWORK</b>	<b>22,785</b>	<b>22,420</b>
Light products	19,319	19,159
Other products	3,466	3,261
<b>OTHER SALES<sup>(2)</sup></b>	<b>8,974</b>	<b>7,948</b>
Light products	6,406	6,045
Other products	2,568	1,903
<b>EXPORTS<sup>(3)</sup></b>	<b>6,854</b>	<b>7,437</b>
Light products	2,045	2,018
Other products	4,809	5,419
<b>TOTAL SALES</b>	<b>38,613</b>	<b>37,805</b>

The refining margin in Spain stood at \$1.6 per barrel in 2011, slightly down on the same figure for 2010 (\$2.5 per barrel). In Peru this figure was \$3.3 per barrel compared with \$4.2 per barrel in 2010.

In this context, Repsol refineries managed by the Downstream Division processed 31.5 million tonnes of crude, which is down 2.8% compared with 2010 after discounting the contribution by REFAP after its sale in December 2010. The average use of refinery capacity was 71% in Spain, down from 74% last year. In Peru the capacity use was also lower than in 2010, down from 71% to 69% in 2011.



Over the last quarter of the year, the expansion and improvements at the Cartagena (C10) and Bilbao (URF) refineries entered into operation - key projects in Repsol's Strategic Plan approved in 2007.

Successful completion of the projects in 2011 saw Repsol meeting the objectives initially set out in its investment strategy:

- Increasing the distillation and conversion capacity of the refining system so as to maximise production of medium distillates given the prevailing shortage, cutting down on fuel oil production processing heavier crude oils.
- Improving energy efficiency, along with safety and the environment.

- This makes Repsol's refining facilities among the best and most efficient.

The C10 project has enabled the company to boost production capacity at the Cartagena complex to 11 million tonnes (220,000 barrels per day). Now geared towards the production of medium distillates -over 50%- and with capacity to process heavy crudes with greater value added, the upgraded refinery will help improve the balance of trade in Spain by reducing the country's fuel imports.

PRODUCTION		
Thousand tonnes		
	2010 <sup>(6)</sup>	2011
<b>Refinery intake<sup>(4)</sup></b>		
Crude	34,410	31,483
Other refinery	7,321	9,053
<b>TOTAL</b>	<b>41,731</b>	<b>40,536</b>
<b>Refining production</b>		
Intermediate	18,668	17,835
Gasoline	9,084	8,145
Fuel oil	6,081	6,287
LPG	1,166	1,056
Bitumens <sup>(5)</sup>	1,478	1,272
Lubricants	275	242
Other(except petrochemicals)	2,250	2,858
<b>TOTAL</b>	<b>39,002</b>	<b>37,695</b>

Petronor's refinery in Bilbao increased its conversion capacity thanks to the URF project.

INSTALLED REFINING CAPACITY			
	PRIMARY DISTILLATION	CONVERSION INDEX <sup>(8)</sup>	LUBRICANTS
Refining capacity <sup>(7)</sup>	MThousand barrels per day	Percentage	Thousand tonnes per year
<b>Spain</b>			
Cartagena	220	76	155
A Coruña	120	66	-
Puertollano	150	66	110
Tarragona	186	44	-
Bilbao	220	63	-
<b>TOTAL REPSOL (SPAIN)</b>	<b>896</b>	<b>63</b>	<b>265</b>
<b>Peru</b>			
La Pampilla	102	24	-
<b>TOTAL REPSOL</b>	<b>998</b>	<b>59</b>	<b>265</b>

The construction of both plants was completed with excellent safety ratios, on schedule and within the approved budget.

Furthermore, both projects form part of Repsol's drive to adapt its facilities to the production of clean transport fuels, encouraging the use of biofuels (biodiesel) while improving energy efficiency, security and the associated environmental impact.

In 2011, Repsol signed an agreement with the Korean company SKL to construct and operate a new production plant for new-generation lubricant base oils.

The plant, which adjoins the Cartagena refinery, will require an estimated investment of €250 million and it is expected to start operating in 2014. The refineries in Cartagena and Tarragona will provide the raw materials for the plant.

The base oils produced are needed in the manufacture of lubricants for Euro IV/V engines, and involve a major reduction in emissions and consumption.

As part of the Repsol Group's plan to integrate people with disabilities, 81 disabled people formed part of the group's workforce at its industrial complexes in Spain at year-end 2011.

- (1) 2010 includes the 30% stake in REFAP, which was sold in December.  
 (2) Includes sales to operators and bunker sales.  
 (3) Expressed from country of origin.  
 (4) Repsol Group's consolidation policy: all refineries are fully consolidated in the financial statements, except for Refap, which is presented in accordance with the Group's 30% stake in 2010 (sold on 14 December of that year). The reported capacity in Tarragona includes the stake in ASES.A.  
 (5) Includes the 50% stake in ASES.A's bitumen production, which is owned 50/50 by Repsol and Cepsa. Repsol markets 50% of ASES.A's products.  
 (6) The data for 2010 include the 30% contribution of the Refap refinery, which was sold in December 2010.  
 (7) Information disclosed in accordance with Repsol Group's consolidation policy: all refineries mentioned are fully consolidated in the Group's financial statements.  
 (8) Defined as the ratio between the equivalent capacity factor of Fluid Catalytic Cracking (FCC) and primary distillation capacity.



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## Marketing

Repsol markets its range of products through an extensive network of service stations.

In addition, marketing activity includes other sales channels and the marketing of a wide range of products, such as lube oils, bitumen, coke, and derivatives.

Total sales through its own network fell year-on-year by 1.6% across the board in 2011 to reach 22,420 thousand tonnes. This drop was due to shrinking demand, which was particularly evident in Spain.

In similar fashion, sales of gasoline and diesel oil through its own network fell by 4% in Spain. Despite this drop, sales fared better than the market as a whole, leading to an increased market share of 0.9%. In other countries, sales climbed by 4%.



BRAND	POINTS OF SALE
Campsa	200
Repsol	3,086
Petronor	308
Other	26
<b>TOTAL</b>	<b>3,620</b>

Despite the drop in sales, Repsol's Marketing division efficiently managed the sales margin in both the service station channel and direct sales to final consumers; obtaining results that are in line with those seen last year. In 2011, the strict policy of controlling credit risk continued to be applied.

At 31 December 2011, Repsol had a network of 4,506 services stations in countries where the Downstream division operates. In Spain, the network comprised 3,620 points of sale, 70% of which had a strong concessionary link to the network while 26% were company operated. Service stations in other countries were spread throughout Portugal (425), Italy (166) and Peru (295).

### SERVICE STATIONS AND SUPPLY UNITS

COUNTRIES	CONTROLLED BY REPSOL <sup>(1)</sup>	LICENCED <sup>(2)</sup>	TOTAL
Spain	2,540	1,080	3,620
Portugal	264	161	425
Peru	116	179	295
Italy	52	114	166
<b>TOTAL</b>	<b>2,972</b>	<b>1,534</b>	<b>4,506</b>

In 2011, Repsol continued to fulfil the commitments acquired with the EU in 2006, which include the right of operators leasing service stations to be released from their long-term supply agreements with Repsol. These commitments expired on 31 December 2011.



Last year, Repsol opened the world's first service station to be certified by Breeam, the leading international design and assessment method for sustainable buildings. The service station was constructed under eco-architecture parameters, employing a wide range of recycled materials, and is highly energy-efficient. The building also boasts the AENOR Universal Accessibility Certificate.

Reflecting the growth experienced in the non-oil business - 18% in 2011 - Repsol has been chosen as the brand of choice for Spanish drivers when purchasing non-oil products, according to the findings of a recent study conducted by a leading independent market research firm. Repsol service stations are considered the best in terms of the quality of the range of in-store products and services and the quality of the service offered to customers.

In similar fashion, Repsol, alongside El Corte Inglés department store, staged a successful promotional campaign in which discount vouchers were offered on purchases exceeding a certain amount, both at Repsol service stations and at the department stores of the Spanish chain.

Moreover, Repsol signed a strategic agreement with Burger King to develop a project whereby Auto King diners are to be set up at Repsol service stations in Spain.

In keeping with its commitment to society, Repsol rolled out an initiative in 2011 to improve the accessibility of more than 500 of its service stations in Spain. Thanks to the project, Repsol will have the largest number of accessible retail outlets in Spain and one of the largest in Europe.

In addition, the company opened the first accessible service station in Portugal, both for employees and customers.

As a prime example of the company's unflinching commitment to sustainable energy supply, Iberia and Repsol staged the first Spanish flight to be powered by biofuels. This ground-breaking project within the airline industry used biofuels certified by the Repsol Technology Centre.

Once again confirming the company's strategy of growth and consolidation in Asia, Repsol has started to produce lubricant oils in China and Malaysia, with sales expected to approach 20,000 tonnes in 2015, equivalent to more than 25% of Repsol's annual sales of these products in Spain. At present, Repsol markets its lubricant oils directly or through distributors in over 60 American, European and Asian countries.

Repsol has been actively working since 2005 to integrate disabled people into its workforce and provide them with the required training, while also raising the awareness of other employees in this regard. The sterling work conducted in this field has been recognised on numerous occasions. In 2011, the company was handed the Discapnet award by the Spanish Once Foundation and also received the Ability Award for "Best private company", in recognition of its significant overall contribution to developing and providing employment to disabled people.

Reflecting Repsol's commitment to environmental protection and personal safety, the Autonomous Region of Madrid awarded Repsol's Bio Telex 46 oil with the European eco-label. The oil was fully developed at the Repsol Technology Centre. The official standard is the first to be granted in Spain to a lubricant oil.



**In 2011, the Company opened the world's first service station to be certified by Breeam, the leading international design and assessment method for sustainable buildings**

(1) Owned or controlled by Repsol under long-term commercial agreements or other types of contractual relations that ensure direct long-term control by Repsol over these points of sale.

(2) "Licenced" refers to service stations owned by third-party dealers with whom Repsol has entered into a new licencing agreement entitling Repsol to (i) be the sole supplier of these service stations and (ii) to use its brand at the service station. In the EU, the maximum term of these agreements is five years.



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## Liquefied Petroleum Gas (LPG)

Repsol is one of the leading retail distributors of LPG in the world and ranks first in Spain and Latin America. In 2011, the company operated in nine different European and Latin American countries.

LPG sales in 2011 totalled 3,033 thousand tonnes, on track with figures for 2010. Total sales in Spain slumped by 12% year on year, dragged down by particularly dry and warm weather conditions. Repsol distributes bottled, bulk, and piped LPG in Spain through collective distribution networks and has more than 10 million bottled LPG customers supplied through a network of 232 endorsed distribution agencies. Bottled LPG sales accounted for 62% of total retail LPG sales in Spain in 2011.

### LPG SALES VOLUME

Thousand tonnes

	2010	2011
<b>Europe</b>	<b>1,680</b>	<b>1,486</b>
Spain	1,503	1,325
Rest of Europe <sup>(1)</sup>	177	161
<b>Latin America</b>	<b>1,428</b>	<b>1,547</b>
Peru	497	625
Ecuador	368	375
Argentina	332	336
Chile	199	194
Rest of Latin America <sup>(2)</sup>	32	17
<b>TOTAL</b>	<b>3,108</b>	<b>3,033</b>
Bottled	1,761	1,689
Bulk, piped and others <sup>sup&gt;(3)</sup>	1,347	1,344
<b>TOTAL</b>	<b>3,108</b>	<b>3,033</b>

LPG sales margins for 2011 in Spain were up year on year across all channels, including bottled LPG, despite the change to the pricing system ushered in by the Spanish Ministry of Industry, Tourism and Trade in September 2009. According to the new model, 25% of the price to be applied in a forthcoming quarter would be pegged to international prices in the preceding quarter and the remaining 75% would depend on the maximum price prevailing at the end of the quarter then ended. The formula change had an adverse impact on fourth quarter 2009 results and on results for 2010 and 2011. If this formula remains in place or if international LPG prices continue to climb, 2012 results will also feel the brunt.

In Portugal, Repsol distributes bottled and bulk LPG to end customers while also supplying other operators. Sales in 2011 reached 150,000 tonnes, making the company the third largest operator in Portugal with a 21% market share.





In Latin America, Repsol is the leading LPG distributor in Argentina, Ecuador, Peru and Chile. It markets bottled and bulk LPG in Argentina to the residential, commercial and industrial sectors, with sales totalling 336,000 tonnes.

AutoGas (LPG for vehicles) is one of the most popular alternative fuels in the world. Although it has yet to make any meaningful impact on the Spanish market, sales grew by 18% in 2011, indicating increased demand for this economic fuel that also helps to improve air quality within cities. The industry expects that roughly 40,000 vehicles will be running on AutoGas in five years' time.

Repsol, fully aware of the growing interest in this alternative fuel, had 80 points of sale equipped with AutoGas pumps at year-end 2011; and intends to open further points of sale at a pace of 100 per year over the coming years.

In Peru, Repsol continued to develop and expand the vehicular LPG market in 2011 with the signing of a commercial agreement with the company Relsa, one of the market leaders in corporate fleet leasing.

Repsol continued to support R&D and innovation programmes focused on LPG. Highlights here include: the SolarGas application - a ground-breaking, integral energy supply system combining solar energy with LPG to provide hot water to homes and businesses in a sustainable and economic manner and with very low CO2 emissions; or new uses in agriculture, fishing and the development of products and services, such as Portugal's Easy Gas.



**Autogas sales  
grew by 18% in  
2011**

- 
- (1) Portugal and France
  - (2) Brazil and Bolivia in 2010, and Brazil in 2011.
  - (3) Includes sales to the automotive market, LPG operators and others.



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## Chemicals

The chemical business, part of the Downstream division, produces and markets a wide range of products, ranging from basic petrochemicals to derivatives. Its products are marketed in over 90 countries, leading the market on the Iberian Peninsula.

### PRODUCTION CAPACITY

Thousand tonnes

#### Basic petrochemical products

Ethylene	1,362
Propylene	904
Butadiene	202
Benzene	290
Ethyl tert-butyl ether	50

#### Petrochemical derivatives

Polyolefins	
Polyethylene <sup>(1)</sup>	875
Polypropylene	520
Intermediate products	
Propylene oxide, polyols glycols and styrene monomer	1,189
Acrylonitrile / Methyl methacrylate	166
Rubber <sup>(2)</sup>	115
Other <sup>(3)</sup>	69

Production is concentrated at three petrochemical complexes located in Puertollano and Tarragona (Spain) and Sines (Portugal), where there is a high level of integration between basic and derivative chemicals, as well as with refining activities, in the case of the Spanish facilities. Repsol also has a number of subsidiaries and affiliates, through which it produces styrene derivatives, chemical specialties and synthetic rubber at special plants. The latter is produced through Dynasol, a 50% partnership with the Mexican KUO group, with plants in Mexico and Spain.

Operating income in the chemical business, part of the Downstream division, experienced year-on-year growth of 113%. The improvement in both margins and demand over the first half of the year, coupled with the on-going consolidation of austere cost-cutting measures and streamlining and production adjustments at plants, have all helped to push up income, despite the weakening of the sector seen in the second half of the year.

### OPERATING FIGURES, CHEMICALS

Thousands tonnes

	2010	2011	2011/2010
<b>Capacity</b>			
Basic petrochemicals	2,808	2,808	0.0%
Derivative petrochemicals	2,933	2,933	0.0%
<b>TOTAL</b>	<b>5,741</b>	<b>5,741</b>	<b>0.0%</b>
<b>Sales by type of product</b>			
Basic petrochemicals	874	889	1.7%
Derivative petrochemicals	1,744	1,770	1.5%
<b>TOTAL</b>	<b>2,618</b>	<b>2,659</b>	<b>1.6%</b>
<b>Sales by region</b>			
Europe	2,263	2,311	2.1%
Rest of the world	355	348	-1.9%
<b>TOTAL</b>	<b>2,618</b>	<b>2,659</b>	<b>1.6%</b>



Sales to third parties in 2011 amounted to 2.66 million tonnes, marking a 1.6% increase on the 2.62 million tonnes sold in 2010.

In addition, investments continued in 2011, mainly to upgrade and optimise existing assets, enhance efficiency, reduce costs and improve quality, safety and environmental standards.

- 
- (1) Includes ethylene vinyl acetate (EVA) and ethylene butyl acrylate (EBA) copolymers.
  - (2) Includes 55,000 tonnes of production capacity in Mexico.
  - (3) Includes styrene derivatives and specialities.



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## New energy

The New Energies business unit was created in 2010 under the auspices of the Downstream division to promote new initiatives that contribute to a vision of the future where energies are more diversified and produce fewer carbon dioxide emissions.

The aim of Repsol's New Energies business unit is to identify new opportunities, promote projects and carry out business initiatives in fields such as bioenergy and renewable energies applied to transport and other areas that could share synergies with Repsol's current businesses and the geographic regions in which it operates.

In this context, Repsol continued in 2011 to develop a number of projects started in 2010, including the acquisition of a stake in and management control over the KUOSOL joint venture, engaged in the development of bioenergy through the farming of *Jatropha curcas*; AlgaEnergy, in microalgae research; Orisol, which develops wind farms; and IBIL, a company that manages the recharging of electric vehicles.

In terms of IBIL's envisaged expansion, Repsol signed commercial collaboration agreements in 2011 with Renault-Nissan, Peugeot and Opel to promote the sale of electric vehicles by vehicle manufacturers and for IBIL to install further recharging stations.



## Acquisition of Sea Energy Renewables



In 2011, Repsol acquired 100% of Sea Energy Renewables, later renamed Repsol Nuevas Energías U.K., a British company based in Scotland and engaged in the promotion and development of offshore wind farms. Through this deal, Repsol acquired development rights for three offshore wind farms off the Scottish coast.

Within the context of this same deal, Repsol reached an agreement with EDP Renováveis for the joint development of two of these wind farms, namely the 1,500-MW Moray Firth wind farm and the 905-MW Inch Cape facility, in which Repsol owns 33% and 51% interests, respectively, following the agreement. The company also holds a 25% stake in the Beatrice wind farm, with Scottish and Southern Renewables owning the remaining 75%. Thanks to the new deal, Repsol now holds rights to develop, construct and operate 1,190 MW of installed capacity in the United Kingdom.

During the project development stage, which is due to be completed sometime between 2014 and 2015, the necessary studies will be conducted and steps taken to acquire the construction and operating permits for the facilities, with wind farm start-up expected to take place between 2015 and 2020. The project will allow Repsol to apply its considerable technological expertise in offshore operations, coupled with its experience in large-scale engineering projects.



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## YPF

All value chain activities (exploration, production, refining, logistics, marketing, and chemicals) conducted by YPF and its affiliates have been reported separately since 1 January 2008, the date on which the new organisational structure of the Repsol Group was unveiled. At 31 December 2011, the Group held a stake of 57.43% in YPF, S.A., which is fully consolidated in the Group's financial statements. Most YPF operations, assets, and clients are located in Argentina.

The 2010-2014 Exploration and Production Development Programme was launched in December of 2009, with its objectives including the implementation of the unconventional oil and gas exploration and production plan. In May 2011, a discovery of unconventional oil resources (shale oil) was reported and it is located in the Vaca Muerta formation in the Loma La Lata Norte area in the Province of Neuquén.

In January 2012, the company announced the discovery of a conventional oil reservoir in the Chachahuén block, located in the southern reaches of Mendoza province, within the Neuquina basin.

In the gas sector, work to develop, construct and start up the Escobar LNG terminal (Buenos Aires province) was completed in May 2011. The facility, constructed in a record time of just 206 days, is operated by YPF and regasifies LNG through a ship boasting a capacity of 17 million cubic metres a day and 151,000 cubic metres of LNG storage capacity.

C80 service stations were remodelled in 2011 to unify and strengthen the entire image of the YPF network as being modern and streamlined.

In December 2011, the La Plata industrial complex exceeded its naphtha production record for the domestic market with volume totalling 207,000 m<sup>3</sup>, reaching a new maximum annual volume of 2,174,000 m<sup>3</sup>. Full integration of the industrial complex was also completed by uniting the operations and services of the refinery with those of the chemical complex. In the same way, full integration of the Plaza Huincul refinery and the Methanol complex was also achieved.

## Results

YPF posted €1.231 billion in operating income for 2011, marking a 15.3% drop on the €1.453 billion reported in 2010.

This decline is mainly the consequence of the effect of strikes on crude production, cost increases and the temporary suspension of the Petróleo Plus programme. The higher revenues from fuel sales at service stations and from products with prices linked to international markets could not offset the aforementioned negative effects.

Average annual output was 495 Mboe/d, compared with 541 in 2010, which represents an 8.5% decrease. The decline was 10.5% for gas and 6.7% for the production of liquids. The 7.6% fall in crude production was mainly due to trade union action in the sector.





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# YPF

## Upstream

This area is tasked with the exploration, development and production of hydrocarbons, mainly in Argentinean territory, as the source for the rest of the company's value chain. In Argentina the company has 48 onshore and offshore exploration blocks with a surface area of over 140,000 km<sup>2</sup>, and is the direct or associate operator in 93 production areas located in the Neuquina, Golfo de San Jorge, Cuyana, Noroeste and Austral basins. The company also operates in the United States and Guyana through YPF International.

## Discoveries

### Conventional

In 2011, YPF completed the drilling of ten exploration wells at the Neuquina basin (five of them in non-operated areas). Of the total wells drilled, four discovered resources (Triquileu sur X-1, Jagüel Casa de Piedra este X-1 and X-2, and Chachahuen Sur X-2), while three are pending completion.

In January 2012, the company announced the discovery of a conventional oil reservoir in the Chachahuén block, located in the southern reaches of Mendoza province, within the Neuquina basin.

### Unconventional

Within the framework of the 2010-2014 Exploration and Production Development programme, the Company completed the first stage of development, consisting of 15 vertical wells in the northern area of Loma La Lata and Loma Campana (Neuquén province), in order to obtain shale oil from the Vaca Muerta formation, all of which have initial production levels of between 200 and 600 boe/d.

Continuing with the exploration project in the Vaca Muerta formation area, two vertical wells were drilled in the Bajada de Añelo and La Amarga Chica blocks, which are both located in the north of the aforementioned area. The belief is that the Vaca Muerta formation extends over a total surface area of approximately 30,000 km<sup>2</sup>, and YPF holds rights over approximately 12,000 km<sup>2</sup>. The preliminary results would indicate that 77% of the area would contain oil and the rest would be divided between wet and dry gas.

## Production

YPF oil and gas production at the end of 2011 totalled 180.7 Mboe, 8.5% lower than last year. The production of liquids was 100.4 thousand barrels (Mb), while crudes amounted to 81.4 Mb and gas was 80.3 Mboe. Without taking into account the trade union action and other losses caused by third parties, crude oil output fell by 2.5% year on year.



## Reserves

At 31 December 2011, YPF's proven reserves, estimated in accordance with the US Securities and Exchange Commission (SEC)'s guidelines and the criteria envisaged under the Petroleum Resources Management System of the Society of Petroleum Engineers (PRMS-SPE), totalled 1,013 Mboe, of which 585 Mboe (58%) relate to crude oil, condensate and liquefied gases, and the remaining 427 Mboe (42%) to natural gas.

Company reserves fared well over 2011 with the addition of 202 Mboe, 137 of which correspond to oil. Highlights for the year included the addition of a major oil development project in unconventional reservoirs (Vaca Muerta) at the Neuquén Gas business unit, and the extension of concessions for all areas containing reserves of the Mendoza business unit.

In 2011, YPF reported a reserves replacement ratio of 112% for crude oil, condensates, LPG and natural gas combined (153% for crude, condensates and LPG, and 60% for natural gas).

At the end of 2011, 659 development wells had been drilled, including 98 injectors which, together with the secondary, repair and infrastructure activities, represented a total investment in development totalling \$1.510 billion.

## International expansion

The international business focused primarily in 2011 on assessing exploration opportunities in South America. At present, YPF is staging talks in the following countries: Colombia, Peru, Paraguay, Uruguay, Chile and the United States.

## Natural gas

YPF's natural gas sales totalled 12,280 Mm<sup>3</sup> in 2011, down by approximately 5.5% on the volume sold in 2010, and with the most significant drop in sales witnessed in the industry segment. In Argentina, YPF enjoys a market share of roughly 30%. The average price of natural gas sold by the company climbed 4.4% year on year, chiefly due to withering volume within the less profitable segments.



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# YPF

## Refining, logistics and marketing

YPF has three refineries: La Plata (in the province of Buenos Aires), Luján de Cuyo (in Mendoza) and Plaza Huincul (in Neuquén). La Plata has a distillation capacity of 189,000 barrels per day and a daily conversion capacity of 119,000 barrels; Luján de Cuyo has a distillation capacity of 105,500 barrels per day and the same conversion capacity; and Plaza Huincul has a distillation capacity of 25,000 barrels per day. Furthermore, the La Plata refinery has a lubricant manufacturing plant with a capacity of 860 m<sup>3</sup>/day of finished base oils.

Refinery capacity use was approximately 89%, compared with 93.2% in 2010. The investments in refining and logistics totalled €396 million in 2011, which is 42% higher than last year (€148 million).



## Gas optimisation

A compression system has been brought online at the La Plata and Luján de Cuyo refineries, whereby part of the gases typically sent to the flare pit for burning can now be recovered for use as fuel gas in furnaces and boilers. The upgrades also herald a significant environmental improvement by curbing CO<sub>2</sub> emissions. La Plata has become the company's first industrial project to be classified as a Clean Development Mechanism (CDM), while the Luján de Cuyo project is currently being assessed by the United Nations.





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# YPF

## Chemicals

The Chemicals business's production takes place at the Ensenada industrial complex, integrated with the La Plata refinery; and also at the Plaza Huincul industrial complex, which houses the Plaza Huincul refinery and Methanol complex. Likewise, YPF carries out chemical activity at the Bahía Blanca complex through its investee Profertil.

These industrial complexes have a total production capacity exceeding 2 million tonnes per year, earmarked for market segments such as the modification of naphthas, resins, detergents, automotive products, solvents, biodiesel, agrochemicals and fertilisers, among others.

International prices for the leading chemical products continued to rally over 2011, building on the improvement first noted towards the end of 2009. Methanol prices increased as construction of new facilities remains in limbo and supply struggles to keep up with demand.



## Investments

Operating investments reached €2.182 billion, compared with €1.537 billion last year. Nearly 69% of this outlay was applied to oil and gas exploration and production projects and nearly 27% financed projects to modernise refining and chemical production equipment.



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## Gas Natural Fenosa

### Results

At 31 December 2011, Repsol owns 30% of the Gas Natural Fenosa Group, which is proportionally consolidated in the financial statements. Operating income contributed by the Gas Natural Fenosa Group climbed 0.7% in 2011 to reach €887 million, in comparison to the €881 million reported in 2010.

Despite capital gains from sales of assets failing to match figures for 2010, EBITDA has remained steady during the two years. This can be explained by the improvements seen in electricity distribution activity in Spain and the rise in wholesale gas sales margins, offsetting the weaker earnings from electricity sales in Spain and electricity distribution in Latin America and the absence of gains on the divestment of assets in 2010 and 2011.

The results highlight the fundamentals underpinning the Gas Natural Fenosa business model, which aims to strike an appropriate balance between regulated and deregulated business in the gas and electricity markets, with growing, diversified contribution made by its international presence.

The main operating highlights for the business are described below. For better comprehension, the figures were generated by Gas Natural Fenosa, in which the Group holds a 30% stake.



Repsol's investments in Gas Natural Fenosa totalled €582 million, 25% higher than in 2010

### Gas distribution

#### Spain

Business in Spain includes the compensated gas distribution activity, the TPA (third-party grid access services) and secondary transport, as well as non-compensated distribution activities (rental of gas meters, connections to customers, etc.).

Within the framework of the Action Plan approved by the Spanish National Antitrust Commission (CNC) in relation to the Unión Fenosa acquisition process, Gas Natural Fenosa undertook to disinvest certain gas distribution assets.

On 30 April 2010, low-pressure distribution assets relating to 507,726 supply points and 3,491 kilometres of distribution networks were sold. In compliance with the commitments with CNC regarding the acquisition of Unión Fenosa, on 30 June 2011 another 304,456 natural gas supply points were sold, representing consumption of 1,439 GWh in the Region of Madrid, to Grupo Madrileña Red de Gas.

Sales from the regulated gas business in Spain amounted to 201,231 GWh in 2011, down 2.9% on the same figure for 2010.

Gas Natural Fenosa has continued to expand its distribution network and number of supply points, although it should be noted that the figures provided have been offset by the divestments made to date.

At year end, the gas distribution network spanned 43,871 kilometres, having shrunk 2.4% year on year, while the number of supply points came in at 5,050,000, 4.2% less than in 2010, reflecting the divestments carried out in furtherance of the Action Plan approved by the CNC in relation to the acquisition of Unión Fenosa.

Latin America increased gas supply points by 217,000 in 2011



### Latin America

In 2011, the number of gas distribution supply points reached 5,882,000 in Argentina, Brazil, Colombia and Mexico. The high rates of year-on-year growth were maintained, with an increase of 217,000 supply points, of which 108,000 related to Colombia.

Gas sales in Latin America (gas and third party grid access services) totalled 191,031 GWh, a 5% decline compared with last year's figure. This slight reduction is mainly the result of the lower sales to the electricity generation sector in Brazil as 2011 water reserves were much higher than those in 2010 and, accordingly, there was lower demand for natural gas.

The gas distribution network has been extended by a further 1,339 kilometres over the last 12 months, reaching 65,831 kilometres at year-end 2011, representing growth of 2.1%.

### Italy

Business in Italy includes third-party grid access services and rate-regulated gas sales.

Gas Natural Fenosa reached a total of 440,297 supply points in the gas distribution business in Italy, up 4.3% on the same figure for 2010.

Gas distribution activity stood at 3,578 GWh, marking an increase of 5.6% in comparison to 2010. The distribution network was extended by 887 kilometres to reach 6,736 kilometres at the close of the year.



## Power distribution

### Spain

This business includes regulated power distribution activity and customer network services, mainly connection and link-up rights, metering, and other services associated with third-party access to the company's distribution network. Electricity supply points experienced mild growth of 0.8% in 2011 to reach 3,748,000.

In 2011, power effectively supplied fell by 1.6% to 33,916 GWh, reflecting the drop in nationwide consumption stemming from the prevailing economic gloom and the relatively mild weather conditions experienced towards the end of the year.

### Latin America

Business here encompasses regulated power distribution in Colombia, Guatemala, Nicaragua and Panama.

In May 2011, Gas Natural Fenosa reached an agreement with the British private equity fund Actis to sell its interests in the distribution companies DEORSA and DEOCSA, both engaged in power distribution in Guatemala, along with its interests in a number of other energy companies within the country. As a result of the divestment, the results for the electricity distribution business in Guatemala relate solely to the first five months of the year.

Sales by the electricity distribution business in Latin America represented 17,706 GWh, marking a moderate drop of just 1.6% despite the divestment in Guatemala, while the client portfolio slid 27.3%.

### Moldavia



**Electricity demand in mainland Spain declined by 2.1%**

Business in Moldavia involves regulated power distribution and rate-regulated marketing in the capital and metropolitan area and in the country's central and southern regions. Gas Natural Fenosa distribution in Moldavia accounts for 70% of the country's total.

compared with  
2010

Demand for electricity within the context of Gas Natural Fenosa's distribution business in Moldavia climbed by 3.3%, while supply points, which totalled 819,506 at year end, also experienced year-on-year growth.

## Electricity

### Spain

The electricity business in Spain includes power generation activities, the wholesale and retail marketing of electricity in the deregulated Spanish market, the supply of electricity at the tariff of last resort and electricity trading in wholesale markets.

In 2011, electricity demand across the peninsula fell by 2.1% in comparison to the previous year. After correcting this percentage to factor in the effects of the number of working days and temperatures during the year, the actual drop in demand was 1.2%.

Gas Natural Fenosa power generation throughout the Iberian Peninsula amounted to 38,081 GWh in 2011. Of this amount, 35,701 GWh came from ordinary system generation, and 2,380 GWh from special system generation. This represents a year-on-year slump of 0.7% as a whole, broken down as 0.3% under the ordinary system and 5.9% under the special system. Gas Natural Fenosa's accumulated share in ordinary system generation at 31 December 2011 was 20.8%, slightly higher than the previous year.

Hydroelectric production in 2011 totalled 2,892 GWh, marking a year-on-year drop of 39.1% due to a very dry year from a hydrological view. The generation of electricity using combined cycle sources in 2011 totalled 23,967 GWh. Nuclear production increased slightly compared with 2010. The entry into force of the Royal Decree Guaranteeing Supplies enabled Gas Natural Fenosa to operate its domestic coal-fired units continuously, producing 4,464 GWh, compared with 772 GWh in 2010. Sales by the electricity marketing business came in at 35,905 GWh.

### Latin America

This section relates to power generation assets in Mexico, Puerto Rico, Panama and the Dominican Republic.

Power generated in Latin America stood at 17,506 GWh in 2011, down on the same figure for 2010 largely on account of the drop reported in Mexico, where production was impacted by the sale of the combined cycle plants in 2010.

### Kenya

This section includes power generation in the African country. In 2011, fuel-based power generation reached 767 GWh, comfortably outstripping 2010 production on the back of heavy demand for thermal power production in Kenya, in turn due to a very dry year in terms of water availability and, therefore, a drop in reservoir levels.



## Infrastructure

This business includes the development of integrated liquefied natural gas projects; oil and gas exploration, development and production; sea transport management and operation of the Maghreb-Europe gas pipeline.

Gas transportation activity carried out in Morocco through the companies EMPL and Metragaz represented a total volume of 111,855 GWh, up 1.9% on the previous year. Of this figure, 80,569 GWh were transported to Gas Natural Fenosa through the company Sagane, while 31,286 GWh were earmarked for Portugal and Morocco, representing growth of 7.7%.

Regarding gas exploration and production at the Tanger-Larache project (Morocco), in which the company holds a 24% stake, a number of different development options for the first well are currently being explored.

## Supply and marketing

This business area is engaged in the supply and marketing of gas (wholesale and retail) both in Spain and abroad, and of other products and services related to retail marketing and also marketing of the gas tariff of last resort in Spain.

Gas Natural Fenosa's marketing in the Spanish gas market reached 169,204 GWh, representing a year-on-year drop of 8.4%, chiefly due to lower sales to households on account of the divestments carried out to date. Supplies to third parties in the Spanish market came in at 67,698 GWh, revealing a 2.4% increase.

Supplies to the international market climbed noticeably to reach 71,733 GWh, marking an increase of 30.9%.

## Unión Fenosa Gas

This business embraces the gas supply and marketing activities carried out by Unión Fenosa Gas, including the liquefaction infrastructure in Damietta (Egypt), regasification infrastructure in Sagunto (Spain) and management of the shipping fleet.

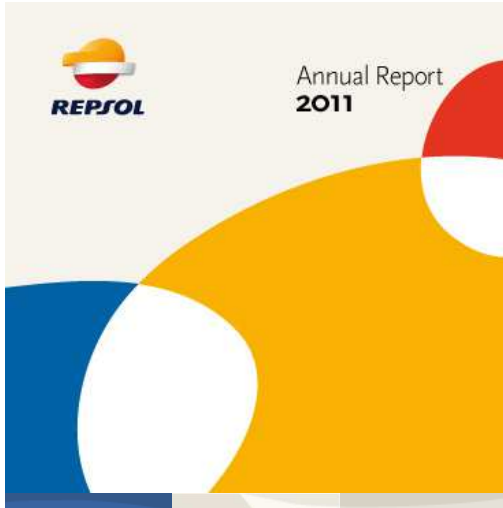
Gas supplied to the Spanish market reached 56,937 GWh, representing a year-on-year drop of 4.3%. In addition, 26,503 GWh were sold on the international market.

## Investments

Repsol's operating investments over the year in relation to its stake in Gas Natural Fenosa amounted to €582 million, in comparison to the €463 million reported in 2010.

Gas Natural Fenosa channelled most of its investments into regulated gas and electricity distribution activities.

Spain remains the main recipient of Repsol's investment, while Mexico and Colombia are the main beneficiaries of investments in Latin America.



## People management

At year-end 2011, Repsol had a consolidated workforce of 46,575 people representing over 70 different nationalities. Of this figure, a total of 39,622 employees were working at companies under the direct control of Repsol. All the information presented in this section refers to these employees. The company's employees work in more than 30 countries, chiefly in Spain (43%) and Argentina (37%), but also in countries such as Peru (9%), Portugal (3.1%), Ecuador (2.3%) and Uruguay (2%). Of the total number of employees, 48% work in the Downstream division, 39% in YPF, 7% in Upstream and LNG, and 6% in corporate departments.

1% of the workforce comprises executive personnel, 6% technical managers, 44% technicians, 3% administrative staff and 46% operatives. Permanent employees make up 88% of the total.

### Change in the organisational structure

With the aim of reorganising the company to bring it into line with the degree of completion of the Strategic Plan and also render the company's management more efficient, the senior management of Repsol was restructured in 2011 through the creation of a new General Department for Economics, Finance and Investees (which has assumed control of the investees YPF and Gas Natural Fenosa, along with the duties of the Corporate Media Department and of the former General Department for Economics and Finance), and by making the General Upstream and Downstream divisions directly accountable to the Executive Chairman's Office.

To ensure that Repsol continues to consolidate its position and grow in the countries where it operates, the decision was reached to adapt the organisational model by boosting the role of country heads, thereby magnifying the company's global vision at country level.

The main changes at individual business level were the restructuring of Repsol Sinopec Brasil to reflect the new corporate structure, and the creation of Repsol Nuevas Energías UK.

### Diversity and work-life balance

Repsol's Diversity and Work-life Balance Committee continued to work in 2011 to roll out specific measures to encourage and foster diversity and work-life balance, articulated through multi-disciplinary teams tasked with proposing and promoting initiatives such as telecommuting, recruiting people with different disabilities, making working hours more flexible, adapting facilities and managing time efficiently, among others.

According to the findings of a survey polling the opinions of 2,538 employees, telecommuting is considered an internally valued tool for guaranteeing a proper work-life balance. Telecommuters and their line managers, colleagues and senior management alike were all quick to point out that the trust line managers place in their telecommuters has a positive bearing on their involvement, motivation and productivity. The programme was extended in 2011 to cover industrial facilities and sales offices in Spain. At year end, a total of 818 people worldwide had signed up to the scheme, illustrating that this approach to work is becoming increasingly widespread and key to retaining and attracting talent.

Another company initiative is for Repsol workers to carry out their work under flexible conditions, effectively meaning they can adapt their working hours to suit their needs, provided their work allows for this and always respecting the practices, customs and restrictions in place in the country or region in question.

The concept of flexible working hours encompasses the different ways in which hours can be redistributed, whether calculated daily, weekly/monthly or on a seasonal basis.

Adapting to the context in each region, the following paid leave is offered:

- **Maternity leave:** workers can enjoy minimum paid maternity leave of at least 12 weeks owing to the birth of a child.
- **Breastfeeding leave:** provided the preceding maternity leave lasts less than six months, mothers are entitled to claim paid breastfeeding leave equivalent to one hour per day, which will last for three months following her return to work from maternity leave. This leave can be taken as two separate half-hours of absence, or pooled and taken together as one



Repsol considers diversity to be an enriching element that stimulates innovation and creativity

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period of eight full working days.

- Paternity leave: fathers can take minimum paid paternity leave of three working days owing to the birth of a child.
- Leave following the death of a family member up to the second degree of relationship: employees are entitled to three days paid leave, or five days if travel is required.
- Marriage leave: workers can take minimum paid leave of five business days if they wish to marry or register officially as civil partners.



In terms of equal opportunities, Repsol treats diversity as a concept that enriches the company and stimulates innovation and creativity. With this in mind, the programme to integrate people with different disabilities is perhaps the most widely known and recognised externally.

The programme started in 2005 in Spain and its progressive implementation has created a new reality at Repsol, which now boasts 578 employees with different disabilities. 400 of these employees were hired directly, while the other 178 were hired under other systems in Spain (3.2% of the total number of employees, in accordance with the legal calculation). In addition, 65 people with differing disabilities work in Argentina, 24 in Ecuador, 24 in Peru and 14 in Portugal. Of these, 20% are engaged in technical work.

In 2011, significant efforts were made to encourage the hiring of disabled employees in the industrial area and awareness-raising campaigns have continued and involved the participation of 6,502 employees.

Repsol has agreements in place with different organisations, associations and foundations, which advise the company on issues relating to disabilities and with which the company has maintained close ties since the start of the programme. In Spain, these include the Framework Cooperation Agreement between Repsol, ONCE and their respective foundations, with action geared towards developing and enhancing the social integration and acceptance of people with different disabilities.

In January 2011, Repsol received the Ability Award for the Best Large Private Company. The accolade, which was awarded in the presence of Queen Sofia of Spain, publicly recognises the work of Spanish companies and institutions to develop sustainable business models that integrate people with disabilities (employees, suppliers and customers) into their value chains.

## 2011 climate survey

In 2011, the company conducted its third climate survey to poll the opinions of all permanent employees (excluding YPF). Final participation in the study was 82%. The aspects that received the highest scores were: company vision, issues related to Repsol's appeal as an employer, and diversity and work-life balance.

Nearly 500 reports on results have been prepared to satisfy the information needs required by the various departments.

Results were reported to all employees during 2011. During this period, workshops were held to identify the causes of issues raised, which ended during the first quarter of 2012. These analyses are helping to define areas in which improvements can be taken.

## Cultural change

Last year, the company initiated a process of cultural change, leading to changes in approaches to work and in people management.

Now, for example, line managers play an essential role in transmitting this new culture and disseminating the values that Repsol is committed to: responsibility, transparency, innovation, collaboration, team work and equal opportunities.

One of the most significant projects contributing to the change to take root is the construction of the new corporate headquarters. The new campus is helping to bring new working methods into practice. The building has been designed with space very much in mind as a means of championing these new approaches, such as: working in open, unrestricted areas; bringing people from different areas and businesses together within a single space; utilising the best technologies to improve productivity and communication; and making working hours more flexible.

## Attracting the finest talent

Within a complex labour market, Repsol remains unflinchingly committed to implementing programmes aimed at capturing, motivating and incentivising top talent, offering them an appealing place to work and guaranteeing and promoting equal opportunities in their professional development.

In this regard, it is worth highlighting the work carried out to attract and develop young talent through technical master's courses held at Repsol's advanced training centre (Centro Superior de Formación Repsol, or CSFR), which trained 85 professionals from different countries in 2011, and to recruit executive personnel through the New Professionals Plan. Repsol's commitment to young professionals is to be stepped up in 2012, which marks the launch of the new Repsol Master's in Energy Management.

Over the course of the year, 16 new educational cooperation agreements were signed with new universities and educational centres, with the company welcoming 365 new scholarship holders.

The Careers channel obtained the best score in the employment category in the KWD Webranking study, in which repsol.com once again cemented its website leadership, having now held on to its title for six years running in the Spanish edition of the study.



One of Repsol's strategic objectives is to nurture and encourage internal talent



## Talent management

One of the company's objectives is to nurture and encourage internal talent to ensure strategic objectives are achieved, for which it has programmes that guarantee the professional development of company employees. The company has numerous corporate diagnostic tools to measure people's abilities, performance, knowledge and management style. Based on the findings, it plans out the most suitable paths for development (mobility, training, hands-on development and best practices), which can therefore shape individuals' development and career plans from both a management and technical perspective.

One of the keys throughout 2011 was to work on management style. To do so, apart from the feedback and implementation plans that have already been mentioned, line manager training courses were held to improve management style and introduce techniques for evaluating and providing feedback. A total of 224 line managers completed the workshops in 2011, which will continue to be staged over 2012.

In this regard, the first convention for line managers in the industrial area was held in Tarragona, which was a pilot that will be exported to other complexes and businesses. Leadership training seminars were also run, attended by 254 individuals under the "Communicate to lead" programme delivered in five different countries.

Since the launch in March 2011 of a new range of executive training initiatives based on the Repsol Style, 161 executives completed a total of 10 training schemes over the course of the year.

In 2011, the company consolidated the systems it uses to assess and develop the talent of its employees, such as People Review, which provides a detailed assessment of people, generating a shared vision of each of them: their strengths, areas of improvement and professional profile. These assessments pave the way for development plans and other specific actions, and envisage mobility throughout the company. In 2011, 1,907 people were assessed, including 27 in Portugal, 40 in Peru and 93 in Venezuela and Trinidad y Tobago.

## Training

Repsol is a company committed to people; valuing, promoting and facilitating employee training as the key driver behind their personal and professional development. Training must be focused on developing an individual's knowledge, skills and attitudes in order to reach the objectives of the different businesses and units, while being aligned with the company's strategy and geared towards developing Repsol's culture and leadership style.

With the aim of improving the management of existing and future training within the company, new functionalities were designed and launched in 2011 to facilitate and streamline training management for employees and line managers alike, thus meeting the need to standardise corporate people management tools within a single, more accessible and user-friendly online environment.

In 2011, more than 1,541,161 hours of training were given to over 37,201 employees across the globe.

Along the same lines of training development as a strategic lever to accompany the attainment of objectives and overcoming challenges in each area at the company as a whole, in 2011 e-learning training opportunities were bolstered considerably through Repsol's Virtual Learning Environment



More than 1,540,000 hours were devoted to



launched in 2010. This effort involves the launch of on-line and part-time classroom training, distributed over a period of time between three months and two years. In 2011, new programmes were directed at specific groups in the commercial, executive and employee areas, or who change jobs giving rise to a change of area or business.

## Employee remuneration

A single, standardised schedule was implemented worldwide in 2011, coordinated with the company's Annual Performance Assessment schedule. Thanks to the schedule, the company is now better positioned to match up individual performance assessment with recognition-related decisions, such as pay rises, promotions or mid-term incentives. The upshot of this integration process is added coherency, equality and simplicity in reaching pay-related decisions, which now operate on the same clock. The aim of this move is to relate and explain the impact of performance on the pay package, offering employees an overall view of the result of their yearly performances and the lines to be followed on the path to future development. It is also worth noting that last year, the Annual Shareholders' Meeting approved two share-based pay systems:

- The 2011-2012 Share Acquisition Plan directed at executives and employees of Repsol YPF Group in Spain and intended to allow those who so wish to receive up to €12,000 of their annual salary in 2011 and 2012 in company shares.
- Plan to Deliver Shares to the Beneficiaries of Multiyear Pay Schemes, divided into five cycles and intended for the Chief Executive Officers, the rest of the management team and other group employees that are already beneficiaries of certain multiyear cash pay-out schemes. The new programme will allow these employees to invest in Repsol YPF, S.A. shares up to 50% of the gross multiyear incentive they receive during the start year of each cycle.

## Model of contribution

Owing to the challenges posed by the new economic and social climate, which has pushed companies into adapting to market conditions, the Repsol Group has conducted a review of its people management model.

Thus, based on the findings of the working climate survey involving all group employees, interviews were held with all members of the company's senior management at year-end 2010 in order to compile information on how the model can be improved.

Thanks to the conclusions reached, two lines of action were defined that are linked to the objective of recognising the contribution of Repsol employees and focus on:

- Optimising the performance assessment system for senior management and staff with special duties within the company, known as GxC (Gestión por Compromisos - Management by Commitments), to bring it in line with currently existing needs, three years after its initial implementation.
- Make it possible to implement models to improve levels of commitment among all company employees - attempting to recognise all contributions of value, regardless of the organisational or professional level from which they emanate - and to peg suitable recognition to the contribution.

## Labour relations

Repsol signed the VI Framework Agreement with Spain's largest unions - the CCOO and UGT - in 2011. This regulates working conditions for all the group's workers in Spain and its content is being included in the collective labour agreements.

This agreement, valid during the 2011-2013 period, includes a new variable component linked to the business units' objectives, guaranteeing the workers' purchasing power and including the possibility of obtaining additional increases linked to the company's achievements. Additionally, the commitment to employment stability and to inclusion of people with different disabilities is renewed and it contains advances as regards training, work-life balance, health and safety.

A full meeting of the Repsol Union Network was held in Santa Cruz de la Sierra (Bolivia) last September. Sector and Repsol union organisations from the following countries were present at the meeting: Bolivia, Colombia, Argentina, Brazil, Peru, Ecuador, Mexico and Spain, as well as the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM).



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## Innovation and technology

Repsol considers that the investment in R&D and innovation, made for the purposes of leadership, is one of the key factors that make it possible to obtain a more efficient and sustainable energy system, capable of simultaneously responding to the two major challenges in the industry: supply security and the reduction of CO<sub>2</sub> emissions, while maintaining the competitiveness of the energy system.

Uncertainty about what will be the dominant technologies of the future, time to maturity of R&D efforts, economic cycles and pressures to reduce costs at low points in the cycle have led Repsol to develop a Strategic Technology Plan as part of its business strategy. The lines of work cover all the company's businesses: hydrocarbons exploration and production, the natural gas value chain, oil refining and its products and petrochemicals, and new energies for diversifying energy production and use.

In 2011, Repsol invested €75 million in R&D activities carried out directly at its technology centres in Spain (Móstoles) and Argentina (La Plata), and a further €7 million in projects undertaken in the company's different business units. Repsol maintains an active policy of collaborating with technology centres, public and private universities and companies in Spain and internationally. The investment earmarked for these types of agreements was €13.7 million. Repsol participates in R&D financing projects run by different government authorities. In 2011, it took part in 12 projects promoted by the Spanish government and four European Union projects.

Repsol has over 500 specialists in its different research centres.

### R&D programmes

#### Upstream

In this division, Repsol develops and applies the most advanced exploration technologies to find new oil and gas fields. The significant discoveries reported in 2008, 2009 and 2010 are a good example of the efficient development and use of these technologies. The Caleidoscopio project, as well as other technologies of its own development, place Repsol at the forefront of exploration in challenging areas.

Furthermore, it has signed collaboration agreements with technology companies and has a strategic alliance with the Barcelona Supercomputer Centre. The aim is to raise the level of confidence in subsoil images and reduce uncertainty in the search for oil and gas deposits. These technologies can be applied in difficult areas to estimate reserves thousands of metres below ground, such as in the Gulf of Mexico and Brazil, where thick layers of salt conceal very high quality reserves.

A significant change in the company's Upstream technology occurred in 2010, with the definition of a new Strategic Plan for Upstream Technology for the period 2011 to 2015. After an exercise in internal reflection, the 2011-2015 strategic plan was built on the technological successes of recent years and focuses activity on key strategic lines for the company, such as well simulation, sub-soil illumination, and the characterisation of wells and non-conventional hydrocarbons. The challenge for the new plan is to develop and apply a new generation of technologies to make it possible to successfully tackle and deal with the technological challenges arising in the company's large investment projects in coming years.

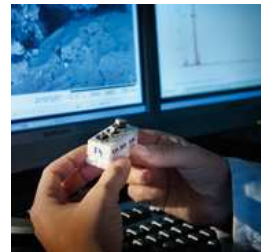
#### LNG

Advances in the development of liquefaction technologies continued in this area, to be used in floating systems. This will enable the exploitation of gas reserves which cannot currently be used in an economically competitive manner. Repsol also systematically monitors alternative technologies for exploiting gas reserves, such as the conversion of natural gas into liquid fuels, compressed natural gas and hydrate technology as a means of transporting and storing natural gas.

#### Downstream

In the area of oil refining and its derivatives (petrol and diesel, LPG, bitumen, lubricants, specialised products, etc.), technological knowledge is applied to optimise refinery operations and enhance product quality, with particular attention paid to advances in energy efficiency and environmental issues.

As an example of developments in this area, we note the technologies



intended to attain the objectives laid out in the multi-year refinery energy efficiency plan, and support for the launch of and development of optimisation tools for the C-10 project relating to the expansion of the Cartagena refinery. Special mention should be made to the development of more environmentally-friendly lubricants, the development of process that facilitate obtaining new products for the design of tires in more demanding markets, the innovative development of bitumens with a lower environmental impact, support for LPG applications for the automotive sector, and integrated systems offering higher energy efficiency.

In petrochemicals, programmes continued to be aimed at improving energy efficiency and cost saving, and lines of technological development aimed as a priority at obtaining new differentiated and specialty products. Outstanding in 2011 were the industrial production of new grades of hydrogenated rubbers of higher added value developed in Repsol's Technology Centre, the development of new grades of polypropylene for fabrics aimed at markets with high margins, the industrial manufacture of polyethylene with improved properties for production of large-diameter pipes, and the development of technologies for producing next generation polyols for polyurethane foams.

### New energies

with respect to the integration of R&D into the company's business strategy. Outstanding in this sense was the activity related to bioenergy, through the development of new energy crops, the development of technology in microalgae cultivation and in biology for production of biofuels. CO<sub>2</sub> technology was oriented to its transformation into added-value products, electric transport technologies to energy recharging and storage systems and renewable electricity generation was focused on future technologies with synergies with existing and potential capabilities at Repsol.



### Prospecting studies

In order to achieve a sustainable energy future, Repsol must overcome ambitious technological barriers to arrive at new and better solutions, as well as analyse the potential impacts of social events, scientific findings and the evolution of natural resources. Repsol carries out systematic prospecting studies to visualise future scenarios and, in relation to these, identify opportunities arising from the long-term evolution of technologies in the energy and petrochemical sectors.

These include studies on the use of oils for the production of biofuels, new technologies for engines and fuels, battery technologies for electric vehicles and refining scenarios for 2030. These studies allow Repsol to gain a clearer vision of the future to guide its portfolio of technological investments.

### Patent policy

Fully aware of the huge importance and value of research and development work, Repsol is committed to the protection of the results of this work. In 2011, it applied for patents to cover numerous inventions in a range of different fields, such as catalysis to streamline processes, the development of new polyol processes, new Upstream technologies for evaluating underground formations, and new devices and equipment intended for LPG uses.



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## Corporate responsibility

Energy companies assume great challenges and considerable responsibility when facing the challenges of a sustainable energy model that guarantees a secure supply, contributes to mitigating climate change and respects human rights.



Video  
Corporate Areas - CSR  
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In 2011, the corporate responsibility function that formalises Repsol YPF's current Corporate Responsibility (CR) model was approved. This model is the way that the company as a whole contributes toward sustainable development, and comprises the following:

- The company's values and principles behind its actions arising from the commitments it has acquired through internal CR regulations, positions taken in relation to and adherence with the principles of various international initiatives.
- The Corporate Responsibility Coordination System, which consists of four components:

To ascertain what is expected by stakeholders (authorities, shareholders, investors, employees, customers, suppliers, communities, partners, etc.) with respect to the company's CR performance.

To review CR performance and compare it with the stakeholders' expectations at the corporate, country and main operating centre levels.

To bring performance into line with expectations through actions involving revising the company's operating processes, training programmes, awareness raising and training or strategic social investment. Each of these actions incorporates specific performance indicators. These actions as a whole make up sustainability plans comprising publically-acquired commitments that are made public.

To measure progress by using reputation metrics.

- The Governance and Corporate Responsibility bodies are as follows: the Strategy, Investments and Corporate Social Responsibility Committee of the Board of Directors, the CR Committee at the corporate level and the CR Committees for Spain, Bolivia, Ecuador and Peru. All these committees are made up of representatives of the areas concerned with fundamental corporate responsibility issues such as: Human Resources and Organisation, Communication and External Relations, Community Relations, Legal Services, Safety and Environment, Purchasing and Hiring and Corporate Safety.

Each committee is responsible for applying the company's Corporate Responsibility Coordination System at the country and operational level: monitoring the sustainability plans, determining strategic social investment needs in the country, collating and deciding on the information presented in the country's corporate responsibility report, procuring and deciding on the information presented in the Global Compact Progress Report for the country, coordinating the company's participation in international initiatives, and handling any other national information deriving from the public commitments made by Repsol YPF in the area of CR.

## Principles

Repsol has been actively committed to the ten principles of the United Nations

Global Compact since 2003 when it joined this high value initiative to achieve a fairer and more united world. Furthermore, the company is aware that extraction produces a major source of income for governments of countries with natural resources.



If they are properly managed, they can and should contribute very positively to their economies' growth. Therefore, from the moment it was launched, the company joined the Extractive Industries Transparency Initiative (EITI): the global initiative that Repsol considers to be best positioned to achieve the goal of increasing the transparency of financial information.

To give a detailed report on the progress and performance of ethical, social and environmental issues, Repsol publishes its Corporate Responsibility Report and the United Nations Global Compact Progress Report annually. Aware of the importance of the impacts generated by the company's activities and operations, and therefore of the relevance of providing a detailed report to interested parties on a local level, Repsol has published the Repsol YPF Ecuador Corporate Responsibility Report for the third consecutive year. Furthermore, in 2011, a Corporate Responsibility Report for the La Pampilla refinery in Peru was published for the first time.

Repsol's presence in international sustainability indexes is proof of how the company has been able to win the trust of those analysts and institutional investors who understand that corporate responsibility is a good indicator of the quality of management and governance of a company.

For yet another year, the company's performance in corporate responsibility matters has been recognised and it continues to form part of the following prestigious sustainability indexes: FTSE4Good, Ethibel Sustainability and Dow Jones Sustainability. For the first time, last year Repsol obtained the maximum score in this last index. Thus, it became the world's most sustainable oil and gas company.

Once again, Repsol received the Gold Class company rating according to the 2011 Sustainability Yearbook which recognises the companies with the best sustainability and corporate responsibility records in the world.

The top position obtained in this publication in 2011 reflects the effort made in all company areas to improve performance. This recognition demonstrates Repsol's firm commitment to transparency and corporate responsibility and ethical, environmental and social values that are part of its corporate culture.



## Repsol Foundation

During 2011, the Repsol Foundation maintained and reinforced its commitment to improve society. To do so, it has developed programmes focusing on social integration, community development, sustainability and disseminating art, science and culture.



In order to be present in those areas where it can make the greatest contribution such as energy, the environment and sustainability, the company has created the Repsol Foundation Entrepreneur Fund. This is a pioneering initiative in Spain to promote and support corporate energy efficiency projects that provide solutions for improving efficiency and savings and responsible energy use.

This initiative, integrated into the commitment to improve the sustainability of current energy models, arose to attract talent, promote innovation and corporate development, generate economic activity and create jobs. To do so, the Foundation foresees selecting up to five projects out of the ones presented in each tender process. These will receive technical, business, legal and financial advice and financial support for as long as necessary to

develop and bring them to market. The selected projects will also be granted access to the necessary investors and business contacts to boost their commercial development. The Foundation will endow €1.5 million to the Entrepreneur Fund per year.

The Energy Observatory has continued to progress in its energy savings and efficiency studies and publications. The Energy Efficiency and Greenhouse Gas Emission Intensity (GEI) indexes were updated. The former expresses the evolution of global energy efficiency broken down by economic sector in Spain, while the latter shows the evolution of greenhouse gas intensities associated with economic activity.

The aim of Citizen R is to promote responsible citizens. It is a project that specifically targets young people and children and encourages a culture of participation, respect and solidarity as well as the importance of responsible energy use, taking care of the environment and energy sustainability. In 2011, the Citizen R caravan, a space equipped with interactive resources for different areas of educational workshops and games travelled to Barcelona, Valladolid and Madrid (Spain) and Lisbon, Sines and Porto (Portugal). In total, it has received more than 22,000 visits of which more than 10,500 were schoolchildren.

Within the framework of the European Year of Volunteering, the Foundation implemented the Volunteer Plan to address social concerns put forth by the group's employees and their environment. At the same time, it contributed toward building a better future in society. The plan, supported by senior management, is conceived by and for volunteers, and encompasses a wide range of actions, especially in social matters. It involves initiatives aimed at training young people and programmes that cover activities to help the most underprivileged groups: promoting values, intergenerational cooperation, actions to promote sports, rehabilitation of the environment and others such as online volunteering. The plan already has six fully developed programmes that encompass the work of 800 volunteers nationwide and a wide network of collaborators who help to effectively deploy these activities.

In the area of education and training, for the purpose of meeting new training demands, a scholarship programme is being developed in cooperation with the Bilbao, A Coruña and Tarragona refineries to encourage local young people to get job training. The last time it was offered, more than 65 young people benefitted from the aid.

Furthermore, through Repsol Chairs, in order to complete postgraduate education and contribute toward promoting research, Repsol collaborates with the Mining Engineering and Industrial engineering Schools at the Polytechnic University of Madrid and with the Rovira i Virgili University in Tarragona.

Likewise, in order to research, acquire knowledge and promote competitiveness and regional development, the Repsol Chair of Competitiveness and Regional Development at the University of Lleida was created.

Within the field of education, another of the Foundation's objectives is to generate, impart and promote scientific knowledge. With this purpose in mind, a partnership agreement with the Parenting University Educational Foundation was signed. This foundation is represented by philosopher and writer José Antonio Marina and aims to develop a project that contributes toward waking young people's interest in science and technology. Furthermore, within the framework of the agreement that Repsol holds with the National Library of Spain, a series of educational and cultural activities to bring science closer to the public and stimulate interest in scientific knowledge were sponsored. Training of South American specialists in preserving their cultural and bibliographic heritage has been encouraged.

The Foundation is becoming increasingly involved in integrating the disabled. Through cultural, sports and educational initiatives, the Foundation has worked toward achieving a social model that enables equal opportunities and facilitates this group's job and social insertion. Thus, in cooperation with the ONCE Foundation, the company continued with the "Tu Formación no tiene límites. Desarrolla tu Futuro" (Your training is unlimited. Develop your future) programme, and the programme entitled "Campus inclusivos de verano Campus sin límites" (Summer Camps for All. Camps without limits) in which a total of fifty students with different types of disabilities have participated.

In the scope of the Foundation's commitment with this group, Recapacita (Think it over) was registered. It is an awareness program for society about the difficulties and barriers that disabled persons encounter in their daily lives. to eight Spanish cities (Puertollano, Tarragona, Santander, A Coruña, Arteixo, Bilbao, Murcia and Madrid) with a final balance of 17,000 visitors.

In 2011, the Repsol Foundation received the Prodis and Discapnet awards as recognition for its efforts to integrate the disabled.

In the field of research and social studies, the Foundation conducted the study titled Social Aspects of Sustainable Mobility. It shows a cross-section of Spanish society's habits and behaviours in connection with mobility and the impacts caused by current behavioural models

At the Social Energy Observatory, the Repsol Energy Efficiency Social Indicator was updated. This indicator analyses the habits, beliefs, knowledge and aptitudes of Spanish society in relation to energy consumption, and identifies social mechanisms and tools to boost energy efficiency.

In the countries where the company is present, the Foundation conducts programmes that promote community development and improve the quality of life. It does so by developing specific projects that are tailored to the needs of each area. Thus, in Peru, a programme is being developed that is aimed at young people on low incomes from Pachacútec and Arequipa in order to make it possible for them to access the educational system, boosting the chances of them finding work in the future.

Also in Peru, construction of the Luisa Astrain School was concluded. During the first year of academic activities, 375 students enrolled. With this initiative, the town of Pachacútec will be able to generate opportunities for 1,000 schoolchildren from their infancy. This will enable children in extreme poverty to access a quality education.

In Colombia, the Foundation has contributed toward the building and furnishing of the Integrated Child Development Centre (CIDI) in Cartagena de Indias. This was done to solve the health problems identified in the area and reduce infant mortality by offering care to babies. In Bolivia, the most noteworthy health project is the consolidation and expansion of the infrastructure of San José Obrero de Portachuelo Hospital in Santa Cruz de la Sierra. This is a township with a very fragile health situation. It has critical maternal and infant mortality indicators in children under five. With that, all of the health needs of the population that exceeds the hospital's current capacity will be covered.



The Repsol Foundation's efforts to integrate the disabled were recognised through the Prodis and Discapnet awards in 2011

Spreading an awareness of culture is another factor that helps society's development and progress. Through different initiatives, and in cooperation with other institutions, the Foundation brings literature, music, theatre and art to citizens.

These programmes and other initiatives are a sample of the Repsol Foundation's responsibility and its contribution toward the on-going improvement of society and welfare.

## YPF Foundation

The YPF Foundation's mission is to consolidate and accompany YPF's commitment to Argentina through educational, social and cultural initiatives that generate opportunities for development and contributed toward the country's growth. Its objectives include:

- Promoting the development of education, culture and social and job insertion in the communities where YPF works.
- Acting as a model for the action that should be taken by companies and non-profit organisations.
- Coordinating the private and public sectors and encouraging policies that contribute toward the country's sustainable development.
- Strengthening ties between YPF, its employees and society.
- Generating job opportunities by training young people who have been excluded from the knowledge society.
- Fostering the development of society through the power of art to transform and integrate individuals, promoting values and preserving historic heritage.
- Contributing toward preserving and caring for the environment.

The YPF Foundation's actions are reflected through numerous educational, social and cultural initiatives performed with dedication and motivation by the Foundation's staff.

In education, the Gregorio Álvarez Cultural Centre was opened so that the inhabitants of Plaza Huincul and Cutral Có (Neuquén) can enjoy the variety of art and cultural activities offered by this new space. The Foundation continued working on reinforcing technical education and several different programmes that make it possible to include young people in society through vocational training oriented toward creating job opportunities.

Culture and art have a positive impact on the community and stimulate its development. They also affirm our identity. The space entitled *Arte en la Torre* (Art in the Tower), the temporary exhibitions of Argentinean artists, the *Argentina Pinta Bien* (Argentina Paints Well) programme and the cultural cycle have enabled the Foundation to show and promote the talent of Argentinean artists. At the same time, it has stirred the interest of young people nationwide.

## Repsol YPF Ecuador Foundation



To root itself in its firm social commitment, Repsol voluntarily decided to create a foundation in Ecuador with the main objective of working toward developing the native and mixed-descent communities located in the territories within the sphere of indirect influence of block 16. The Repsol YPF Ecuador Foundation was founded on 11 May 2001.

Three priority lines of action to improve the population's living conditions were identified from a study of the area's socioeconomic and cultural conditions. The first line of action concerns education and job insertion; the second is oriented toward health and sanitation and the third refers to reinforcing productive and business capacities at the micro and local levels. Furthermore, since 2010, the Inclusive Business Model has been developed. Besides creating corporate benefits, it creates social and financial value by involving individuals on low incomes in many companies' productive activities.

In 2011, the Repsol YPF Ecuador Foundation participated in 20 social development projects.

All these initiatives are based on the conviction that the supported initiatives require an injection of funds to survive. However, once this process has concluded, it will be necessary to continue backing the projects through on-going supervision until they become completely self-sufficient.

A total of 11,095 people benefitted from the programmes carried out by the Repsol YPF Ecuador Foundation using its own funds, and with resources contributed by institutions, counterparties, strategic partners and the community itself.

The effort to generate proposals to seek additional funding continues to engage multilateral cooperation institutions and other companies to join the initiatives to support social and environmental development projects.

The YPF Foundation's action is reflected in numerous educational, social and cultural initiatives

More than 11,000 people have benefitted from the Repsol YPF Foundation programmes in 2011







## Safety and the environment

For Repsol YPF, attention to safety and the environment plays a central role in managing its activities. Repsol YPF's principles for safety and the environment are defined in its Health, Safety and Environment Policy. It is applicable in all company activities. In the policy, the company pledges to conduct its activities while considering the following to be essential values: safety, people's health and environmental protection.



▶ Video  
Corporate Areas -  
Safety and the  
Environment  
Lenght: 1'25"

📄 Download transcription

Additionally, safety is one of the company's fundamental and unwavering ethics that must guide all actions and commitments.

The basis for safety and environmental management is the management system. This system is comprised of an extensive body of regulations, procedures, technical guidelines and management tools that are applicable to all company activities. They are being continuously updated to be adapted to the sector's best practices.

The Management Committee establishes the objectives and strategic lines for safety and the environment, which are the basis for preparing objectives and action plans for all company businesses. These plans include the action that is necessary to continuously improve management, investments and the associated expenses and the adaptation to the new legislative requirements. Additionally, the duties of the Board of Directors' Audit and Control Committee include obtaining information on and steering the company's safety and environmental policy, directives and objectives.

Repsol YPF's 2011 Corporate Responsibility Report lists the most notable actions carried out during the year to improve safety and protect and conserve the environment. It also includes data on the performance of the most relevant indicators.

### Safety

The rate of accidents resulting in sick leave declined by 21% compared with the previous year, in compliance with the annual objective. This objective is part of the annual objectives of Repsol YPF employees who have variable pay linked to goals attained.

The goal is to achieve zero accidents in Repsol's activities. In the last five years, the rate of accidents resulting in sick leave has decreased by more than 60%. Nevertheless, during 2011, a total of four fatal accidents involving contractor personnel occurred (two of which were road traffic accidents).

The safety management system is aligned with international standard OHSAS 18001 (Occupational Health and Safety Management System). Repsol YPF encourages the gradual certification of all the company's centres according to this standard, as a way to promote continuous improvement and obtain external validation of management systems. Currently, all the refineries and chemical plants, practically all lubricant and specialty facilities, several exploration and production facilities and a growing number of facilities for other activities are certified. (See detail of certified facilities at [www.repsol.com](http://www.repsol.com)).

Given their scale, the most noteworthy safety milestones in new projects include the significant challenge faced by the company as a result of the expansion of the Cartagena refinery and project to cut fuel oil production at the Petronor refinery (Bilbao). To guarantee safety during these projects,



several activities have been carried out. These include: incorporating better international construction management practices, management of the necessary general services to meet construction workers' needs, compliance with regulations and standards due to the high degree of coordination between Repsol's specialists and contractor personnel, preventive observations by specialised technicians, and monitoring and tracking of materials and welding quality. Close to 22,200 people belonging to more than 700 contractors have participated in the projects.



## Environment

The environmental management system is aligned with the international standard ISO 14001. Repsol encourages the gradual certification of all the company's centres according to this standard as a way of promoting continuous improvement and obtaining external validation of management systems. Currently, all the refineries and chemical plants, all lubricant and specialty facilities, practically all exploration and production facilities and a growing number of facilities for other activities are certified. (See detail of certified facilities at [www.repsol.com](http://www.repsol.com)).

In 2011, significant environmental investments were made that were aimed at improving the environmental quality of petroleum products, minimizing air emissions, increasing energy efficiency, optimizing water consumption, reducing the contaminating load of dumps and improving spill prevention systems. All of this was done by applying the available best practices and technological innovation. Also of note is the effort undertaken to identify, evaluate and correct the possible past contamination situations. In note 35 of the Consolidated Financial Statements, information on assets, provisions, expenses and future actions of an environmental nature is listed.

In addition, Repsol YPF was recognized by Newsweek magazine as the company with the best environmental performance in the energy sector in Green Ranking 2011. This ranking assesses the environmental practices of the 500 major companies traded worldwide. It considers three categories: environmental impacts, the environmental management system and transparency on the environmental report. This year, the company's transparency was quite positively evaluated in the report on environmental issues. Moreover, it was highly evaluated in the environmental management system category. That was because of the programs, initiatives and certifications implemented in the entire organization to meet the commitments set forth in the Safety, Health and Environment Policy.

This recognition is the result of the company's joint effort to improve its environmental performance, and it shows Repsol YPF's commitment as a beacon in its sector.



## Spill prevention

Repsol YPF has adopted cutting-edge techniques to prevent pollution, manage accidental spills and maintain facilities. In this regard, the company has a marine and river spill management policy that lays down the common basic guidelines for managing, preventing and responding to incidents involving oil and gas and toxic and potentially hazardous substances in all company activities.

In response to two spills on the Tarragona (Spain) seacoast in early 2011 and as an extension of the actions carried out to date, Repsol YPF drew up an Integrated Plan of Action along the Tarragona seacoast. Its purpose is to contribute to improving environmental protection, reinforcing the quality and safety of company operations on the seacoast, and has an associated investment of €131 million in the next four years. This investment is mainly earmarked for guaranteeing the integrity and reliability of the Upstream facilities (Casablanca platform) and Downstream facilities (dock and outdoor rack), that Repsol YPF has along the Tarragona seacoast.

The plan's scope at the Casablanca platform amounts to an estimated investment of €50 million focused on performing actions aimed at extending the platform's life and implementing the best available technologies. Furthermore, at the dock and outdoor rack facilities, an estimated investment of €81 million should be made. It is focused on extending the facilities' reliability and implementing technological improvements that will create

facilities with the best safety standards on the market.

The 2011 Corporate Responsibility Report lists the actions taken during the year.

## Safety during offshore operations

Repsol YPF has a great deal of experience in offshore operations and it has performed deep-water operations both in the Gulf of Mexico and elsewhere. As part of the continuous improvement cycle, the company's standards and procedures are periodically reviewed and the lessons learned, recommendations and international best practices are incorporated.

In this regard, Repsol YPF has emergency response plans for those scenarios that may have an environmental impact, including responses to oil and gas spills.

These contingency plans are drawn up according to the scenarios with the most risk based on local regulations, internal rules and the industry's best practices. They are reviewed and updated beforehand, both at the beginning of the drilling operations and after changes have been produced that may affect the operations' normal operation. These plans are subject to approval processes that are both internal and by the appropriate government authorities in the country of operation.

Before implementing the well construction operations, all of the most significant risks are identified and actions aimed at avoiding damage to people, the environment and the facilities are implemented. Measures are taken through documentation to ensure that all technical aspects have been properly implemented and verified. Additionally, the services commissioned are subject to periodic supervision and inspection during the operations in order to ensure that the local regulations, internal rules and the industry's best practices are applied.

In addition, Repsol YPF is a member of the OSR (Oil Spill Response), Clean Gulf Associates (CGA) and other mutual benefit societies or consortiums that intervene in large spills. These consortiums provide technical support and equipment for environmental emergencies.



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## Sustainable energy and climate change

During 2011, the 2012-2020 Carbon Strategy was reviewed and updated. Its purpose is to drive the company's vision of developing a more diversified and less carbon-intensive energy supply. The Carbon Strategy's end goal is to devise a common action plan that harmonises existing initiatives and detects synergies through an integrated focus.

After the New Energies business unit was created in 2010, which is currently deploying its action plans, Repsol considers it necessary to prioritise carbon intensity reduction activities in company operations by focusing on the following areas:

- Energy efficiency to reduce CO<sub>2</sub> emissions and energy consumption through systematic plans that enable reduction opportunities to be exploited.
- Carbon Markets that focus on mitigating the deficit foreseen in the European Union Emissions Trading Scheme (EU ETS), development of CDM projects and procurement of Certified Emission Reductions (CER).
- Prospecting and development of technologies that enable CO<sub>2</sub> to be transformed into added value products.
- Biofuel strategy for research, development, production, mixing and distribution.
- Development of new transport technologies that contribute toward guaranteeing supply through cleaner fuels with a lower impact on the environment.
- Integration of carbon management throughout the company's entire value chain.

Repsol YPF's Management Committee is in charge of approving the company's carbon strategy as well as evaluating its implementation. Additionally, since 2005, the duties of the Board of Directors' Audit and Control Committee include obtaining information on and steering the company's safety and environmental policy, directives and objectives including climate change aspects.

Repsol YPF has established a strategic objective of reducing CO<sub>2</sub> emissions by the equivalent of 2.5 million tonnes in the period 2005-2013. This objective is being fulfilled through annual reduction targets compared with a business as usual scenario, which are approved by the company's Management Committee.

A reduction of roughly half a million tonnes of CO<sub>2</sub> equivalent was achieved in 2011 through specific energy savings actions. The accumulated decrease as a consequence of all action taken between 2006-2011 amounts to 2.1 million tonnes of CO<sub>2</sub> equivalent - more than 80% of the strategic objective).



During 2011, CO<sub>2</sub> emissions were cut by half a million tonnes through energy savings action



The most noteworthy milestone in the area of energy efficiency was the July 2011 certification, by an external entity, of the Energy Management System at

the A Coruña refinery in accordance with the new ISO 50001. This is the first plant in the world to receive a certificate of these characteristics.

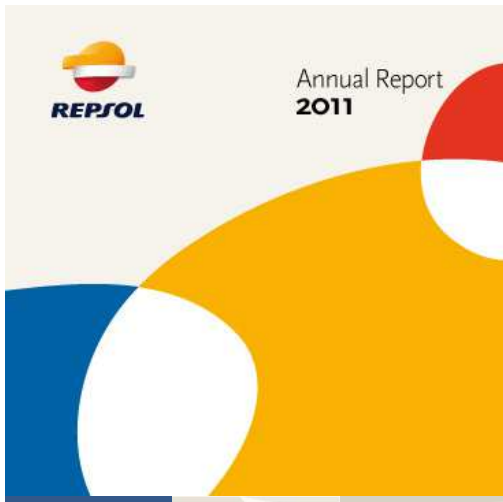
Implementing this system enables:

- Energy management criteria and good practices to be consolidated by applying them homogeneously across areas, systematising work methods, prioritising improvement opportunities, and ensuring that these efficiency criteria are adopted in all activities performed.
- Energy consumption to be slashed by grouping all energy management-related activities into one continuous improvement cycle.

To do so, it is fundamental to have tools to identify, analyse and implement opportunities to save energy and efficiently monitor both energy consumption and the related processes or activities.

This system lies within Repsol YPF's commitment to efficiently use energy at its facilities in order to save natural resources, reduce atmospheric emissions and contribute toward mitigating the impacts of climate change.

After this experience's success, this certification was extended to the Puertollano refinery with the implementation of an Energy Management System to obtain ISO 50001 certification.



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## Communication

Repsol believes that communication is a key element in its relationship with society. In order to adequately manage communications, it offers its main stakeholders various on- and offline tools through which it effectively and transparently reports on its activities and businesses. The company adopts a communications strategy based on proximity, truthfulness and speed as the main principles of its General Communications Department.

### Shareholders and investors

Many ways to learn about the company's everyday activity are made available to these groups. Since it became a listed company in 1989, Repsol has had a Shareholder Information Office (SIO) and Investor Relations Department, through which it serves its investors and securities analysts. In recent years, analyst coverage of the company has greatly increased, reaching a total of 41 analysts that effectively follow the company's performance.

In order to serve shareholders' information needs, Repsol makes the SIO available to them. Shareholders can personally visit the office, call the free line 900 100 100 or write via regular post or email, in order to obtain any information required. The SIO answered some 50,000 calls in 2011 (an average of 190 per day). The most frequent questions concerned share prices, the Annual Shareholders' Meeting, dividend payment dates, and relevant events in the company.



	Dif.	Dif %		Comprá	Venta	Títulos
Contratando	68,500	-0,790	-1,33%	718	58,500	58,570
Repsol	93,280	-	-	50	58,490	58,580
apertura	93,080	-0,210	-0,35	50	58,480	58,590
cl. Sesión	93,990	-0,200	-0,34	306	58,470	58,620
Inicio Sesión	58,281	-1,009	-1,70	306	58,460	58,640
Fin. Sesión	57,500	-1,790	-3,02			
Vol. Efectivo	65,641	-	-			51,3
Vol. anual	67,402	1,761	2,68			2,992,6
Fin. anual	57,500	-8,141	-12,40			

- Video Corporate Areas - Investors Length: 1'46"
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In addition, the corporate website ([www.repsol.com](http://www.repsol.com)) provides access to all relevant information regarding the company, as well as specific content in the section "Shareholders and investors" section, which received over 250,000 unique visitors in 2011. The website also has several e-mail addresses (the general one is [infoaccionistas@repsol.com](mailto:infoaccionistas@repsol.com)) to which comments may be sent and publications requested. More than 5,000 emails were received in 2011, mainly requesting information about Repsol.

The Investor Relations Department constantly liaises with institutional investors and securities analysts. In 2011, road shows (meetings with institutional investors outside the Repsol offices) were held in Europe, the United States and Asia, in which senior management took part, as well as 11 other meetings in which the investor relations team took part. Moreover, Repsol attended 12 sector conferences, both in Europe and in the United States, during which meetings with institutional investors were also held. If visits to the company's offices are added to the above, a total of approximately 600 institutional investors were contacted in 2011. Finally, the Investor Relations Department organised a field trip (focused visit during which analysts and institutional investors learn about a key company asset, attended by senior management and local management) in Argentina and Bolivia, which was attended by 38 analysts that follow the company's performance.

## Media

The aim of the General Communications Department is to serve the media under the principles of transparency, proximity, rigor and truthfulness. To this end, Repsol boasts various channels through which it manages information requests from the media.

The main activities of the Repsol Group in 2011 were made known to the media through more than 60 press releases, all of which are available in the corporate website Press Room. ([www.repsol.com](http://www.repsol.com)). The press releases issued by industrial facilities in Spain, those issued in countries where the company operated, those pertaining to sports sponsorship project, and those relative to specific businesses, such as liquefied petroleum gas (LPG) or the Repsol Foundation, should also be taken into account. In order to maintain a close relationship with media professionals, in 2011 a number of press conferences and information sessions were held. These include the presentation by Repsol's Chairman, Antonio Brufau, of the 2010 results in the press conference which took place on 24 February, as well as the media session following the Annual Shareholders' Meeting of 15 April 2011.

Furthermore, media professionals took part in the visit that the Prince of Asturias and the Prince of Wales made to the Repsol Technology Centre on the occasion of a Spanish-British seminar on algal biofuels (31 March), the opening of the first sustainable service station in the world (13 April), and the first Spanish biofuel-based flight (3 October), among other events.

On the occasion of the launch of the extension to the Cartagena refinery in April 2011, which constitutes the largest industrial investment in the history of Spain (over €3,000 million), the General Communications Department scheduled a number of visits to the new facilities for international, national, regional and local media.

The corporate website includes a Press Room where information about the Repsol Group and its activities is available to media professionals. In addition to press releases, it includes graphs and multimedia files, publications, specific dossiers and newsletters intended for journalists from all over the world.

In 2011, the Repsol newsletter, News, was presented: a new tool for media relations, created to raise awareness of Repsol stories and projects, less from a current affairs perspective and more as a learning experience. News is sent to more than 2,000 journalists and has been warmly received. Social network activity also started, more specifically on Twitter, where press releases are announced, as well as the most relevant company and energy sector data.

Another development in 2011 involved the Spanish translation and distribution of the well-known book *How the Energy Industry Works* among journalists, institutions, universities and associations, as well as throughout Repsol offices all over the world. It is a highly educational work, and thus comprises an everyday tool for anyone who is not an energy expert.

In order to respond to information requests from the press, the Communications Department has an e-mail address ([prensa@repsol.com](mailto:prensa@repsol.com)), through which more than 4,000 queries and requests for information were received over the course of 2011. This figure shows the great media interest in Repsol's activities. By means of this channel, the company quickly and effectively responds to the many requests from the media each day.

As a result of the untiring work of the General Communications Department, in March 2011 the Barcelona Chamber of Commerce, Industry and Shipping awarded Repsol the Llotja Award in recognition of its commitment to providing truthful, full and accessible information to journalists, investors, and the general public, mainly through its annual reports and website.



The Shareholder Information Office handled an average of 190 telephone calls per day last year



## Repsol on the Internet

With 10 years' experience in the digital world, the website [www.repsol.com](http://www.repsol.com) is reputed for its multi-content strategy. By means of this strategy, Repsol seeks to provide its various target groups with interesting content allowing them to acquire information about and follow the company in real time, as well as generate close relationships and dialogue through its four blogs and ever-growing social network presence.

This recognition was given by prestigious organisations, experts in the field and the generation of relationships based on trust, and once again this year Repsol was chosen as among the best. The international consultant KWD, which evaluates nearly 1,000 companies in Europe in its annual ranking "KWD webranking", indicates that Repsol has held the leadership position in Spain for eight consecutive years and, furthermore, in 2011 it moved into the top five best companies in Europe. The Spanish Accounting and Business Administration Association named Repsol as the winner of the IX AECA Award as the Ibex-35 company with the best financial information on the Internet, among other things.

In 2011, [www.repsol.com](http://www.repsol.com) developed three lines of action to be so successful.

- Firstly, creating new digital, audio-visual and interactive content available on the Internet, thereby facilitating knowledge of Repsol, its brands and products, as well as the way it operates. The new Innovation and Technology channel, the redesign of Products and Services, and the revamped "About us" and "Corporate Responsibility" sections are an

In 2011, the company was named the Ibex-35 company with the best financial information on the Internet

example of this.

- Secondly, offering access to users through mobile devices such as smartphones and tablets using Repsol Guide apps and the generation of content viewable on these platforms.
- And thirdly, promoting dialogue and interaction through a greater emphasis on the web 2.0, where the new Technological Innovation blog joins the dialogue already started by the blogs of Dani Pedrosa, Marc Márquez and Cuchara de Palo, as well as through the consolidation of the Box Repsol and Repsol Guide profiles, which celebrated three years on the main social networks (Facebook and Twitter) in 2011.

The result has been a monthly average of over 70 million page views and five million visits to the [www.repsol.com](http://www.repsol.com) website, as well as massive social network activity, reaching 100,000 Facebook followers and 22,000 Twitter followers, which amount to a 67% and 400% increase with respect to 2010, respectively.





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## Intangible asset management

A significant part of the value of a company lies in its intangible assets. A company's brand and reputation are two key strategic values for differentiation and the generation of trust among the various stakeholders.

### Brand strategy

The brand constitutes a key asset in Repsol's strategy: an intangible asset which can concentrate all the company's value, making them pervasive throughout the organisation, and conveying them in each of its relations with the various stakeholders.

For this reason, in 2011 the Strategic Brand Plan started to be rolled out; the objective of which is to provide the brand with a strong, consistent and unique personality both verbally and visually, manage its use through all points of contact and its communication to all audiences, and create an internal culture that is fully aligned with the brand.

This organisation recognises excellence in branding as synonymous with market consolidation, a guarantee of quality and trust for the public in more than 80 countries all over the world.

In 2011, Repsol also ranked among the top-ten Spanish companies in the biannual ranking published by Interbrand, a world-renowned company in brand valuation. In 2011, the Repsol brand came eighth, improving its position with respect to 2009, when it was ninth. A commitment to internationalisation, innovation, new technologies, and adaptation to new consumption patterns are the main features of the brands heading the ranking.

### Reputation

Repsol understands corporate reputation as the capacity to generate trust, respect and admiration among all our stakeholders. This trust is a differentiating element, as proved by the fact that companies with the best reputations are also those which are most highly valued. A good reputation makes them more competitive because it has a direct impact on financial results, talent attraction and loyalty, product recommendation and crisis management.

This is particularly relevant in such sensitive sectors as the energy sector: always in the spotlight due to its direct work with natural resources and its main role in people's welfare. This means Repsol has to operate to extremely high standards.

As a pioneer in the area of reputation, Repsol was one of the four founders of the Corporate Reputation Forum, and in 2011 became one of the sponsors of Corporate Excellence: Centre for Reputation Leadership: a think tank in which large Spanish companies join together to professionalise brand management and corporate reputations around the world.

In Repsol, reputation is managed with the aim of promoting constant improvement of the organisation and its external image. To this end, its reputation is continually measured, and a Strategic Corporate Reputation Plan has started to be deployed. Special emphasis has also been placed on online reputation management.

In 2011m Repsol improved its top ten positions in the main national and international reputation rankings, such as the Spanish Business Reputation Monitor (MERCOS) and Fortune's World Most Admired Companies index, both by sector and by country.



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## Sports sponsorship

In 2011, Repsol took part in the top motorcycle racing competitions in the world, such as the World Motorcycling Championship, which is the best testing ground for its fuels and lubricants. It is precisely the experience acquired in the development of specific products for top competitions that enables Repsol to remain a leader in the research and development of products that can fulfil its customer's high expectations.



[Video](#)  
Corporate Areas -  
Sports Sponsorship  
Lenght: 2'44"

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The 2011 season was exceptional as regards the world titles won by the Repsol riders taking part in international competitions. In MotoGP, Repsol won the World Championship with Casey Stoner. Moreover, Repsol Honda Team was the team World Champion. Repsol's Australian pilot won ten of the seventeen great championships. Dani Pedrosa won three times and only bad luck prevented him from reaching the end of the season with the chance of winning the championship. Andrea Dovizioso came third at the end of the season. As an example of the supremacy of the Repsol team, two of our riders stepped onto the podium in fifteen of the seventeen main competitions.

Marc Márquez, the latest 125cc World Champion, debuted in the Moto2 category. The Cervera pilot did not disappoint his fans and after a difficult start to the season, he won seven races and reached the end of the season as the leader in his category. An unfortunate accident in the penultimate race brought his options of winning the championship to an end. Even though he failed to win the prize, the Repsol rider has been confirmed as a sports and media phenomenon, which makes him a wonderful ambassador for the brand, both on and off the race track.

Repsol won the Trial Indoor and Outdoor World Championship in the men's category for another year. Toni Bou has so far won ten world championships. The 26-year old is on the verge of becoming the rider who has won the most championships ever in the history of this specialty.

Repsol remained the personal sponsor for Marc Coma, who in January won the 2011 Dakar rally in the motorcycle category.

In the Spain Speed Championship, which has become the best testing ground for the World Championship, the Repsol team took the first three positions in the 125cc category.

## Other sponsorships

Repsol is a company committed to Olympic sports through its collaboration with the ADO plan, which helps many young sportspeople to live the dream of taking part in the Olympic Games. In this way, Repsol is firmly behind reinforcing the excellent status of Spanish sports with a view to the 2012 London Olympics.

This year, the Group started sponsoring an acrobatic flight team which has won the World Sub-championship, the Spanish Championship, and has taken part in a number of aerial exhibitions.



## New Repsol Headquarters

Construction of the new Repsol headquarters commenced in November 2008, and works were practically complete in 2011.

In 2011, the above-ground structure was completed and 100% of the façade was executed; installation work came to an end, and the commissioning phase is currently underway. Landscaping with trees planted in October was also completed. Moreover, urban development of the campus has started

The internal fit-out was also completed in terms of the design of the various areas, and work continued on the design and functioning of the main services, with the collaboration of the members of the Campus Team (which consists of 54 representatives of the various group units, channelling the division's participation and opinion in the change project), and trade union representatives. 52% of the internal fit-out is complete.



Video  
Corporate Areas - Campus  
Lenght: 2'45"

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The accident rate involving sick leave remained under five during 2011, which constitutes a landmark in the construction sector.

Finally, all units have been engaged in exhaustive analysis of their actual relocation to the company's campus, involving a simulation of relocations, checking the functioning of each space, and detecting special needs.

In November and early December, almost 1,000 employees visited the trial office, which was expressly furnished for the occasion, as well as the most emblematic areas in the building.

Campus occupancy is scheduled to start between May and June 2012.

The future Repsol headquarters will have a ground floor plus four office and service floors. It will also have two underground floors housing services and parking for 1,800 vehicles. The project comprises more than 5,000 square metres, which will provide various services for employees. The buildings will be ring-shaped making it possible to enjoy an almost 10,000 square-metre tree-lined garden. In addition, a new green area will be created around the business campus. Repsol has focused on sustainability since the project design phase.



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**CONVERSION CHART**

		OIL			GAS			
		Litres	Barrels	Cubic metres	toe	Cubic metres	Cubic feet	
<b>OIL</b>	1 barrel <sup>(1)</sup>	b	158,98	1	0,16	0,14	162,60	5.615
	1 cubic metre <sup>(1)</sup>	m³	1,000	6.29	1	0.86	1,033	36,481
	1 tonne of oil equivalent <sup>(1)</sup>	toe	1,160.49	7.30	1.16	1	1,187	41,911
<b>GAS</b>	1 cubic metre	m³	0.98	0.01	0.001	0.001	1	35.32
	1,000 cubic feet = 1.04x10 <sup>6</sup> Btu	ft³	27.64	0.18	0.027	0.024	28.317	1,000

		Metre	Inch	Foot	Yard	
<b>LENGTH</b>	Metre	m	1	39.37	3,281	1.093
	Inch	in	0.025	1	0.083	0.028
	Foot	ft	0.305	12	1	0.333
	Yard	yd	0.914	36	3	1

		Kilogramme	Pound	Tonelada	
<b>MASS</b>	Kilogramme	Ton	1	2.2046	0.001
	Pound	lb	0.4536	1	0.00045
	Ton	t	1,000	22.046	1

		Cubic feet	Barrel	Litre	Metro cúbico	
<b>VOLUME</b>	Cubic feet	ft³	1	0.1781	28.32	0.0283
	Barrel	b	5,615	1	158.98	0.1590
	Litre	l	0.0353	0.0063	1	0.001
	Cubic metre	m³	35.3107	6.2898	1,000	1

(1) Reference measurement: 32.35° API and relative density of 0.8636



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## Glossary of terms

TERM	DESCRIPTION
ADR	American Depositary receipt
Bcf	Billion cubic feet
Bm <sub>3</sub>	Billion cubic metres
Bm <sub>3</sub> /y	Billions of cubic metres per annum
Bscf	Billions of standard cubic feet
Btu	British thermal unit
EBITDA	Earnings before interest, taxes, depreciation and amortisation
EPC	Engineering Procurement and Construction
FCC	Fluid catalytic cracking
GWh	Gigawatts per hour
HDPE	High-density Polyethylene
LDPE	Low-density Polyethylene
LNG	Liquefied natural gas
LPG	Liquefied Petroleum Gas
MMW	Million watts
MMb	Million barrels
MMboe	Million barrels of oil equivalent
MMm <sup>3</sup>	Million cubic metres
MMm <sup>3</sup> /d	Million cubic metres per day
MMscf	Million standard cubic feet
MMscf/d	Million standard cubic feet per day
MMt	Millions of tonnes
MMtoe	Millions of tonnes of oil equivalent
MTBE	Methyl tert-butyl ether
MWe	Electrical megawatts

TERM	DESCRIPTION
MWh	Megawatts per hour
Mb	Thousand of barrels
Mboe	Thousand barrels of oil equivalent
Mboe/d	Thousand barrels of oil equivalent per day
Mscf	Thousand standard cubic feet
Mt	Thousand tonnes
Mt/y	Thousand tonnes per year
OP/SM	Propylene oxide/Styrene monomer
Payout	Percentage of profits used to pay dividends
Tcf	Trillion cubic feet
USD	US dollar
b	Barrel
bo/d	Barrels of oil per day
boe	Barrels of oil equivalent
boe/d	Barrels of equivalent oil per day
kbbld	Thousand barrels per day
kg	Kilogramme
km <sup>2</sup>	Square kilometre
m <sup>3</sup>	Cubic metre
scf	Standard cubic feet
t	Metric tonne
tep	toe