



2010

## Consolidated management report 2010 Repsol YPF Group

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## General and economic-financial information

### Macroeconomic environment

This year, 2010, has marked the beginning of global economic recovery after the crisis of 2008-2009, already known as the *Great Recession*. The world economy has grown 5.0% during 2010 and forecasts estimate 4.4% growth during 2011. However, the global economy is still facing the consequences of the crisis and this recovery process is not free of risks and weaknesses.

After a first half of the year during which the pace of recovery was stronger than expected - thanks to the upward trend in inventories and fixed investments, which led to a strong increase in international trade - the tendency in the following stage was more moderate growth.

This moderation began to be noticeable in the second half of the year, with slower industrial production and global exports, despite a higher-than-expected consumer spending in Japan and the United States, fostered by the incentive programmes introduced by both economies, which maintained economic growth in the period above the forecast rates.

The different speeds of recovery seen in each region during both the crisis and the recovery process as a whole became consolidated this year. The most advanced economies have grown 3.0% in 2010 and estimates for 2011 are in the region of 2.5%, while emerging economies grew 7.1% and are expected to grow about 6.5% in 2011. Similarly, in late 2010, the industrial activity in some emerging economies was above the activity levels recorded before the crisis, while a large number of advanced economies had not yet regained their record levels.

This uneven progress has posed different challenges in terms of economic policies. Although in advanced economies private consumer spending has become steadier, the moderate economic growth may not be enough to tackle the high unemployment rate. These countries still have to deal with the excesses of the period before the crisis by reforming their financial systems and, in the most indebted economies in the Eurozone, they must also face the challenge of fiscal sustainability.

At the same time, many developing economies have already recovered their economic activity levels and, in some cases, they are not far from achieving full employment. Their favourable evolution has led them to receive strong capital input which, in addition to the prosperous economy, have caused the onset of inflationary pressure and even symptoms of overheating. For this reason, some of these economies have partially withdrawn the incentive measures they had introduced to face the crisis.

Regarding the main economies, the United States achieved 2.9% growth, managing to avoid the feared double dip. However, the rebound in activity towards late 2009 and early 2010 was supported mainly by transitory factors, such as public aid and an expansive inventory cycle.

By mid-year the economy suffered a slowdown that was noticed in a new growth of the unemployment rate and a steep fall-off in property sales, increasing the fear of a new recession. The American authorities reacted by announcing new expansive monetary and tax policies. These were, on the one hand, a programme to buy up public debt announced by the Federal Reserve, known as "Quantitative Easing 2", and on the other, an agreement between the two main parties to extend tax exemptions for the next two years, equivalent to US\$ 800 billion. These measures managed to accelerate growth towards the end of 2010. However, significant weaknesses still remain, mostly connected to the property market and high unemployment.

Global reactivation also reached the Eurozone, which finished 2010 with a 1.8% growth, while estimates for 2011 are around 1.5%. The German economy is still the driving force behind the region's economic recovery, which is still weak due to the tensions in the peripheral Eurozone countries and the high levels of unemployment.

Throughout 2010, international financial stability was affected by doubts regarding the sustainability of the public accounts of some of the region's countries, especially Greece and Ireland.

The fear that these countries could not meet their sovereign debt obligations and the effect this would have on the single currency led to the creation of the European Financial Stability Mechanism and the approval of financial aid for those countries. The persistent risk that the crisis could spread to other economies in the Eurozone led the European Central Bank to extend its expansive monetary policy.

Despite these measures, doubts about the sustainability of public debt in several countries and about the cost of restructuring their debt could involve for bondholders have kept interest rate differential of these countries' debt high compared to German debt.

For its part, Spain's Gross Domestic Product (GDP) dropped 0.1% in 2010, although positive quarterly growth rates indicate that economic recovery is beginning, albeit slowly.

During the first half of the year, private consumer spending showed some improvement, mostly linked to transitory measures. However, the persistence of high unemployment rates and the lack of credit have kept domestic demand at a low level, thus dragging down the whole economy.

The foreign sector was the main source of movement this year. The gradual recovery of Spain's main trade partners boosted the export sector, avoiding a more marked setback in activity and employment.

What happened in Greece and Ireland had a major impact on market perception of Spanish public debt, causing a sharp rise in the country risk and making access to finance expensive for both the public and private sectors.

Doubts about the capacity of the Spanish economy to go back to positive growth rates, along with the steep increase in public deficit registered in 2009 (-11.1% of GDP) forced the Government to implement measures to cut public deficit and to carry out structural reforms in order to provide the maximum credibility for the fiscal consolidation path.

Untouched by these trends, Latin America, in general terms, is experiencing strong, fast economic recovery thanks to the rebound in commodity prices and to relatively favourable financing conditions. The region's GDP has grown 5.9% in 2010, which is expected to be moderated to 4.3% in 2011.

This positive trend is reflected in risk premiums which, for some Latin American economies, are currently lower than those demanded from developed economies. However, some of the main economies in the region are receiving strong capital input, which they should handle with careful macroeconomic management.

The growth in the Asia-Pacific region has already gone back to the rhythm it had before the crisis and the solidity in growth stands out compared to the weaknesses of more advanced economies. The emerging Asian economies, with China at the forefront, have grown 9.3% in 2010, and are expected to reach 8.4% in 2011.

Towards the end of the year, and especially after the Federal Reserve's decision to inject more dollars into the American economy, a return of inflationary pressure in countries such as China, South Korea, India, Australia and New Zealand, has led their governments to raise interest rates and adopt more restrictive monetary policies.

#### Recovery of global oil demand

The behaviour of the oil market during 2010 was characterised by a recovery of supply and demand fundamentals and, as a consequence, of prices, which were significantly influenced by the global economic-financial context.

Regarding the fundamentals, 2010 marked a change with respect to the two previous years, when consumption shrunk by about 1.5 million barrels. On the contrary, this year saw an increase in global oil demand in excess of two million barrels per day, according to official international energy agencies.

The main drivers behind this growth in demand were China, the United States and the rest of those countries that do not belong to the Organization for the Economic Cooperation and Development (OECD), of which China and the United States accounted for almost half of the global demand growth in 2010.

During 2010, there still was a certain excess supply on the market as a direct consequence of two factors. The first being the policy applied by the Organization of Petroleum Exporting Countries (OPEC), which led to production levels of about 2 million barrels per day, well above

their agreed quotas. The second factor was the high inventory levels carried over from 2009, despite their gradual reduction during 2010.

Regarding the price of oil, it was highly volatile during the year, with an average of about US\$ 80 per barrel (79.6 in the case of West Texas Intermediate oil), an increase of about 29% compared to 2009 or a price increase of nearly US\$ 18 per barrel.

The upward trend in prices was more noticeable in the second half of the year, highly influenced by macroeconomic and financial factors. In this sense, the monetary easing adopted by the United States in the second half of 2010 through quantitative expansion measures, which generated a capital flow towards high yielding assets (commodities and oil), which contributed to oil price increases.

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### The Group's activities

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

- Three strategic integrated activities, including the operations undertaken by the Group's 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 the midstream operations (liquefaction, transport and regasification) of natural gas and to marketing operations for natural gas and liquefied natural gas; and
  - Downstream, corresponding to refining and marketing activities involving oil products, chemicals, and liquefied petroleum gas.
- Two holdings in strategic companies:
  - YPF, which includes YPF S.A. and its Group operations in all of the aforementioned activities; as of 31 December 2010, the Group owned 79.81% of YPF, S.A., that is included in the Group's financial statements through full consolidation; and
  - Gas Natural Fenosa, which mainly engages in natural gas marketing and the generation, distribution, and marketing of electricity; as of 31 December 2010, the Group owned 30.13% of Gas Natural Fenosa, which is included through proportional consolidation.

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### Horizon 2014 Plan

In 2010 the company presented the Horizon 2014 Plan to the markets, which establishes the Group's priorities for the 2010-2014 period. The remarkable success in explorations during 2008 and 2009, and the changes in the sector brought about by the financial crisis, led to the Group updating its objectives and bases, which will enable it to tackle the next growth stage.

The main strategic lines guiding each business are:

- Upstream: the company's driver of growth.
  - Repsol's presence in geographical areas with a high exploration potential and its recognised ability for deepwater exploration has transformed the company into one of the energy companies with the best growth prospects.
  - The investment strategy will be based on a solid portfolio of strategic projects: the exploitation of those already in operation and making progress on those projects in the delineation or development phase. Additionally, the company will continue to pursue its commitment for organic growth and for exploration activities in new areas of interest for the Group.
  - The development of these projects will increase the annual oil production in the Upstream area by between 3 and 4% until 2014, and even further up to 2019, with an estimated reserve replacement rate in excess of 110% for the next five years.
- Downstream: optimising and improving profitability
  - The projects to enlarge and improve the Bilbao and Cartagena refineries are already at a very advanced stage, and commercial operations are expected to start in late 2011. The start-up of these plants will increase exploitation margins and consolidate the company's integrated position and its position as leader in this business in Spain.

- From 2012 onwards, the excellent position developed by Repsol's Downstream business will allow the company to capitalise on the economic recovery, thereby obtaining solid cashflow generation for the Group.
- YPF: capturing the company's hidden value
  - YPF is a leading company in Argentina, a growing market that offers plenty of business opportunities. The energy transition that is taking place in the country towards international prices and the strict management of investments and costs will allow the company to reach the growth goal in results and dividends.
- Gas Natural Fenosa: a leader in the gas and electricity convergence industries.
  - Creation of a leading integrated gas and electricity company that will ensure steady cashflow generation for the Group.

The keys for generating value in the various businesses and strict financial discipline will enable the Group to reach the Plan's ultimate goal: maximising the value created for the stockholder.

In 2010, the Horizon 2014 Plan has benefited from investments of €5,106 million to help it achieve this goal. The main initiatives during the financial year were delineating the largest exploratory discoveries (in countries like Brazil and Venezuela); the progress made in the building phase of refining projects for Spain (Cartagena and Bilbao); the start-up of major projects such as Peru LNG; and the efficient operation of Repsol's earning assets (Shenzi in the Gulf of Mexico, I/R in Libya, Trinidad and Tobago, Bolivia and Canaport in Canada).

The latest discoveries made in West Africa and Latin America and the acquisition of new mining rights in Latin America, Norway, Oman, Algeria, Indonesia and Angola have laid the foundations for generating future growth.

Moreover, the Group's affiliate companies made progress in their respective strategic lines during 2010:

- YPF which, bolstered by the recovery of prices in Argentina, is focusing on the exploitation of mature fields (mainly through the improvement of the recovery factor) and making advances in marketing management and operational optimisation,
- Gas Natural Fenosa defined their new strategic framework for the upcoming years, after the acquisition and integration of Fenosa.

## Results

The Group's results for 2010 and 2009 are as follows:

	Millions of euros	
	2010	2009
<b>Operating income</b>	<b>7,621</b>	<b>3,244</b>
Upstream	4,113	781
LNG	105	(61)
Downstream	1,304	1,022
YPF	1,453	1,021
Gas Natural Fenosa	881	748
Corporate, adjustments and others	(235)	(267)
<b>Financial result</b>	<b>(1,008)</b>	<b>(468)</b>
<b>Net income before tax and share of results of companies accounted for using the equity method</b>	<b>6,613</b>	<b>2,776</b>
Income tax	(1,742)	(1,130)
Share of results of companies accounted for using the equity method	76	86
Net income for the year from discontinued operations	0	12
<b>Consolidated net income for the year</b>	<b>4,947</b>	<b>1,744</b>
Net Income attributable to minority interests	(254)	(185)
<b>Net income attributable to the parent</b>	<b>4,693</b>	<b>1,559</b>

Repsol YPF's net income for 2010 was €4,693 million, more than three times the result obtained in the previous year (€1,559 million). Operating income was €7,621 million, up 134.9% from the €3,244 million posted a year earlier. EBITDA was €9,196 million, 36.3% more than in 2009. Earnings per share were €3.84.

The results in 2010 show an improvement in every business area and, in large part due to the agreement with China Petroleum & Chemical Corporation (Sinopec), achieve a record result for the Group.

This agreement is one of the highlights of the year. In December 2010, Repsol and Sinopec signed a strategic agreement to develop joint exploration and production projects in Brazil, and to this end formalised a capital increase for Repsol Brasil, S.A. ("Repsol Brasil", which in February 2011 changed its name to Repsol Sinopec Brasil S.A., "Repsol Sinopec Brasil") fully subscribed by Sinopec, for an amount of US\$ 7,111 million (€5,389 million). With this operation, Repsol has maintained its 60% stockholding in Repsol Sinopec Brasil, while Sinopec holds the remaining 40%. The agreement ensures financing for the development of the discoveries in Brazil, in particular Guará, Carioca and Panoramix, as well as their exploitation, reflecting an estimated market value of these assets of over US\$10.6 billion.

The operating income for the Upstream area (Exploration and Production) jumped 426.6% from €781 million in 2009 to €4,113 million by 31 December 2010. The result for 2010 includes €2,847 million capital gains, resulting from the agreement between Repsol and Sinopec. Leaving these capital gains aside, the result for the Upstream area in 2010 is still higher than that of 2009, basically as a result of higher oil and gas resolution prices, and increased production in this period.

The Liquefied Natural Gas (LNG) business posted profits of €105 million in 2010, thanks to larger LNG trading margins and volumes than in 2009, a year in which this area's operating performance was negative, with a recorded loss of €61 million (a figure that includes the losses stemming from arbitration decisions such as the Gassi Touil dispute).

Operating income in the Downstream division (Refining, Marketing, Liquefied Petroleum Gas, Chemicals and Trading) was €1,304 million compared to €1,022 million in the previous year, implying a 27.6% increase. The operating income considering the inventories at the current

cost of supplies (CCS), instead of at the average cost, was €806 million, 23.1% higher than the €655 million obtained in 2009, mainly due to the recovery of the chemical business and the improved results in refining.

Regarding YPF, it finished 2010 with a €1,453 million operating income, a 42.3% increase compared with €1,021 million in 2009. This increase is a result of bringing fuel prices in service stations closer to the international parity in dollars, and of the higher income from those products whose prices, despite being sold in Argentina's internal market, are linked to international prices, as well as the effect of the higher income stemming from exports.

Repsol's 30% stake in Gas Natural Fenosa generated an operating income of €881 million, 17.8% higher than the previous year, mainly due to the incorporation of 100% of Unión Fenosa from 30 April 2009, and the capital gains obtained in the subsequent divestment process.

The consolidated Group recorded a net financial result of minus €1,008 million in 2010 in comparison with minus €468 million a year earlier. The difference is mainly due to the increase in expenses for investments under a financial leasing arrangement (pipelines and gas tankers) and to the differences in exchange rates, which in 2009 yielded considerable profits due to the depreciation of the dollar against the euro, while in 2010 the dollar regained value in relation to the euro, thus having a negative impact on the financial result through positions with an exchange rate risk.

The Corporate Income Tax accrued was €1,742 million, with an effective tax rate of 26.3% (40.7% in 2009). This unusually low rate is a consequence of the unusual transactions carried out during the year (agreement with Sinopec, sale of Refap and CLH, etc.).

## Financial overview

At year-end 2010, Repsol YPF holds a solid financial position.

The Group's net financial debt excluding Gas Natural Fenosa, in other words, without taking into account the proportional integration of the figures corresponding to this company, was €1,697 million as of 31 December 2010, compared to the €4,905 million in the previous period, which means a 65% reduction. The good progress being made across the business, as well as the divestment of the Refinería Alberto Pasqualini (Refap) in Brazil, the sale of over 4% of YPF's capital to the market and, very significantly, the capital increase for Repsol Brasil have been the causes behind this reduction.

The Group's consolidated net financial debt at year-end 2010 was €7,224 million, that is, €3,704 million less than the net debt as of 31 December 2009, which totalled €10,928 million.

During 2010, investments reached €5,091 million<sup>(1)</sup>. These investments are explained in detail in the sections pertaining to each business area contained in this Management Report.

Divestments in the year totalled €4,972 million<sup>(2)</sup>. Of this amount, it is important to point out, in addition to the inflow of funds as a result of the Sinopec agreement, the sale of 4.23% of the shares Repsol had in YPF on the market for a total amount of €489 million. Likewise, it includes the sale of the 30% stake Repsol held in the Refinería Alberto Pasqualini (Refap), of 5% in the Compañía Logística de Hidrocarburos (CLH) and of 25% in Bahía de Bizkaia Gas (BBG). These transactions are dealt with in greater detail in the sections devoted to each business area contained in this Management Report.

During 2010, exceptionally, there was a single dividend payment (€0.425 per share as an 2009 final dividend) due to the payment of 2009 interim dividends by Repsol YPF, S.A. in December of that year. Furthermore, the Group's Board of Directors authorised a 2010 interim dividend of €0.525 per share, a 23.53% increase compared to the 2009 interim dividend, which was paid in January 2011.

In relation to transactions involving company shares, the Annual General Meeting held on 30 April 2010, resolved to grant authorisation to the Board of Directors "for the derivative acquisition of shares of Repsol YPF, S.A. by purchase, exchange, or by any other transaction

(1) This figure does not include financial investments of €15 million in 2010.

(2) This figure does not include financial divestments in the 2010 period, totalling €88 million.

for valuable consideration, directly or through controlled companies, in one or more transactions, up to a maximum number of shares that, added to those already held by Repsol YPF S.A. and its subsidiaries, do not exceed 10% of share capital and for a price or equivalent value that may not be lower than the nominal value of shares nor exceed the quoted price on the stock market."

This authorisation is valid for 5 years, from the date of the Annual General Meeting was held, leaving without effect the authorisation granted by the previous Annual General Meeting held on 14 May 2009, in the part that had not been used.

In 2010, Repsol YPF did not purchase or dispose of any of its own shares. As of 31 December 2010, neither Repsol YPF S.A. nor any of its affiliates held any shares of Repsol YPF, S.A.

## Financial prudence

Repsol YPF keeps, in line with their prudent financial policy, cash resources and other net financial instruments, as well as unused lines of credit covering 78% of its entire gross debt and 63% of same including preference shares. Regarding Repsol YPF, excluding Gas Natural Fenosa, these resources cover the entire gross debt and over 80% when preference shares are included.

The financial investments are included in the headings listed under Note 12 of the Consolidated Financial Statements as "Other financial assets at fair value through profit and loss", "Loans and receivables" and "Held-to maturity investments" (which include cash and cash equivalents), and amount to €8,177 million, €7.807 of which corresponds to Repsol YPF, not including Gas Natural Fenosa. The Group has also committed, unused lines of credit at its disposal for an amount of €4,666 million (excluding Gas Natural Fenosa), up from the €3,860 million at the end of 2009 (excluding Gas Natural Fenosa). For the whole consolidated Group, the amount in committed, unused lines of credit was €5,690 and €4,680 million as of 31 December 2010 and 2009, respectively, 79% of which are due after 31 December 2011.

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

Millions of euros, except ratios	31 December			
	Consolidated Group		Consolidated Group, excluding Gas Natural Fenosa	
	2010	2009	2010	2009
I. Net financial debt	7,224	10,928	1,697	4,905
II Preference shares	3,748	3,726	3,568	3,548
III Net financial debt, including preference shares	10,972	14,654	5,265	8,453
IV Capital employed	36,958	36,045	30,777	29,346
Net financial debt to capital employed (I/IV)	19.5%	30.3%	5.5%	16.7%
Net financial debt including preference shares, to capital employed (III/IV)	29.7%	40.7%	17.1%	28.8%

At 31 December 2010, the Group's net debt to capital employed ratio (excluding Gas Natural Fenosa) stood at 5.5% versus 16.7% at the end of the previous year. Taking preference shares into account, the variation in this ratio stood at 17.1% on 31 December 2010 compared to 28.8% at year-end 2009.

As of 31 December 2010, the Consolidated Group's net debt to capital employed ratio was 19.5% versus 30.3% on 31 December 2009. Including preference shares the ratio was 29.7% in comparison with 40.7% at the end of 2009.

Below is the breakdown of the changes in the net financial debt during the 2010 and 2009 financial years:

(Millions of euros)	Consolidated Group		Consolidated Group, excluding Gas Natural Fenosa	
	2010	2009	2010	2009
<b>Net financial debt at the beginning of the period</b>	<b>10,928</b>	<b>3,481</b>	<b>4,905</b>	<b>2,030</b>
EBITDA	(9,196)	(6,749)	(7,688)	(5,517)
Variation in trade working capital	1,693	590	1,316	461
Investments (1)	5,091	8,964	4,468	4,991
Divestments (2)	(4,972)	(1,037)	(4,293)	(400)
Dividends paid (including affiliates)	806	1,935	759	1,894
Currency translation differences	617	125	535	112
Taxes paid	1,627	1,168	1,490	1,054
Variation of consolidation perimeter (3)	(372)	1,809	(395)	-
Interests and other movements	1,002	642	600	280
<b>Net financial debt at year-end</b>	<b>7,224</b>	<b>10,928</b>	<b>1,697</b>	<b>4,905</b>

(1) There were financial investments of €15 and €39 million for the Consolidated Group in 2010 and 2009, respectively, that do not appear in this table.

(2) Similarly, there were financial divestments of €88 and €56 million for the Consolidated Group in 2010 and 2009 respectively, that do not appear in this table.

(3) In 2009, it relates mainly to the incorporation of Union Fenosa's debt and in 2010 to the deconsolidation of Refap's debt.

Below is the breakdown of Repsol YPF's current credit rating:

	Standard & Poor's	Moody's	Fitch
Short-term debt	A-2	P-2	F-2
Long-term debt	BBB	Baa1	BBB+

## Risk factors

Repsol YPF's operations and earnings are subject to risks as a result of changes in competitive, economic, political, legal, regulatory, social, industrial, business and financial conditions. Investors should carefully consider these risks.

Future risk factors, either unknown or not considered relevant by Repsol YPF at present, could also affect the company's business, results, and financials.

### Operation-related risks

**The uncertainty of the economic context.** The rhythm of recovery after the recent global economic-financial crisis is still subject to risks and uncertainty. The growth of the global economy was slower in the second half of 2010, when the leeway of certain factors supporting the recovery, in particular inventory restocking and public anti-cyclic tax and monetary policies, was weakened or exhausted. This dynamic could also dominate during 2011, reducing the company's prices and margins in relation to the current ones, despite expectations of a growing world demand for oil and gas, especially in emerging countries. The increase in public debt in nearly every country as a result of their anti-crisis policies, could lead to the introduction of changes in taxation and the regulatory framework for the oil and gas industry. In addition

to this, there is deep financial reform underway, which could have significant consequences for the economy as a whole. Additionally, the financial and economic situation may have a negative impact on third parties with whom Repsol YPF does, or may do, business. Any of these factors, together with or independently, may adversely affect Repsol YPF's business, financial condition and results of operations.

**International reference crude oil prices and demand for crude oil may fluctuate due to factors beyond Repsol YPF's control.** World oil prices have fluctuated widely over the last 10 years and are subject to international supply and demand factors over which Repsol YPF has no control. Political developments throughout the world (especially in the Middle East), the evolution of stocks of oil and products, the circumstantial effects of climate changes and meteorological phenomena, such as storms and hurricanes (which especially affect the Gulf of Mexico), the increase in demand in countries with strong economic growth, such as China and India, major world conflicts, as well as political instability and the threat of terrorism from which some producing areas suffer periodically, together with the risk that the supply of crude oil may become a political weapon, can particularly affect the world oil market and oil prices. In 2010, the average West Texas Intermediate (WTI) crude oil price was US\$79.61 per barrel, compared to an average of US\$56.13 per barrel for the period 2001-2010, with maximum and minimum annual averages of US\$99.75 per barrel and US\$25.96 per barrel in 2008 and 2001, respectively. In 2010, oil (WTI) was trading at a range of approximately US\$68-92/barrel.

Demand for crude oil may also fluctuate significantly during economic cycles.

Reductions in oil prices negatively affect Repsol YPF's profitability, the valuation of its assets and its plans for capital investment including projected capital expenditures related to exploration and development activities. A significant reduction of capital investments may negatively affect Repsol YPF's ability to replace oil reserves.

**Repsol YPF's operations are subject to regulation.** The oil industry is subject to extensive regulation and intervention by governments throughout the world in such matters as the award of exploration and production interests, the imposition of specific drilling and exploration obligations, restrictions on production, price controls, required divestments of assets and foreign currency controls over the development and nationalization, expropriation or cancellation of contract rights. Such legislation and regulations apply to virtually all aspects of Repsol YPF's operations inside and outside Spain. In addition, certain countries contemplate in their legislation the imposition of sanctions on non-domestic companies which make certain types of investments in other countries.

In addition, the terms and conditions of the agreements under which Repsol YPF's oil and gas interests are held generally reflect negotiations with governmental authorities and vary significantly by country and even by field within a country. These agreements generally take the form of licenses or production sharing agreements. Under license agreements, the license holder provides financing and bears the risk of the exploration and production activities in exchange for resulting production, if any. Part of the production may have to be sold to the state or the state-owned oil company. License holders are generally required to make certain tax or royalty payments and pay income tax which can be high compared with the taxes paid by other businesses. Nevertheless, production sharing agreements generally require the contractor to finance exploration and production activities in exchange for the recovery of its costs from part of production (cost oil) and the remainder of production (profit oil) is shared with the state-owned oil company.

Repsol YPF cannot predict changes in the aforementioned regulation and legislation or the interpretation or implementation thereof.

**Repsol YPF is subject to extensive environmental regulations and risks.** Repsol YPF is subject to extensive environmental laws and regulations in practically all the countries in which it operates, which regulate, among other matters affecting Repsol YPF's operations, environmental quality standards for products, air emissions and climate change, energy efficiency, water discharges, surface water pollution, remediation of soil and groundwater and the generation, storage, transportation, treatment and disposal of waste materials.

In particular, due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, new regulatory requirements to reduce green-

house gas emissions, such as carbon taxes, increased efficiency standards, or the adoption of trade regimes. These requirements could make Repsol YPF's products more expensive as well as shift hydrocarbon demand toward relatively lower-carbon sources such as renewable energies. In addition, compliance with greenhouse gas regulations may also require the company to upgrade the facilities, monitor or sequester emissions or take other actions which may increase the compliance costs.

These laws and regulations have had and will continue to have an impact on Repsol YPF's business, financial condition and results of operations.

**Operating risks related to exploration and exploitation of oil and gas, and reliance on the cost-effective acquisition or discovery of, and, thereafter, development of new oil and gas reserves.** Oil and gas exploration and production activities are subject to particular risks, some of which are beyond the control of Repsol YPF. These activities are subject to production, equipment and transportation risks, natural hazards and other uncertainties including those relating to the physical characteristics of an oil or natural gas field. The operations of Repsol YPF may be curtailed, delayed or cancelled as a result of weather conditions, mechanical difficulties, delays in the delivery of equipment or compliance with governmental requirements. In addition to this, some of our development projects are located in deep waters and other difficult environments, such as the Gulf of Mexico, Brazil and the Amazon rainforest or in challenging reservoirs, which could aggravate these risks. The offshore operations, in particular, are subject to sea risks, among them storms and other adverse climate conditions or shipwrecks. Also, the transportation of oil products, by any means, always has inherent risks: during road, rail or sea transport, or by pipeline, oil or another hazardous substance could leak; this is a significant risk due to the potential impact a spill could have on the environment and on people, especially considering the high volume of products that can be carried at any one time. If these risks materialize, there could be personal and environmental damage, production losses or destruction of goods and legal actions and, depending on the cause and the severity of the damages, Repsol YPF's reputation could also be damaged.

Moreover, Repsol YPF is dependent on the replacement of depleted oil and gas reserves with new proved reserves in a cost-effective manner that permits subsequent production to be economically viable. Repsol YPF's ability to acquire or discover new reserves, however, is subject to a number of risks. For example, drilling may involve unprofitable efforts, not only with respect to dry wells, but also with respect to wells that are productive but do not produce sufficient net revenues to return a profit after drilling, operating and other costs are taken into account. In addition, crude oil and natural gas production blocks are typically auctioned by governmental authorities and Repsol YPF faces intense competition in bidding for such production blocks, in particular those blocks with the most attractive potential reserves. Such competition may result in Repsol YPF's failing to obtain desirable production blocks or result in Repsol YPF acquiring such blocks at a higher price, which could mean that subsequent production would not be economically viable.

If Repsol YPF fails to acquire or discover, and, thereafter, develop new oil and gas reserves in a cost-effective manner or if any of the aforementioned risks materialises, its business, results of operations and financial condition would be materially and adversely affected.

**Location of reserves.** Part of the oil and gas reserves are located in countries that are or could be economically or politically unstable.

Reserves in these areas as well as related production operations may be subject to risks, including increases in taxes and royalties, the establishment of limits on production and export volumes, the compulsory renegotiation or cancellation of contracts, the nationalization or denationalization of assets, changes in local government regimes and policies, changes in business customs and practices, payment delays, currency exchange restrictions and losses and impairment of operations by actions of insurgent groups. In addition, political changes may lead to changes in the business environment. Economic downturns, political instability or civil disturbances may disrupt distribution logistics or limit sales in the markets affected by such events.

**Oil and gas reserves estimates.** Repsol YPF uses the guidelines and the conceptual framework of the Securities and Exchange Commission (SEC)'s definition of proven reserves in order

to calculate proven oil and gas reserves. Oil and gas proved reserves are estimated using geological and engineering data to determine with reasonable certainty whether the crude oil or natural gas in known reservoirs is recoverable under existing economic and operating conditions.

The accuracy of proved reserve estimates depends on a number of factors, assumptions and variables, some of which are beyond our control. Factors susceptible to the company's control include drilling, testing and production after the date of the estimates, which may require substantial upward or downward revisions to reserves estimates; the quality of available geological, technical and economic data used and its interpretation thereof; the production performance of reservoirs and recovery rates, both of which depend in significant part on available technologies as well as the company's ability to implement such technologies and the relevant know-how; the selection of third parties with which Repsol YPF enters into business; and the accuracy of its estimates of initial hydrocarbons in place, which may prove to be incorrect or require substantial revisions. Factors mainly beyond Repsol YPF's control include changes in prevailing oil and natural gas prices, which could have an effect on the quantities of proved reserves (since the estimates of reserves are calculated under existing economic conditions when such estimates are made); changes in the prevailing tax rules, other government regulations and contractual conditions after the date estimates are made (which could make reserves no longer economically viable to exploit); and certain actions of third parties, including the operators of fields in which the Group has an interest.

As a result of the foregoing, measures of reserves are not precise and are subject to revision. Any downward revision in estimated quantities of proved reserves could adversely impact financial results, leading to increased depreciation, depletion and amortization charges and/or impairment charges, which would reduce earnings and shareholders' equity.

**Repsol YPF's natural gas operations are subject to particular operational and market risks.** Natural gas prices in the various regions in which Repsol YPF operates tend to vary from one to another as a result of significantly different supply, demand and regulatory circumstances, and such prices may be lower than prevailing prices in other regions of the world. In addition, excess supply conditions that exist in some regions cannot be utilized in other regions due to a lack of infrastructure and difficulties in transporting natural gas.

In addition, Repsol YPF has entered into long-term contracts to purchase and supply of natural gas in various parts of the world. These contracts have different price formulas, which could result in higher purchase prices than the price at which such gas could be sold in increasingly liberalized markets. In addition, gas availability could be subject to risks of contract fulfillment from counterparties. Thus, it might be necessary to look for other sources of natural gas in the event of non-delivery from any of these sources, which could require payment of higher prices than those called for under such contracts.

Repsol YPF also has long-term contracts to sell and deliver gas, mainly to clients in Argentina, Bolivia, Brazil, Chile, Venezuela, Spain and Mexico. These contracts present additional types of risks to the company as they are linked to current proved reserves in Argentina, Bolivia, Venezuela, Trinidad and Tobago and Peru. If sufficient reserves in those countries were not available, Repsol YPF might not be able to satisfy its obligations under these contracts, several of which include penalty clauses for non-fulfillment.

**Conditions in the petrochemicals industry are cyclical and may change due to factors beyond Repsol YPF's control.** The petrochemicals industry is subject to wide fluctuations in supply and demand reflecting the cyclical nature of the chemicals market at regional and global levels. These fluctuations affect prices and profitability for petrochemicals companies, including Repsol YPF. Repsol YPF's petrochemicals business is also subject to extensive governmental regulation and intervention in such matters as safety and environmental controls.

**Significant presence in Argentina.** Nearly 19% and 20% of Repsol YPF's assets were in Argentina as of 31 December 2010 and 2009 respectively, corresponding for the most part to exploration and production activities. In addition, approximately 20% and 33% of operating income as of 31 December 2010 and 2009 respectively was generated from activities in that country.

After the economic crisis of 2001 and 2002, Argentina's GDP has grown at an average rate of approximately 8.5% from 2003 to 2008, slowing down in 2009 due to the international financial crisis. In 2010, after a recovery process and according to preliminary estimates, the growth rate achieved is in the region of 9%. The Argentinean economy is still sensitive to volatile commodities prices, the limited credit and international investment in infrastructure, the development of energy resources supporting economic growth and the rise in inflation rates, among other factors.

The main economic risks Repsol YPF faces due to its operations in Argentina include the following:

- limitations on its ability to pass on increases in international oil prices and other fuels, and exchange rate fluctuations and/or other costs affecting the operations to local prices;
- higher taxes on hydrocarbon exports;
- restrictions on hydrocarbon export volumes driven mainly by the requirement to satisfy domestic demand, thereby affecting the company's prior arrangements with its clients;
- the need to extend concessions, some of which expire in 2017;
- work disruptions and stoppages by the workforce;
- changes in the Argentinean peso exchange rate.

In recent years, new and increased duties have been imposed on exports (see note 2, "Argentina - Regulatory Framework" in the Consolidated Financial Statements for 2010). As a result of these export tax increases, YPF could be, and on certain occasions has been, forced to renegotiate its export contracts despite the Government's prior approval of them. The imposition of these export withholdings has had an adverse impact on the operating income of YPF.

In addition, YPF has been obliged to sell a part of its natural gas production previously destined for the export market in the local Argentine market and has not been able to meet its contractual gas export commitments in whole or, in some cases, in part, leading to disputes with its export clients and forcing YPF to declare force majeure under its export sales agreements. Repsol YPF believes that these actions from the government constitute force majeure events that relieve YPF from any contingent liability for the failure to comply with its contractual obligations.

**Repsol YPF's current insurance coverage to all the operational risks may not be sufficient.** As discussed in several of the risk factors mentioned in this document, Repsol YPF's operation are subject to extensive economic, operational, regulatory and legal risk. The company maintains insurance covering against certain risks inherent in the oil and gas industry in line with industry practice, including loss of or damage to property and equipment, control-of-well incidents, loss of production or income incidents, removal of debris, sudden and accidental seepage pollution, contamination and clean up and third-party liability claims, including personal injury and loss of life, among other business risks. However, the insurance coverage is subject to deductibles and limits that in certain cases may be materially exceeded by its liabilities. In addition, certain of Repsol YPF's insurance policies contain exclusions that could leave the Group with limited coverage in certain events. On the other hand, the company may not be able to maintain adequate insurance at rates or on terms that are considered reasonable or acceptable or be able to obtain insurance against certain risks that materialize in the future. If the company experiences an incident against which it is not insured, or the costs of which materially exceed its coverage, it could have a material adverse effect on its business, financial condition and results of operations.

#### Financial risks

**Liquidity risk.** Liquidity risk is associated with the Group's ability to finance its obligations at reasonable market prices, as well as being able to carry out its business plans with stable financing sources.

Repsol YPF keeps, in line with their prudent financial policy, resources available covering 78% of its entire gross debt and 63% of this debt including preference shares. Regarding Repsol YPF excluding Gas Natural Fenosa, these resources cover the entire gross debt and over 80% when preference shares are included.

**Credit risk.** The Group's credit risk exposure mainly relates to trade accounts payable, which are measured and controlled by individual client or third party. To this end, the Group has its own systems, aligned to best practices, for constantly monitoring the creditworthiness of all its debtors and for determining the risk limits of third parties.

As a general rule, the Group establishes a bank guarantee issued by financial entities as the most suitable instrument of protection from credit risk. In some cases, the Group has taken out credit insurance policies whereby this transfers the credit risk related to the business activity of some of their businesses to third parties.

#### Market risk

**Exchange rate fluctuation risk.** Repsol YPF is exposed to fluctuations in currency exchange rates since revenues and cashflows generated by oil, natural gas, and refined product sales are generally denominated in dollars or affected by this currency's exchange rate. Operating income is also exposed to fluctuations in currency exchange rates in countries where Repsol YPF conducts its activities. In order to mitigate the exchange rate risk on results, and when it deems appropriate, Repsol YPF may use derivatives for those currencies for which there is a liquid market and where transaction costs are reasonable.

The company is also exposed to exchange rate risk affecting the value of its assets or financial investments in dollars. Repsol YPF obtains financing in dollars and in other currencies, either directly or synthetically through currency derivatives.

In addition, Repsol YPF's financial statements are expressed in euros and, consequently, the assets and liabilities of investee companies with a different functional currency are translated into euros at the exchange rate prevailing on the balance sheet date. The revenues and expenses of each of these items in the profit and loss accounts are translated into euros by applying the exchange rate in force on the date of each transaction; for practical reasons, the exchange rate used is, in general, the average of the period in which the transactions were made. The fluctuations in the exchange rates applied in the process for converting the currencies into euros generates variations (gains or losses) which are recognised in the Repsol YPF Group consolidated financial statements and expressed in euros.

**Commodity price risk.** In the normal course of operations and trading activities, Repsol YPF Group earnings are exposed to volatility in the price of oil, natural gas, and related derivative products (see the previous section "Possible fluctuations in international benchmark oil prices and oil demand due to factors beyond the control of Repsol YPF" and "Operational and market risks affecting Repsol YPF's activities in the natural gas industry").

**Interest rate risk.** The market value of the Group's net financing and net interest expenses could be affected by interest rate fluctuations.

Note 20 "Financial risk and capital management" and Note 21 "Derivative transactions" in the Consolidated Financial Statements for the financial year 2010 include additional details on the financial risks described in this section.



## Business areas

The Group's main operating highlights are shown below:

	2010	2009
<b>Upstream:</b>		
Oil and gas net production (1)	125,653	121,768
<b>LNG:</b>		
Production of liquefaction trains(2) (3)	5.1	4.7
LNG sold (3)	6.7	4.5
<b>Downstream:</b>		
<b>Refining capacity (4) (5)</b>	<b>878</b>	<b>926</b>
Europe (6)	776	776
Rest of the World	102	156
<b>Processed crude oil (7) (8)</b>	<b>34.4</b>	<b>35.1</b>
Europe	28.7	28.7
Rest of the World	5.7	6.5
<b>Number of service stations</b>	<b>4,447</b>	<b>4,428</b>
Europe	4,182	4,186
Rest of the World	265	242
<b>Oil product sales (7) (9)</b>	<b>38,613</b>	<b>39,429</b>
Europe	32,429	32,970
Rest of the World	6,184	6,459
<b>Petrochemical product sales (9)</b>	<b>2,618</b>	<b>2,306</b>
By region:		
Europe	2,263	2,000
Rest of the World	355	306
By product:		
Base products	874	567
Derivative petrochemicals	1,744	1,739
<b>LPG Sales (9)</b>	<b>3,108</b>	<b>2,993</b>
Europe	1,680	1,677
Rest of the World	1,428	1,316
<b>YPF:</b>		
Oil and gas net production(1)(10)	197,442	208,708
Refining capacity (4) (11)	333	333
Processed crude oil (8) (11)	15.4	15.7
Number of service stations (12)	1,653	1,668
Oil product sales (9) (11)	14,146	13,906
Petrochemical product sales (10)	1,563	1,479
LPG Sales (9)	340	362
Natural gas sales (3)	14.0	15.9
<b>Gas Natural Fenosa:</b>		
Natural gas distribution sales (3) (13)	35.40	34.64
Electricity distribution sales (13) (14) (15)	54,833	34,973

(1) Thousands of barrels of oil equivalent (kboe).

(2) Including liquefaction train production according to their shareholding. Trinidad [Train 1 (20%), Trains 2 and 3 (25%), Train 4 (22.22%)] Peru LNG (20%). From this production, 1.4 bcm in 2010 and 0.8 bcm in 2009 belong to companies consolidated in the Repsol Group through the equity method.

(3) Billions of cubic metres (bcm).

(4) Thousand barrels per day (kbb/d).

(5) The 2010 information does not include Refap's 30% (Brazil), since it was sold in December 2010.

(6) The reported capacity includes the shareholding in ASES.

(7) The 2009 and 2010 information includes Refap's 30% (Brazil), up to the date it was sold in December 2010.

(8) Millions of tons.

(9) Thousands of tons.

(10) The data shown is for Argentina, except the net hydrocarbon production of 777 and 977 thousands of barrels of oil equivalent (kboe) in 2010 and 2009, respectively, which is United States data.

(11) Including 50% shareholding in Refinerías del Norte, S.A. ("Refinor").

(12) Including 50% of "Refinor" service stations.

(13) Including 100% of reported Gas Natural Fenosa sales although Repsol YPF had a 30.01% share in Gas Natural by 31 December 2009 and 30.13% by 31 December 2010, accounted for through proportional consolidation.

(14) Gigawatts per hour (GWh).

(15) In 2009 this corresponds to the Gas Natural operations since the acquisition of Unión Fenosa in April.

### Abbreviations used for units of measurement

"bbl"	Barrels
"bcf"	Billion cubic feet
"bcm"	Billion cubic metres
"boe"	Barrels of oil equivalent
"Btu"	British thermal unit
"GWh"	Gigawatts per hour
"kbb/d"	Thousand barrels
"kbb/d"	Thousand barrels per day
"kboe"	Thousand barrels of oil equivalent
"km <sup>2</sup> "	Square kilometres
"Mbbbl"	Million barrels
"Mboe"	Million barrels of oil equivalent
"Mm <sup>3</sup> /d"	Million cubic metres per day
"MW"	Megawatts
"MWe"	Megawatts electrical
"MWh"	Megawatts per hour
"TCF"	Trillion cubic feet

### Upstream

#### Activities

The Repsol Upstream division includes oil and natural gas exploration and production activities outside Argentina. For information on the exploration and production activities conducted by YPF, see the chapter on this company and its affiliates contained in this Consolidated Management Report.

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 production and reserves, diversifying its business geographically by increasing its presence in OECD countries, achieving operating excellence and maximising the profitability of its assets. For this, 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 suit the objectives and it was oriented towards improving the quality of operations; the technical and commercial processes were redesigned and standardised and the technological capacities have been developed for successful operation in deep waters.

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. Among the latter, particularly important are the US Gulf of Mexico (with the important Shenzi field, in operation since 2009, and one of the company's key strategic projects) and offshore fields in Brazil.

In this country, in addition to the successful exploration of the last few years, we can add the agreement signed with the Chinese company Sinopec to create one of the largest energy companies in Latin America, valued at US\$17,777 million. Repsol owns 60% of the company, while Sinopec owns the remaining 40%. This transaction enhances the success of the exploration activities carried out by Repsol in Brazil in the last few years and confirms that the strategy used and the risk taken in the investment were on the right track, in terms of human, technical and material resources, in particular in the pre-salt offshore area in Brazil.

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 and Indonesia.

The most noteworthy aspect in the strategy defined for diversifying business geographically in 2010 has been access to areas with high exploratory potential in Indonesia, Norway, Angola, Russia and Oman.

In January 2010 in Norway, Repsol was awarded two exploration licenses (PL-541 y PL-557) in the North Sea and in the Norwegian Sea in the 2009 APA round. In June, a 40% share was taken in license PL-356, which is located in the southern area of the North Sea, in the Norwegian sector. The company will carry out exploratory work in 2011 to confirm the high expectations for these marine areas in Norway.

In the first quarter of 2010, Repsol agreed on the purchase of a 45% share in the Seram and East Bula exploratory blocks, and a 50% share in the South Seram study area from Niko Resources Ltd in Indonesia. This transaction was formally approved in January 2011 by the Indonesian government. In the May 2010 bidding round in Indonesia, Repsol was awarded three exploratory blocks (Cendrawasih II, III and IV) located offshore from the Papua Island, with Niko Resources Ltd as partner. Repsol's net shareholding is 50% and it is the operating company in one of these blocks. Both are key actions for entering new areas with high exploratory potential in this country with a long oil tradition.

For Repsol, 2010 was also the year of the beginning of exploratory activity in offshore Angola, with the entrance into exploratory gas blocks located in the Lower Congo basin. Furthermore, in January 2011 Sonangol announced the results of the first Exploratory Round since 2007. In this round, Repsol was awarded three blocks: block 22 (in which it is operator, with 30%), block 35 (25% Repsol) and block 37 (20% Repsol).

In Russia, halfway through 2010, the purchase was agreed - and officially confirmed by the Russian government in early 2011 - of 74.9% of the corporate capital of CSJC EUROTEK-YUGRA, which owns the Karabashsky 1 and 2 exploratory blocks in the West Siberian basin.

In August, Repsol signed an agreement with the United Arab Emirates' publicly-owned oil company, RAK Petroleum, for the acquisition of a 50% shareholding in Oman's block 47 (Jebel Hammah). This agreement is subject to the approval of the authorities in Oman. RAK will continue to operate the block, which is located in the north of the country and has a surface area of 4,964 km<sup>2</sup>.

The strategy of diversifying in new countries is paying off. One benefit is the notable discovery of light crude oil in Sierra Leone waters, made in 2010, specifically in the Mercury-1 well. This is the second discovery made by Repsol since the Venus B-1 well, carried out in 2009, and it is a clear indication of the potential this area, that was practically unexplored up to now, has, and where Repsol is one of the pioneering companies in exploration.

In 2010, two new exploration discoveries took place in Brazil (Creal B and Piracuca 2), Sierra Leone (Mercury-1) and Colombia (Calamaro-1), along with the successful campaigns carried out in 2008 and 2009, when over 20 discoveries were made, four of them among the largest in those years. These discoveries took place in particularly relevant geographical areas, such as Brazil, the United States, Venezuela, Peru and Bolivia. In 2010, testing on the Perla 2X prospect in Venezuela was also carried out, with positive results.

The company is fulfilling its commitments and the next growth stage is coming together, mainly based on the successful exploratory campaigns, which are creating value for its stockholders. This future growth includes the strategic projects that are being carried out - and are in various stages of development - and which gained real momentum in 2009-2010, such as the US Gulf of Mexico (Shenzi, in operation since 2009), Brazil (Guará, Carioca and Piracuca), Venezuela (Cardón IV and Carabobo), Bolivia (Margarita-Huacaya), Peru (Kinteroni), Algeria (Reggane) and Lybia (I/R).

Many of these projects are being undertaken in offshore areas, where Repsol is consolidating its status as one of the most competitive and most experienced companies in offshore exploration-production, a tendency that the company will continue to work on. Over the last few years, Repsol has significantly increased its work in exploration and has made use of its technical experience to become an important company in offshore exploration.

Repsol's objectives in its offshore operations, especially in deep water, is to continue to strengthen the existing implementation of the best practices and recommendations within the industry's most stringent standards, and to strictly adhere to every regulation to be part of the group best companies after the lifting of the moratorium in the Gulf of Mexico.

The replacement rate of proven reserves in the Upstream division in 2010 was 131%.

As of 31 December 2010, the Repsol Upstream area had a participation in oil and gas exploration and production blocks in 27 countries, either directly or through its subsidiaries. The company was the operator in 20 of these countries. In addition to this, Repsol has a presence in Russia through its stake in the Russian company Alliance Oil, as well as in the exploratory blocks awarded in 2010, so that Repsol's Upstream area is currently present in 28 countries.

FINISHED EXPLORATORY WELLS	2010 (1)							
	Positive		Negative		Under evaluation		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	-	-	-	-	-	-	-	-
South America	3	1	8	3	-	-	11	4
Trinidad and Tobago	-	-	-	-	-	-	-	-
Other countries in South America	3	1	8	3	-	-	11	4
Central America	-	-	-	-	-	-	-	-
North America	-	-	-	-	-	-	-	-
Africa	1	*	-	-	-	-	1	*
Asia	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>4</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>4</b>

FINISHED EXPLORATORY WELLS	2009 (1)							
	Positive		Negative		Under evaluation		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	2	2	-	-	-	-	2	2
South America	5	2	4	1	-	-	9	3
Trinidad and Tobago	-	-	-	-	-	-	-	-
Other countries in South America	5	2	4	1	-	-	9	3
Central America	-	-	-	-	-	-	-	-
North America	1	*	1	*	-	-	2	*
Africa	3	1	8	4	3	1	14	6
Asia	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>11</b>	<b>5</b>	<b>13</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>27</b>	<b>11</b>

(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.  
\* Fewer than one exploratory well.

FINISHED DEVELOPMENT WELLS	2010 (1)							
	Positive		Negative		Under evaluation		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	-	-	-	-	-	-	-	-
South America	47	13	4	2	7	3	58	18
Trinidad and Tobago	2	1	1	*	-	-	3	1
Other countries in South America	45	12	3	2	7	3	55	17
Central America	-	-	-	-	-	-	-	-
North America	-	-	-	-	-	-	-	-
Africa	28	5	2	*	16	3	46	8
Asia	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>75</b>	<b>18</b>	<b>6</b>	<b>2</b>	<b>23</b>	<b>6</b>	<b>104</b>	<b>26</b>

FINISHED DEVELOPMENT WELLS	2009 <sup>(1)</sup>							
	Positive		Negative		Under evaluation		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	–	–	–	–	–	–	–	–
South America	23	3	4	1	1	*	28	4
Trinidad and Tobago	1	*	–	–	–	–	1	*
Other countries in South America	22	3	4	1	1	*	27	4
Central America	–	–	–	–	–	–	–	–
North America	2	1	–	–	–	–	2	1
Africa	14	4	–	–	1	*	15	4
Asia	–	–	–	–	–	–	–	–
<b>TOTAL</b>	<b>39</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>*</b>	<b>45</b>	<b>9</b>

(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.  
\* Fewer than one development well.

REPSOL'S CURRENT ACTIVITY BY GEOGRAPHICAL AREA	As of 31 December 2010					
	Acreage				No. of exploratory wells being drilled <sup>(1)</sup>	
	No. of blocks		Net acreage (km <sup>2</sup> ) <sup>(2)</sup>		Gross	Net
	Development	Exploration	Development	Exploration		
Europe	12	25	385	7,160	–	–
South America	51	31	5,933	39,997	3	1
Trinidad and Tobago	7	–	2,363	–	–	–
Other countries in South America	44	31	3,570	39,997	3	1
Central America	–	1	–	4,492	–	–
North America	7	280	479	5,159	–	–
Africa	16	19	2,208	57,785	2	1
Asia	–	6	–	17,814	1	*
<b>TOTAL</b>	<b>86</b>	<b>362</b>	<b>9,005</b>	<b>132,407</b>	<b>6</b>	<b>2</b>

(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.  
(2) The gross acreage is the area where Repsol owns a working interest. The net acreage is the sum of the gross area in each acreage according to their respective working interests.

## Acreage

The table below shows the information on Repsol's developed and non-developed acreage, by geographical area, as of 31 December 2010:

(km <sup>2</sup> )	2010			
	Developed <sup>(1)</sup>		Undeveloped <sup>(2)</sup>	
	Gross <sup>(3)</sup>	Net <sup>(4)</sup>	Gross <sup>(3)</sup>	Net <sup>(4)</sup>
Europe	31	24	12,785	7,521
South America	973	297	107,951	45,633
Trinidad and Tobago	158	59	5,420	2,304
Other countries in South America	815	238	102,531	43,329
Central America	–	–	11,231	4,492
North America	18	5	10,719	5,633
Africa	612	170	116,053	59,823
Asia	–	–	47,324	17,814
<b>TOTAL</b>	<b>1,634</b>	<b>496</b>	<b>306,063</b>	<b>140,916</b>

(1) A developed acreage is the area assignable to productive wells. The amounts shown belong to the acreage, both in terms of exploration and development.

(2) The non-developed acreage covers the surface area in which no wells have been drilled, or where any wells have not been completed to the point of permitting oil and gas production in economically viable quantities, regardless of whether said area has proven reserves or not.

(3) The gross acreage is the area where Repsol owns a working interest.

(4) The net acreage is the sum of the gross area in each acreage according to their respective working interests.

## Results

Operating income (millions of euros)	2010	2009	2010/2009
North America and Brazil	2,911	63	4.521%
North Africa	642	372	73%
Rest of the World	560	346	62%
<b>TOTAL</b>	<b>4,113</b>	<b>781</b>	<b>427%</b>

Operating income in the Upstream division in 2010 was €4,113 million, 426.6% more than the €781 million posted a year earlier. EBITDA totalled €2,478 million versus €1,699 million in 2009. The 2010 result includes capital gains of €2,847 million, a consequence of the agreement reached between Repsol and Sinopec to develop joint exploration and production projects in Brazil. The result of the activity in the Upstream division, not considering the aforementioned capital gains, was better in 2010, basically due to higher oil and gas realisation prices and increased production during the period, and despite larger exploration costs and the effects of discontinuing the Persian LNG project.

The average realisation price of the Repsol oil product mix was US\$ 72.6/barrel (€54.7 / barrel) versus US\$ 56.7/barrel (€40.7/barrel) in 2009. The average price of gas was US\$ 2.7 per thousand cubic feet, 19% higher than the previous year. These variations are in line with those experienced by benchmark prices on international markets.

The lifting cost was US\$ 3.0/barrel. This amount is very similar to that seen in 2009 (US\$ 2.9 per barrel). The finding costs of proven reserves averaged US\$44.1/barrel in the 2008-2010 period.

### Discoveries

In 2010, the company took part in new discoveries, continuing its successful exploratory results of 2008 and 2009. These discoveries took place in Brazil (with the Creal B and Piracuca 2 wells), Sierra Leone (Mercury-1 well) and Colombia (Calamaro-1 well). Another highlight of 2010 was the positive results from the Perla 2X appraisal well in Venezuela, confirming and, in fact, improving the area's great potential.

Some of the discoveries in this historic stage for the company from an exploratory point of view have taken place in important locations from an exploratory point of view, such as Brazil, the United States, Venezuela, Peru, Bolivia and Algeria, and have allowed to carry out strategic development projects to guarantee the future organic growth of the company.

Furthermore, Repsol discovered gas in the RGD 22 well during the development works on the Rio Grande Area in Bolivia in 2010.

In Brazil, drilling for the Creal B well was finished in June 2010, with a positive result in the pre-salt objective, which could significantly increase the potential of the remaining reserves in this important offshore field. The Albacora Leste field (Santos basin), in which Repsol holds a 10% interest, has been producing since April 2006.

In May 2010, the exploratory well Piracuca-2 in the BM-S-7 development block, located in the Brazilian offshore area (Santos basin) was finished with positive results. This is the third positive well drilled after the two that were carried out in 2009 (Pialamba and Piracuca-1). After the positive exploratory and appraisal results of 2009, confirmed in 2010 with the Piracuca-2 well, it was decided that development works in the block should begin, with a view to starting production by 2015.

In November 2010 a second deepwater discovery in Sierra Leone was announced, this time with the Mercury-1 well, which confirms the high potential of this area, virtually unexplored up to now, where Repsol is one of the pioneering companies. The discovering well is in block SL-07B-10, at a depth of 4,862 metres, under 1,600 metres of water. The oil found is a 41-metre column. Repsol, along with its partners Anadarko and Tullow, is appraising the positive tests obtained and studying the drilling of new wells to assess the commercial viability of the area. The Mercury-1 well was drilled about 64 kilometres southeast of the 2009 Venus B-1 discovery.

By the end of the year, the Calamaro-1 well, in Colombia, made an exploratory discovery in the Rondón block, located in the Llanos basin.

On 12 April 2010, Repsol announced the end of the Perla 2X appraisal well with positive results, in the Cardón IV block, located in Venezuelan waters. This well, drilled under 60 metres of water, went through 840 feet (260 metres) of net pay. The result of this well confirmed and indeed revised expectations upwards on the recoverable gas resources in this block, estimated at 8 trillion cubic feet (TCF) of gas after the discovery in 2009 with the Perla 1X well. In fact, after drilling the Perla 2X well, the Ministry of Energy and Petroleum of Venezuela (MPPEP) approved the new resource estimate amounting to 9 TCF, confirming the Perla megafield as the largest gas discovery in Repsol's history, and one of the most important in Venezuela.

In the exploration phase, Repsol is operating the Cardón IV block, in a 50% interest agreement with the Italian company ENI. In the block's future development phase, which is still being defined, PDVSA, Venezuela's national oil company, would have 35% interest in the project, along with Repsol (32.5%) and ENI (32.5%).

In Bolivia in August 2010, Repsol, as part of the YPFB Andina consortium, announced a large gas discovery in the Rio Grande Area with the RGD 22 development well. This area, with production since 1968 in geological formations different from the one discovered in 2010, is 55 kilometres southeast of the city of Santa Cruz de la Sierra. Repsol discovered this gas deposit while working to deepen existing wells in order to increase production in this field. The finding will provide an estimated total resources of 1 TCF of gas, which is about 10 months' gas consumption in Spain. Since Rio Grande already has the necessary infrastructure, the new resources could be in production shortly.

The production tests in the RGD 22 well have shown a flow rate of 6 million cubic feet/day and 160 barrels of condensate. Future drillings will allow for a more accurate definition of the size of the find.

In January 2011 the company announced the positive result of the Carioca NE appraisal well in the prolific BM-S-9 block, in deep water off the coast of Brazil.

### Production

Repsol's hydrocarbon production in 2010 (excluding YPF) was 344,256 barrels of oil equivalent/day, up 3.2% on 2009's figures. This increase derives mainly from activities in Peru, due to the start-up of the Peru LNG liquefaction plant in June 2010, in the United States after the start-up of Shenzi in March 2009, in Libya, as a result of the increase in the quota and in Venezuela through the incorporation of Barua Motatan, partially compensated by the sale of Barrancas, both in February 2010. All of this was partially offset by lower production in Algeria, especially due to the change of ratio in 2010, based on the application of contract terms and in Brazil (due to the decline of Albacora Leste). Isolating the impact of higher benchmark prices in PSCs (Production Sharing Contracts), production would have increased 6% compared to 2009.

It should be pointed out that the extended well test on the Guará field in offshore block BM-S-9 in Brazil began on 25 December 2010 and this test is expected to last for five months.

#### NET PRODUCTION OF LIQUIDS AND NATURAL GAS BY GEOGRAPHICAL AREA IN 2009 AND 2010

	2010			2009		
	Liquids (Mbbbl)	Natural gas (bcf)	TOTAL (Mboe)	Liquids (Mbbbl)	Natural gas (bcf)	TOTAL (Mboe)
Europe	1	2	1	1	2	1
Spain	1	2	1	1	2	1
<b>South America</b>	<b>26</b>	<b>390</b>	<b>96</b>	<b>25</b>	<b>380</b>	<b>93</b>
Bolivia	2	33	8	2	32	8
Brazil	3	1	3	4	1	4
Colombia	2	–	2	2	–	3
Ecuador	6	–	6	6	–	6
Peru	3	23	7	3	10	4
Trinidad and Tobago	6	282	56	6	277	55
Venezuela	4	51	14	2	60	13
<b>Central America</b>	–	–	–	–	–	–
<b>North America</b>	<b>10</b>	<b>3</b>	<b>11</b>	<b>8</b>	<b>3</b>	<b>9</b>
United States	10	3	11	8	3	9
<b>Africa</b>	<b>16</b>	<b>12</b>	<b>18</b>	<b>15</b>	<b>24</b>	<b>19</b>
Algeria	1	12	3	2	24	6
Libya	15	–	15	13	–	13
<b>Asia</b>	–	–	–	–	–	–
<b>TOTAL NET PRODUCTION</b>	<b>53</b>	<b>407</b>	<b>126</b>	<b>49</b>	<b>409</b>	<b>122</b>

PRODUCTIVE WELLS BY GEOGRAPHICAL AREA	As of 31 December 2010 (1)			
	Oil		Gas	
	Gross	Net	Gross	Net
Europe	8	6	5	4
South America	1,059	329	168	70
Trinidad and Tobago	99	69	47	16
Other countries in South America	960	260	121	54
Central America	–	–	–	–
North America	12	3	–	–
Africa	230	46	77	23
Asia	–	–	–	–
<b>TOTAL</b>	<b>1,309</b>	<b>384</b>	<b>250</b>	<b>97</b>

PRODUCTIVE WELLS BY GEOGRAPHICAL AREA	As of 31 December 2009 (1)			
	Oil		Gas	
	Gross	Net	Gross	Net
Europe	8	6	5	4
South America	1,089	379	161	65
Trinidad and Tobago	102	71	54	18
Other countries in South America	987	308	107	47
Central America	–	–	–	–
North America	12	3	–	–
Africa	181	51	78	23
Asia	–	–	–	–
<b>TOTAL</b>	<b>1,290</b>	<b>439</b>	<b>244</b>	<b>92</b>

(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.

### Reserves

As of 31 December 2010, Repsol's proven reserves (excluding YPF), calculated in accordance with the U.S. Securities and Exchange Commission (SEC)'s guidelines, totalled 1,100 million barrels of oil equivalent (Mboe), of which 376 Mboe (34%) relate to crude oil, condensate and liquefied gases and the remaining 724 Mboe (66%) to natural gas.

In 2010, the evolution of the aforementioned reserves was positive, with the incorporation of 165 Mboe most notably from Peru (114 Mboe), Trinidad and Tobago (15 Mboe) and Libya (14 Mboe).

These reserves are mainly located in Trinidad and Tobago (36%). 46% is located in the other South American countries (Venezuela, Peru, Brazil, Ecuador, etc.), 12% are in North Africa (Algeria and Libya), 5% are in the Gulf of Mexico (United States) and about 1% in Spain.

### Investments

Investments in the Upstream business in 2010 totalled €1,126 million, which maintains the level of investment from the previous year (€1,122 million in 2009). Investment in development accounted for 50% of the total and was carried out mainly in Trinidad and Tobago (16%), Bolivia (14%), Brazil (13%), Peru (12%), U.S.A. (10%), Ecuador (9%) and Libya (7%). Exploration investments represented 38% of total investments and were carried out mostly in Brazil (76%) and U.S.A. (8%).

### Divestments

The agreement signed in October between Repsol and Sinopec for the joint development of exploration and production projects in Brazil entailed divestment of US\$ 4,267 million (€ 3,234

million). The amount of the divestment relates to the percentage of the Group's interest in the liquidity incorporated into the company as a result of the capital increase. With this operation, the Group has proportionally consolidated its 60% shareholding in Repsol Sinopec Brazil.

Furthermore, a €70 million down-payment was received in 2010 for the agreed sale of Repsol's 82% stake in the Gaviota underground natural gas storage facility to Enagás, sold for a total amount of €87 million (of this figure, €16 million are subject to the Ministry of Industry, Tourism and Trade's approval of the enlargement project). This sale, pending definitive approval of the transaction from the relevant authorities, is another step in Repsol's strategy of gradual divestment of non-strategic assets.

### Activities in the main countries

#### North America

Over the past four years, Repsol has significantly increased its presence in deep waters in the U.S. Gulf of Mexico with its stake in the major Shenzi oil development project and by securing a large number of exploration blocks which proved their potential in 2009 with the discovery made at the Buckskin well. This region is considered to be one of the most profitable and with the best deepwater exploration potential in the world.

The Shenzi field, where Repsol holds a 28% stake and which came onstream in March 2009 through its own platform, is one of the largest discoveries made to date in deep water in the Gulf of Mexico. By the end of the year, ten wells were producing through this platform. The drilling of other development wells should be completed over the coming months since the lifting of the moratorium for deepwater drilling in the Gulf of Mexico in October 2010, which had been imposed in late April by the US Department of the Interior.

The moratorium on deepwater drilling was lifted on 12 October 2010, and drilling operations for water injection at Shenzi were resumed in November 2010. Operating procedures and management systems are currently under review in order to fully comply with the new regulatory demands for the drilling of additional exploration and production wells. In 2010, production levels on the Shenzi platform exceeded 105,000 bbl/d. The objective of the future investment plan is to maintain an annual production plateau in the range of 100,000 to 120,000 boe/d for the next five years and includes a secondary recovery project via water injection, which will be operative by mid-2012. Development of the Shenzi North Flank is at an earlier stage, although the successful results of drilling work carried out in 2009 have increased the forecast potential of this area. The first delineation well in these formations is planned for 2011.

The appraisal well for the Buckskin discovery, which was initially planned for drilling in 2010, has been rescheduled for 2011. This delay is due to the drilling moratorium imposed by the United States in 2010; however, this does not affect the estimated start of production for this field in 2017. This appraisal well will help define the future development plan for the field. Repsol, as the project's operator in its exploratory phase, made this major discovery in 2009. At a depth of more than 10,000 metres, this is the deepest well operated by Repsol to date and one of the deepest wells in this region.

In March 2010, Repsol was awarded 16 new exploration blocks in exploration round 213, in the Gulf of Mexico; five of them with a 100% stake and the rest in partnership with Ecopetrol (five with a 60% stake, another five with 40% and a last block with a 50% stake). These blocks are in the Mississippi Canyon, Garden Banks, Walker Ridge and Keathley Canyon basins. In addition to the aforementioned 16 blocks, Repsol also obtained interests in another two blocks made available during exploration round 213 in Mississippi Canyon and Keathley Canyon through agreements with the awardee companies.

In Alaska, Repsol holds a 20% interest in 71 adjacent offshore blocks in the Beaufort Sea, alongside Shell Offshore Inc. and Eni Petroleum US LLC. Researches are being conducted to establish their exploratory potential. The company also has a 100% stake in 93 offshore blocks in the Chukchi Sea.

These assets, along with those awarded over the last few years, form a large and solid exploration project portfolio in the United States, with over 275 blocks. The company's participation in these rounds is in-keeping with its diversification and growth strategy in OECD countries.

In Canada, during 2010, Repsol continued to expand its geological knowledge on the available areas in order to assess the value of the opportunities that are arising in this country. The company is already actively participating in three blocks in the Newfoundland (Terranova) and Labrador offshore areas. Two of these blocks are located in the Central Ridge/Flemish Pass area and another in Jeanne d'Arc Basin. Furthermore, in the Exploration Round carried out at the end of 2010, Repsol obtained a 25% stake in blocks NL 10-01 and NL 10-02 in the Jeanne d'Arc Basin area, which are awaiting official ratification from the Canadian authorities.

## Latin America

### Brazil

2010 marked a very important milestone in the strategy in this key area for the company. In October, the partnership between Repsol and Sinopec in Brazil was announced to create one of the largest private energy companies in Latin America. On 28 December 2010, the Shareholders' Board of Repsol Brasil approved a capital increase of more than US\$ 7,111 million, entirely subscribed by Sinopec, resulting in a company valued at US\$17,777 million. After this operation, Repsol holds 60% of the company's corporate capital and Sinopec, the largest Chinese oil company, holds the remaining 40%. The funding provided by this operation will allow the company to undertake the investments needed for the full development of its assets in Brazil, including some of the largest discoveries in the world, like those in the Guará and Carioca blocks. Repsol and Sinopec will continue working on their expansion plans in Brazil and will take part, jointly or separately, in future bidding rounds in the country. This transaction between two leading companies, highlights the successful exploratory activities that Repsol has been carrying out in Brazil during the last few years.

The offshore area of Brazil is one of the largest growth areas in the world in terms of oil reserves. The agreement signed between Repsol and Sinopec is an example of the great international interest in this historic time for Brazil, especially regarding the activity in the pre-salt area of the Santos basin.

Repsol is one of the leading independent energy companies in Brazil, in terms of exploration and production. It enjoys a strategic position in the areas with the greatest potential of the Brazilian pre-salt zone and also leads the exploratory activity in the prolific Santos basin, along with Petrobras and BG. The company has a large, diversified asset portfolio, including a field already in production (Albacora Leste) and other assets with big discoveries made over the last few years, among which, the BM-S-9 block in the Santos basin, is especially important, with discoveries like Guará, Carioca, Iguazu Norte and Abare Oeste, as well as the Piracuca field, located in the BM-S-7 block (currently in the development stage) and Panoramix, in block BM-S-48 (674).

In the Guará area, the Guará North appraisal well was finished in August 2010, with positive results confirming the high reserve potential of this field. During 2010, the preliminary works were carried out in order to conduct an extended well test (EWT) which will take five months, starting in December 2010. Also, there were agreements made to set up an additional drilling rig and to build a second floating production storage and offloading unit (FPSO). These works are intended to start the development of this area, with a view to starting production in 2013.

In 2010, the drilling of an appraisal well was started in the northeast zone of the Carioca area structure, with the purpose of obtaining definitive data in order to define a development plan for the field and its future production start-up, as well as conducting extended well tests (EWT), scheduled for 2011, and the drilling of an additional well. The company announced the positive results from this appraisal well (Carioca NE) in January 2011.

The BM-S-9 block has an exploration potential that should be assessed over the next two years. Two other exploration discoveries were made in 2009 (Iguazu North and Abare West), so the expectations for the rest of the block are also high.

The development plan approved in 2009 for the Piracuca field (block BM-S-7) was continued in 2010, with the objective of starting production by 2015. The exploration well Piracuca-2 in this block of the offshore area of Brazil, was finished in May 2010 with positive results. The two previous exploration appraisal wells carried out in this field in 2009 also had positive results and were the reason behind the present development of this field.

Repsol holds a 10% interest in the Albacora Leste field (Campos basin), which has been producing since April 2006. Drilling for the Creal B well in this major deepwater Brazilian oil field was finished in June 2010, with a positive result in the pre-salt objective.

The important exploration discoveries made in recent years, the development projects that are being carried out and the agreement reached with Sinopec bolster the company's strategy in offshore Brazil and represent one of the key growth projects in the Upstream division.

### Bolivia

The consortium involved in the major Margarita-Huacaya gas project, one of the company's strategic initiatives, decided to begin the work on the development of Phase I in 2010. A consortium comprising Repsol (operator with a 37.5% stake), BG (37.5%) and PAE (25%) is undertaking this key project at the Margarita and Huacaya fields, in the north of Tarija state. The objective of the joint development project for the Margarita and Huacaya fields (the latter, found in 2008, was one of the five largest discoveries made in the world that year) is to increase the field's current output (2.3 Mm<sup>3</sup>/d) to an intermediate plateau of 8.3 Mm<sup>3</sup>/d in 2012, and possibly increasing the production in a second phase to 14 Mm<sup>3</sup>/d in 2013. Within the context of this development plan, the signing of a building contract for the new gas processing plant in Campo Margarita to increase current production capacity to 8.3 Mm<sup>3</sup>/d was announced in July 2010. The building works on the plant are estimated to finish within 20 months of signing the contract.

In August 2010, as part of the development drilling programme for the Rio Grande Area, located 55 kilometres southeast of the city of Santa Cruz de la Sierra, Repsol announced a large gas discovery in Bolivia in the RGD 22 development well, successfully finishing a project to deepen existing wells for the purposes of increasing the country's oil production. The finding will provide estimated total resources of 1TCF of gas. Since Rio Grande already has the necessary infrastructure, these resources could be in production shortly.

### Peru

In June 2010, the natural gas supply from the Camisea field, in which Repsol holds a 10% stake, to the Peru LNG liquefaction plant, in which the company has a 20% interest, was started. The Camisea field is made up by blocks 56 and 88, and its production is aimed at the local market and at supplying the Peru LNG liquefaction plant. There are two fields in block 88: San Martin (onstream since 2004) and Cashiriari (onstream since 2009). In block 56, the Pagoreni field came onstream in 2008.

In 2010, works began on the plan for the early development of the southern part of the major discovery made in 2008 with the Kinteroni well in block 57 (one of the largest discoveries made in the world that year) located in the Ucayali-Madre de Dios basin in the country's central forest, 50 kilometres from the Camisea gas and condensate field. Repsol, with a 53.84% stake, is the operator of this block.

The early development of southern Kinteroni involves drilling two new wells and the workover of the 2008 discovery well. Before the start of the drilling phase, the approval of the required Environmental Impact Study was obtained in 2010. The drilling of the first development well started in August 2010, which finished in the fourth quarter of the same year. Drilling of the second development well and the workover of the discovery well will be carried out in 2011. Production is expected to start in 2012.

In October 2010, Perupetro awarded (pending official confirmation) exploration licenses for blocks 176, 180, 182 and 184 in the Sub-Andean Belt, to a consortium formed by Repsol (25% and operator), Ecopetrol (50%) and YPF (25%). These areas complete Repsol's exploratory positioning in the Peruvian Sub-Andean Belt. Also in 2010, Repsol obtained a 30% stake in block 101 operated by the Talisman and located in the Marañon basin.

### Venezuela

Two important milestones concerning key projects for the company were reached in 2010: the discovery made with the Perla 2X appraisal well, in the Cardón IV block, and entering into the Carabobo-1 project.

In April, preliminary results from the Perla 2X appraisal well confirmed, and even improved, expectations of recoverable gas resources in this block after the major discovery in 2009 with the Perla 1X well (8 TCF). Repsol operates with a 50% stake with the Italian company ENI, the

consortium that made the discovery in Cardón IV block, where the Perla megafield is located in shallow waters of the Gulf of Venezuela.

In June, the Ministry of Energy and Petroleum of Venezuela (MPPEP) approved the evaluation plan for the Cardón IV block, which includes drilling the Perla 3X, concluded in 2010 with positive results, and Perla 4X delineation wells, started in 2010, as well as the optional drilling of another well. Furthermore, the MPPEP approved the new resource estimate, about 9 TCF, after the drilling of the Perla 2X well.

In February 2010, a consortium of international companies led by Repsol, with an 11% share, was awarded the Carabobo-1 project by the Venezuelan government. This project involves the development, along with PDVSA, of the heavy crude oil reserves in the Carabobo 1 Norte and Carabobo 1 Centro blocks located in the Orinoco Oil Belt, one of the areas with the largest undeveloped oil reserves in the world. The Carabobo area is located on the eastern side of the belt which, according to the US Geological Survey, could have a recoverable volume of up to 513 billion barrels of heavy crude oil. The estimated production that could be reached with this project is 400,000 barrels of oil per day for 40 years. The project includes building a heavy oil upgrader with a processing capacity of about 200,000 barrels of oil/day.

In May 2010, the Petrocarabobo S.A. mixed-ownership company was formed in Caracas, which is in charge of the development of the heavy crude oil reserves in the Carabobo project.

The Carabobo project will allow Repsol to increase its production and its resources, in line with its targets. Part of the heavy crude oil in the project will be sent to Repsol's Spanish refineries, which will allow the company to profit from their investment in advanced deep conversion techniques in those premises.

The Barua-Motatan productive area was effectively incorporated on 1 February 2010 as an asset to be operated by the Petroquiriquire S.A. mixed-ownership company. Back in 2009, the Venezuelan National Assembly had already stated that the development of activities by the mixed-ownership company Petroquiriquire had been approved, by means of publication in the Official Gazette of the Bolivarian Republic of Venezuela. Repsol holds a 40% stake in this mixed-ownership company, and the approved activities are to be carried out in the Barua-Motatan area, located in the Lake Maracaibo basin. The Barua-Motatan production was incorporated to Petroquiriquire S.A. on 10 February 2010. As a result, Repsol used the credit received during the process of migrating of operating contracts into mixed-ownership companies.

#### **Trinidad and Tobago**

Repsol continues to be one of the main private companies in this country, in terms of oil and gas production and reserves, along with BP, with whom it shares the ownership of the bpTT company. This enterprise, in which Repsol holds a 30% stake, operates a large productive oil area in the country's offshore zone, which in 2010 produced a total daily average of over 470,000 boe.

Furthermore, Repsol, with a 70% stake, is the operator of the TSP sea block.

#### **Other countries**

In the exploration bidding round carried out in 2010, Colombia's National Oil Agency (ANH) awarded two offshore blocks (Cayos-1 and Cayos-5), pending official confirmation, to the consortium formed by Repsol (35%), Ecopetrol (50%) and YPF (15%). In January 2011, Repsol signed an agreement with the Colombian company Ecopetrol and the Brazilian company Petrobras to acquire a share in the Tayrona offshore exploration block, located in Colombian Caribbean waters, near La Guajira peninsula. After this agreement, Repsol's interest in the block is 30%, while Ecopetrol owns another 30% and Petrobras, which will continue to operate the block, holds the remaining 40%. The operation is subject to the ANH's approval.

In Guyana in 2010, Repsol carried out the preliminary works for the drilling of the Jaguar-1X well, scheduled for the second quarter of 2011. The well is located in the Georgetown sea block and Repsol operates it while holding a 15% stake, the other partners being YPF (30%), Tullow Oil (30%) and CGX Energy (25%).

In Cuba in January 2010, Repsol signed a lease contract with Saipem to use the Scarabeo-9 drilling rig, which complies with all the technical requirements and all the limitations established by the US administration for drilling operations in Cuba. This, along with the rest of the

preliminary works carried out during 2010, will allow drilling to start on the Jagüey exploration well in the second half of 2011.

In Ecuador on 23 November 2010, the modification of the sharing contract for the exploration and exploitation of oil and gas in Block 16 was agreed. The new contract was that of a service contract will be valid until 2018, and came into effect on 1 January 2011. Likewise, on 22 January 2011, the service contract for the Tivacuno Block was signed.

#### **Africa**

Repsol's significant presence in North Africa is mainly concentrated in Libya and Algeria, countries where it holds a stake in major projects that will ensure sustained and profitable growth over the coming years. In addition, the company is consolidating its presence in West Africa, in particular in Sierra Leone, where in 2010 the Mercury-1 well yielded an important discovery. Repsol also has a stake in exploration blocks in Liberia, Angola and Equatorial Guinea.

#### **Libya**

2010 saw the completion of important works within the development plan for the "I/R" field, which started production in June 2008 and is expected to reach its maximum output potential between 2012 and 2013 once the permanent facilities are finished, with a production plateau of 75 kbb/d. Repsol holds an interest in this field, situated in the NC 186 and NC 115 blocks in the prolific Murzuq basin. Discovered in 2006, the "I/R" field, one of the most important exploration findings in the company's history and the most important one in Libya in the last decade, is one of the key growth projects defined by Repsol.

Therefore, in 2010 the four manifolds included in the development plan for the field started operations, as well as the definitive crude export line towards NC115 block's central facilities. The installations for water injection in the field were finished in 2010, and injection began at the end of the year.

Production at the "K" field in block NC186 came on stream in May 2010. This development plan had been approved by the Libyan National Oil Company, NOC, in December 2008. There are two producing wells in this field.

#### **Algeria**

In January 2010, Repsol signed an agreement with Sonatrach and the National Agency for the Assessment of Oil Resources (ALNAFT) of Algeria for the exploration and exploitation of the Sud-Est Illizi block, located in the southeast of Algeria. The consortium developing the exploration activities is formed by Repsol (52.5%) as the operator, the Italian company Enel (27.5%) and the French-Belgian GdF-Suez (20%).

The awarding of this new block in December 2009, reinforces Repsol's position in Algeria, where the company has an important presence in the Reggane, Tinfouye Tabenkort and Tifernine areas, and confirms this country as one of the company's growth areas.

Regarding the major gas project in Reggane, during 2010 the company worked with the Algerian authorities on the final steps to launch a development plan for the block, and works are scheduled to start in 2011. The Development Plan includes the drilling and completion of 74 wells, further drilling work to deepen 10 additional wells, and workovers on another 12 existing wells. Gas production is expected to start in late 2014 or 2015. Repsol is the operator in this project, with a share of 29.25%, while RWE owns 19.5%; Edison, 11.25%; and Sonatrach, the Algerian national company, the remaining 40%.

#### **Sierra Leone**

During 2010, Repsol and its partners Anadarko and Tullow, made a second deepwater discovery in this country. This new hydrocarbon discovery, made in the Mercury-1 well, is a clear indication of the potential of an area that has been virtually unexplored up to now. New wells will be drilled to determine the commercial viability of the zone.

This discovery adds to the success of the Venus B-1 well, in which gas and liquid hydrocarbons were found at a depth of 5,639 metres. The Mercury-1 well was drilled about 64 kilometres southeast of the Venus B-1 well.

Repsol is a pioneering company in the exploration of this African region. The company's operations, started in 2003, have discovered an area with a high potential, and where further exploration will be carried out in collaboration with its partners.

## Europe

### Norway

In January 2010, during the APA 2009 round, the Norwegian government awarded two new exploration licenses (PL-541 and PL-557), specifically in the North Sea and the Norwegian Sea, to two consortiums in which Repsol is involved.

Repsol is the operator of the PL-541 license, located in the Norwegian part of the North Sea. The company holds a 50% stake in this contract, along with the Italian company Edison (35%) and the Norwegian Skagen (15%). This award is the first for Repsol as an operator on the Norwegian Continental Shelf (NCS), and implies the Norwegian authorities' recognition, highly rated in the sector, of the company's abilities.

Regarding the second license, PL-557, located in the Norwegian Sea, Repsol holds a 40% stake in partnership with the Austrian OMV (50% and operator) and the Norwegian company Skagen (10%).

Furthermore, in June 2010 Repsol acquired a 40% stake in the PL-356 licence, operated by DetNorske which holds the remaining 60%, and which is located in the southern area of the North Sea, in the Norwegian sector.

In 2009, Repsol opened a permanent office in Oslo, Norway's capital, in line with its geographical diversification and with the objective of increasing the company's presence in this Scandinavian country.

### Spain

During the year, Repsol made progress in the works towards the development of the oil fields discovered in 2009, Montanazo D-5 and Lubina-1, in the Mediterranean Sea. The production plan schedules them to come onstream in 2011 through the Casablanca platform, will make it possible to extend production of Repsol's existing fields in this area (Casablanca, Boqueron, Rodaballo, and Chipiron) as well as the useful life of this platform.

In 2010, Repsol finished and submitted the Environmental Impact Study, and also the equipment's detail engineering to the authorities, and requested the operating license.

Also in 2010, Repsol was awarded the Turbon exploration block in the South Pyrenean basin.

## Liquefied Natural Gas (LNG)

### Activity and context

LNG activities include the liquefaction, transportation, marketing, and regasification of liquefied natural gas, in addition to electricity generation activities in Spain not conducted by Gas Natural Fenosa and natural gas marketing in North America. Since 1 January 2008, the information in this section refers solely to the Repsol Group's LNG commercial segment. For information on YPF's LNG activities, please refer to the chapter on this company and its affiliates contained in this Consolidated Management Report.

The LNG market in 2010 was marked by the recovery of gas demand, both in Europe and in the Far East. In Europe, the increase in the first six months was about 10% more than the previous year.

Regarding prices, the year began with the American market and its benchmark, the Henry Hub (HH), setting the market price and defining the spot transactions in the Atlantic basin. However, in the second quarter of the year, the American market began to lose ground against the European market and the National Balancing Point (NBP) became the benchmark for the spot transactions, both in the Atlantic and in the Pacific basins. The market took advantage of differentials of up to US\$ 4.5/Mbtu between the NBP and the HH to carry out several diversions from the American terminals to Europe.

The drop in the American benchmark could be related to the lower production cost of shale gas. The NBP has kept its value, helped by the decline of the North Sea reserves and by the UK gas sales to Central Europe (an alternative to Brent-indexed long term contracts).

With regard to the power generation market, the average Spanish electricity pool price in 2010 was €37.0/MWh, similar to the price in 2009. Electricity demand in the peninsula during 2010 was 259,940 GWh, 3.2% higher than in 2009. With the temperature effect adjustments, annual growth was 2.9% versus the 4.8% fall recorded in 2009.

Regarding the production balance in Spain, the most significant fact was the outstanding 59% growth of hydraulic power generation, which covered 14% of the demand versus 9% in 2009. At the other end of the scale were the coal and combined cycle groups, where production has dropped off markedly compared to the previous period, 34% and 17%, respectively.

### Results

The operating income from LNG operations was €105 million in 2010 in comparison with the negative result of €61 million a year earlier. 2010 EBITDA was €277 million compared to the €150 million recorded in 2009.

The improvement in these results is mainly due to larger LNG trading margins and volumes in 2010, partially offset by the effects of discontinuing the Persian LNG project. In 2009, this area's operating income was negative, a figure that includes the losses stemming from adverse arbitration decisions such as the Gassi Touil dispute.

### Assets and projects

One of the milestones in 2010 was the start-up of the Peru LNG liquefaction plant in Pampa Melchorita, in June, in which Repsol holds a 20% interest, and of a gas pipeline linking up with the existing one in Ayacucho. 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 this plant.

This plant, with a nominal capacity of 4.4 million tons per year, processes 17 million m<sup>3</sup> of gas per day. It has the two largest storage tanks in Peru (with a capacity of 130,000 m<sup>3</sup> each) and a sea terminal over one kilometre long to receive ships with capacities between 90,000 and 173,000 m<sup>3</sup>.

Additionally, the project includes Repsol's exclusive marketing of the liquefaction plant's entire production. The term of the gas purchase agreement entered into with Peru LNG is 18 years from the start of commercial operations. This is the largest LNG acquisition ever made by Repsol in terms of volume.

In September 2007, Repsol was awarded a contract in an international tender sponsored 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 entails supplying over 67 bcm of LNG to the Mexican plant over a fifteen-year period. The Manzanillo plant, which will supply gas to the CFE power plants in the central-western area of Mexico, will receive gas from Peru LNG, and is set to start operations in the second half of 2011.

The start of production in the Canaport LNG regasification plant, a Repsol (75%) and Irving Oil (25%) partnership, took place in June 2009. This is the first LNG regasification plant on Canada's eastern shore. Located in Saint John (New Brunswick) and with an initial send-out capacity of 10 bcm/year (1 billion cubic feet per day), the Canaport terminal is one of the largest in North America and supplies markets on the eastern coast of Canada and the north-eastern United States. Repsol, the operator of this plant, supplies the LNG that feeds the terminal and is entitled to the entire regasification capacity. The third tank, which started operations in April 2010, can receive loads from the largest LNG carriers in the world.

A multi-year LNG supply agreement was signed in 2010 with Qatargas for the Canaport LNG plant. The supply will be carried out using Q-Flex and Q-Max carriers, the largest in the world, whose capacities are 210,000 and 260,000 m<sup>3</sup>, respectively, Canaport LNG one of the few plants in the world that can receive these ships at its offshore terminal. This agreement bolsters Repsol's position as a reliable, diversified and flexible natural gas provider for the Canadian and north-eastern American markets.

Repsol is present in the Trinidad and Tobago integrated LNG project, in which it holds a interest alongside BP, BG and others, in the Atlantic LNG liquefaction plant. The strategic



geographical location of this plant enables it to supply markets in the Atlantic Basin (Europe, the United States, and the Caribbean) under very advantageous economic conditions.

This plant has four liquefaction trains with a combined capacity of 15 million tons per year. Repsol holds a 20% stake in train 1, a 25% stake in trains 2 and 3, and 22.22% in train 4 (the latter is one of the largest in the world, with an output capacity of 5.0 million tons/year). In addition to its interests in the liquefaction trains, Repsol plays a leading role in gas supplies and is one of the main purchasers of LNG.

Repsol holds a 25% stake in Bahia de Bizkaia Electricidad S.L. (BBE). This company owns a combined cycle power plant with 800 MWe installed capacity. The plant uses natural gas delivered by BBG as its main feedstock. Power generated at this plant is fed to the grid for residential, commercial, and industrial consumption. In 2010, the availability rate of the plant, situated in Bilbao Harbour, was 83% and the load factor was less than 46%, both parameters much lower than in 2009, due to the scheduled stoppage in October 2010, when it reached 48,000 operating hours, and another unscheduled stoppage due to problems found during this review. Furthermore, generation was lower in the first half of the year, because of the increase in hydraulic and renewable power generation.

In 2010, Repsol sold its 25% share in BBG; Enagas bought 15% of it, while the Basque Energy Agency (EVE) and a German infrastructure fund purchased 5% each. This company owns a regasification plant with unloading facilities for methane tankers of up to 140,000 m<sup>3</sup>; two 150,000 m<sup>3</sup> LNG storage tanks, and a vaporisation capacity of 800,000 Nm<sup>3</sup>/hour. Its enlargement has been further supplemented by building a third 150,000 m<sup>3</sup> storage tank and improving its regasification capacity by an extra 400,000 Nm<sup>3</sup>/hour.

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, through Gas Natural West Africa (GNWA) were involved 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, confirmed by the National Assembly and published in the Official Gazette. In addition to this, the Risk Service Agreement was signed in July 2010.

Moreover, drilling on the Garoupa-2 well was finished in January 2011. As it progresses, it will allow for the assessment of the consortium's potential gas resources in this field.

In Brazil, Repsol signed a contract in December 2009 to join the consortium formed by Petrobras (51.1%), BG (16.3%), Galp (16.3%) and Repsol (16.3%) which will be responsible for the technical engineering studies—Front End Engineering Design (FEED)—prior to the installation of a floating LNG plant in the BSM-9 and BSM-11 fields. These studies serve to assess the floating liquefaction plant's technical and economic viability. Three parallel studies are being conducted with three different consortiums to reduce technical uncertainties in a trailblazing development for the LNG industry and to create the necessary competition among the various contractors in order to optimise 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 on 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.

In May 2010, Repsol notified the National Iranian Oil Company (NIOC) and Shell of its intention to discontinue its participation in the Persian LNG project.

### 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 management of both partners' fleets, which includes 15 gas tankers.

In 2010, Repsol, with management support from Stream, marketed 6.7 bcm of LNG, 49% more than in 2009, most of which was from Trinidad and Tobago and the new Peru LNG liquefaction plant, which was started up in June 2010. The cargoes' main destination was Spain and Canaport LNG, although there were sales both in the Atlantic basin (Europe and America) and in the Pacific basin.

Regarding ships, at year-end 2010, Repsol had seven LNG vessels, and a further two whose ownership is shared (50%) with Gas Natural Fenosa, all of them under time charter agreements, with a total capacity of 1,248,630 m<sup>3</sup>. Four of these methane tankers were added during 2010, linked to the start-up of the Peru LNG project, one from Naviera Elcano and three more from Knutsen OAS. The four ships have a nominal capacity of 175,000 cubic metres of LNG each and are equipped with state-of-the-art technology.

In addition to this, Repsol has leased a further two LNG vessels for 33 months and occasionally rents vessels for short-term leases.

### Investments

Investments in the LNG business in 2010 totalled €82 million, 34% less than the €125 million invested in 2009. This amount was mainly used to build the third tank for the Canaport LNG regasification terminal, as well as the Floating LNG Brazil and Angola LNG projects.

### Divestments

In July 2010, Repsol sold its 25% share in BBG to Enagas and other minor shareholders, for €31 million.

## Downstream

The Repsol Group Downstream business comprises the supply and trading, refining and marketing of oil and oil products, LPG and 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 affiliates contained in this Consolidated Management Report.

### Results

Operating income (millions of euros)	2010	2009	2010/2009
Europe	1,182	800	48%
Rest of the World	122	222	-45%
<b>TOTAL</b>	<b>1,304</b>	<b>1,022</b>	<b>28%</b>

Operating income in the Downstream business was €1,304 million, up 28% in comparison with the €1,022 million posted in 2009. The key aspects of these results are:

- A recovery in the margins and volume of the chemical business.
- A better result for the refining business due to the increase in refining margins for the company.
- A good performance in the marketing business, with solid margins.
- The effect of considering the inventories at the average cost, instead of the current cost of supplies (CCS), was €498 million in 2010, compared to €367 million in 2009, due to the rise in the price of oil and its derivatives.

Refining

The Repsol Group owns and operates five refineries in Spain (Cartagena, A Coruña, Petronor, Puertollano, and Tarragona), with a combined distillation capacity of 776,000 barrels per day (in Tarragona the share in Asfaltos Españoles S.A is included). Installed capacity at La Pampilla refinery (Peru) in which Repsol holds a 51.03% stake and is the operator, is 102,000 barrels per day. Until 14 December 2010, when this stake was sold, Repsol also had a 30% interest in the Refap refinery (Brazil) with a total capacity of 190,000 barrels per day.

The refining activity and its context

In 2010, the Refining division's activity and earnings continued to be heavily affected by the international economic crisis. During 2009 the demand for oil products fell, especially in medium distillates, resulting in narrower spreads in relation to oil and, consequently, having a very adverse impact on refining margins. Likewise, weaker demand for oil products led to a reduction in heavy oil supply in the market, as producing countries maximised the production of light oil in order to compensate for lower revenues. The reduced availability of heavy oil resulted in narrower spreads between heavy and light oil, also putting pressure on refining margins, particularly affecting facilities with a large conversion capacity, such as Repsol's.

The International Energy Agency has revised the demand of oil products in 2010 upwards, after two years (2008 and 2009) of relentless falls. The increasing demand comes mainly from emerging countries, with China and India leading the trend. The fall in European markets continued during 2010, and it is expected that this tendency will prevail in 2011. This behaviour of demand in the OECD zone has caused some non-competitive refineries to be shut down or transformed into storage facilities in 2009 and 2010.

The beginning of the recovery of demand for oil products at global level, which involves an increase in crude demand, along with the decrease in refining capacity caused by some refineries closing, has led to an improvement in the spread for crude and light-heavy products in 2010 compared to the previous year, reflected in a modest recovery of refining margins during this year.

The refining margin in Spain in 2010 was US\$ 2.5/bbl, higher than in 2009 (US\$1.3/bbl), thanks to the aforementioned improvement in spreads. As for Peru, the refining margin in the year was US\$ 4.2/bbl as opposed to US\$ 4.1/bbl in 2009.

The table below shows the refining capacity of the refineries in which Repsol held a stake as of 31 December 2010:

	Primary Distillation	Conversion Index (2)	Lubricants
REFINING CAPACITY (1)	(thousand barrels per day)	(%)	(thousand tons per year)
<b>Spain</b>			
Cartagena	100	–	155
A Coruña	120	66	–
Puertollano	150	66	110
Tarragona	186	44	–
Bilbao	220	32	–
<b>TOTAL REPSOL (SPAIN)</b>	<b>776</b>	<b>43</b>	<b>265</b>
<b>Peru</b>			
La Pampilla	102	24	–
<b>TOTAL REPSOL</b>	<b>878</b>	<b>40</b>	<b>265</b>

(1) Information disclosed in accordance with the Repsol Group consolidation criteria: all the refineries mentioned are included in the Group's financial statements through full consolidation. The reported capacity in Tarragona includes the shareholding in ASESAs.

(2) Defined as the ratio between the equivalent capacity coefficient of Fluid Catalytic Cracking (FCC) and primary distillation capacity.

In this context, Repsol's refineries managed by the Downstream division processed 34.4 million tons of oil, 2% less than in 2009. The average use of the refining capacity in Spain was 73.6% versus 74.5% the previous year. In Peru, the degree of utilisation was lower than in 2009, dropping from 76.7% to 71.2% in 2010.

The table below shows a breakdown of the refineries' production, by their main products:

PRODUCTION	2010	2009
<b>Feedstock processed (1)(2)</b>		
Crude	34,410	35,135
Other feedstock	7,321	6,350
<b>TOTAL</b>	<b>41,731</b>	<b>41,485</b>
<b>Refining production (2)</b>		
Intermediate distillates	18,668	18,922
Gasoline	9,084	7,090
Fuel oil	6,081	6,230
LPG	1,166	956
Asphalts (3)	1,478	1,768
Lubricants	275	103
Other (except petrochemicals)	2,250	1,552
<b>TOTAL</b>	<b>39,002</b>	<b>36,621</b>

(1) Information disclosed in accordance with the Repsol Group consolidation criteria: all the refineries mentioned are included in the Group's financial statements through full consolidation, with the exception of Refap, which is presented considering the Group's 30% interest in 2009 and 2010. This stake was sold on 14 December 2010.

(2) Thousands of tons

(3) Includes 50% of the Asfaltos Españoles S.A. (ASESA) asphalt production, in which Repsol and Cepsa own 50% shares. Repsol markets 50% of ASESA's products.

The table below shows the origin of processed crude oil in the Group's refineries, as well as the sales of oil products.

ORIGIN OF CRUDE OIL PROCESSED	2010	2009
Middle East	22%	22%
North Africa	19%	16%
West Africa	11%	10%
Latin America	25%	27%
Europe	23%	25%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

<b>OIL PRODUCT SALES</b>	<b>2010</b>	<b>2009</b>
Thousands of tons (1) (2)		
<b>SALES BY GEOGRAPHIC AREA</b>		
<b>Sales in Europe</b>	<b>32.429</b>	<b>32.970</b>
<b>Own marketing</b>	<b>20.963</b>	<b>21.169</b>
Light products	17.850	17.781
Other products	3.113	3.388
<b>Other Sales in Domestic Market</b>	<b>5.591</b>	<b>6.222</b>
Light products	3.889	4.320
Other products	1.702	1.902
<b>Exports</b>	<b>5.875</b>	<b>5.579</b>
Light products	1.688	1.849
Other products	4.187	3.730
<b>Sales Rest of the World</b>	<b>6.184</b>	<b>6.459</b>
<b>Own marketing</b>	<b>1.822</b>	<b>1.854</b>
Light products	1.469	1.509
Other products	353	345
<b>Other Sales in Domestic Market</b>	<b>3.383</b>	<b>3.406</b>
Light products	2.517	2.443
Other products	866	963
<b>Exports</b>	<b>979</b>	<b>1.199</b>
Light products	357	659
Other products	622	540
<b>TOTAL SALES</b>	<b>38.613</b>	<b>39.429</b>
<b>SALES BY DISTRIBUTION CHANNELS</b>		
<b>Own marketing</b>	<b>22.785</b>	<b>23.023</b>
Light products	19.319	19.290
Other products	3.466	3.733
<b>Other Sales in Domestic Market</b>	<b>8.974</b>	<b>9.628</b>
Light products	6.406	6.763
Other products	2.568	2.865
<b>Exports</b>	<b>6.854</b>	<b>6.778</b>
Light products	2.045	2.508
Other products	4.809	4.270
<b>TOTAL SALES</b>	<b>38.613</b>	<b>39.429</b>

(1) Exports: expressed from country of origin.

(2) "Other sales" including sales to operators and bunker sales.

Repsol continues to implement its ambitious investment plan to increase refining capacity and conversion, while also enhancing safety, the environmental impact, and the efficiency of its facilities. In the medium and long-term, the reactivation of the global economy, which already showed some positive signs in 2010 and should continue to consolidate in 2011 (according to forecasts from various international organisations) will ensure the profitability of the projects undertaken by the company.

The projects to enlarge and increase conversion in the Cartagena refinery and increase conversion in the Petronor refinery (URF) are key aspects of this investment plan. Progress was made in 2010 towards developing both these projects as planned and, accordingly, the new facilities are expected to start operations by the third quarter of 2011. With these investments, the conversion capacity of Refining Spain, measured in FCC equivalent, would grow from 43% to 63%.

The enlargement of the Cartagena refinery is a key initiative in the Horizon 2014 Plan. The €3,262 million investment will make this one of the most modern facilities of its kind in the world and will double its capacity to 220,000 barrels/day. A hydrocracker, a coker, atmospheric and vacuum distillation units, and desulphurisation and hydrogen plants are among the main units featured in this project. Great progress was made on this project in 2010 in line with the timetable. About 6,000 people are already working on the project, expected to be completed in 2011, with the start-up scheduled for the third quarter. Nearly 700 jobs will be created once the project comes onstream. This project makes it possible to maximise the production of clean fuels for the transportation sector. More than 50% of the products that this facility will manufacture will be medium distillates, significantly contributing to addressing the shortage of these products in Spain.

As part of the Repsol Group's plan to integrate people with disabilities, the company has set the goal to incorporate about a hundred disabled people in its many industrial complexes. To this end, during 2010 Repsol carried out a survey in the Puertollano Industrial Complex, in collaboration with FSC Inserta (Fundación Once), to assess sixty positions that could be taken on by people with disabilities.

#### Marketing

Repsol markets its oil products through a large network of service stations under a multi-brand strategy; Repsol, Campsa, and Petronor in Spain, and Repsol in other countries where the Downstream business operates. 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 oil product sales (excluding LPG) amounted to 38,613 thousand tons, 2.2% less than in the previous year. This decrease was due to a weaker demand, particularly in Spain. Sales were down 1.6% in Europe and down 4.3% in the rest of the world.

Regarding own marketing sales, light products sales fell 0.4% in Spain while in other countries sales grew 5.3%.

Despite lower sales volumes, Repsol's Marketing area was able to manage the sales margin efficiently both in the service station channel and in the wholesale market, contributing considerable income growth, in line with the previous year's trends. The maintenance of a strict credit risk control policy implemented throughout 2010 had a positive impact in the division's earnings.

At the end of 2010, Repsol had a network of 4,447 service stations in countries where the Downstream business operates. The network in Spain was comprised of 3,600 retail outlets, 72% of which had a strong concessionary link to the network, and 26% were company-owned and operated (932). Service stations in other countries were spread throughout Portugal (424), Italy (158), and Peru (265).

The retail outlets (service stations and supply units) of the Downstream business as of 31 December 2010 were as follows:

<b>Points of sale</b>	<b>Owned or controlled by Repsol (1)</b>	<b>Flagged (2)</b>	<b>TOTAL</b>
Spain	2,583	1,017	3,600
Peru	116	149	265
Portugal	266	158	424
Italy	51	107	158
<b>TOTAL</b>	<b>3,016</b>	<b>1,431</b>	<b>4,447</b>

(1) Owned by Repsol or controlled by Repsol pursuant to long-term commercial agreements or other types of contractual relations that ensure its direct long-term control over these retail outlets.

(2) "Branded" refers to service stations owned by dealers with whom Repsol has entered into a new branding agreement that entitles Repsol to (i) be the sole supplier of these service stations and (ii) allows the service station to use its brand. The maximum term of these agreements in Spain is five years.

In Spain, Repsol markets its gasoline under the Repsol, Campsa, and Petronor brands, with the following distribution as of 31 December 2010:

Points of sale by brand	Retail outlets
Campsa	328
Repsol	2,932
Petronor	313
Other	27
<b>TOTAL</b>	<b>3,600</b>

In 2010, Repsol continued to implement the commitments offered to the EU in 2006 which include the possibility of rescuing certain long-term supply contracts by some dealers who operate the service stations.

The REPSOL MAXIMA card was launched in 2010, and gives a 2% discount on fuel and 5% in all Repsol, Campsa and Petronor service station stores.

The growth of international activities is offsetting the decrease in traditional markets. For instance, in the lube oil business, Repsol has signed an agreement with the Malaysian industrial group UMV for the manufacturing and distribution of Repsol lube oils in Malaysia, China and other countries of the region.

In-keeping with its commitment to the community, Repsol continued to promote projects to integrate people with disabilities. By the end of 2010, the company employed 246 disabled people in the Marketing division, representing 3.5% of its workforce.

#### 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. The company operates in nine countries in Europe and Latin America.

LPG sales in 2010 totalled 3,108 thousand tons, 3.8% more than in 2009. Total sales in Spain grew by 0.9% compared with the previous year. 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 243 distribution agencies. Bottled LPG sales accounted for 61% of total retail LPG sales in Spain in 2010.

	(thousand tons)	
Sales volumes of LPG	2010	2009
Spain	1,503	1,489
Latin America	1,428	1,316
Argentina	332	303
Bolivia	10	10
Chile	199	200
Peru	497	411
Ecuador	368	372
Other (1)	22	20
Rest of the World	177	187
<b>TOTAL</b>	<b>3,108</b>	<b>2,993</b>
<b>Sales volumes of LPG</b>		
Bottled	1,761	1,770
Bulk, piped and others (2)	1,347	1,222
<b>TOTAL</b>	<b>3,108</b>	<b>2,993</b>

(1) Brazil

(2) Includes sales to the automotive market, LPG operators and others.

LPG margins in 2010 were lower than the previous year, in particular in the bottled gas channel in Spain, due to the modification of the pricing system by the Spanish Ministry of Industry, Tourism and Trade in September 2009. According to the new formula, 25% of the price to be applied in the forthcoming quarter would be linked to international prices at the end of the previous quarter and the remaining 75% would depend on the maximum price prevailing at the end of the quarter just ending. The variation in this formula had an adverse impact on fourth quarter 2009 results and in those of 2010; if this trend remains in place and international prices continue to climb, 2011 results will also be adversely affected.

In Portugal, Repsol distributes bottled and bulk LPG to end customers and supplies other operators. Sales in 2010 reached 162,000 tons, making the company the third biggest operator 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 332,000 tons.

Between 28 September and 1 October 2010 the 23rd World LPG Forum, 2010 AEGPL Congress, 25th AIGLP Congress & Global Technology Conference took place in Madrid, in which Repsol was a very active participant. In these events, the importance of LPG was stressed in the fight against climate change and in improving air quality, as well as its role as a sustainable fuel with a leading position among alternative energy sources.

Over the last few years, Repsol has been developing several research, development and innovation programmes based on the use of LPG as an alternative fuel. A few examples of this are 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, economic manner with very low CO<sub>2</sub> emissions; the Autogas application, where LPG is used as an automotive fuel with considerable environmental advantages due to its low emissions compared to other fuels; and new uses in agriculture, fishing and the development of products and services, such as Portugal's Easy Gas.

#### Chemicals

The chemical business, part of the Downstream division, involves the production and marketing of a wide range of products from base to derivative petrochemicals. Its products are marketed in over 90 countries leading the market in the Iberian peninsula.

Production most significant facilities include three petrochemical complexes located in Sines (Portugal), and Puertollano and Tarragona (Spain), where there is a high level of integration between basic and derivative chemicals, as well as with refining activities. Repsol also has a number of subsidiary and affiliate companies, through which the company produces styrene derivatives, chemical specialties and synthetic rubber. 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 a great improvement compared to the previous year, with a return to positive values. The improved situation, both in terms of margins and demand, together with the implementation of strong measures to reduce costs and optimization and plant's production adjustments have allowed to reverse the situation of losses of 2008 and 2009, although the business is still remains in a low cycle.

Sales to third parties in 2010 amounted to 2.6 million tons, 13.5% more than the 2.3 million tons sold in 2009.

As an example of the efficient integration with the refining activity, in June Repsol acquired the Neste Oil Portugal company, owner of the ethyl tert-butyl ether (ETBE) plant located in the Sines complex, with a production capacity of 50,000 tons per year.

In December, Dynasol, a Repsol Group subsidiary, signed an agreement with the Chinese company Shanxi Northern Xing'an Chemical Industry (Xing'an) to form a joint venture for the manufacturing and marketing of synthetic rubber in China. The new plant will increase Dynasol's production capacity by 50% making the company a global producer with plants in Europe, America and Asia.

In addition, during 2010 revamping of the cracker unit at the Tarragona plant continued, achieving the capacity of 702,000 tons of ethylene. The rest of the investments were used to

improve existing assets, achieve greater efficiency and, cost reductions as well as improving product quality, safety and environmental standards.

<b>OPERATING HIGHLIGHTS (CHEMICALS)</b>		Thousand tons	
	2010	2009	% variation 2010/2009
<b>Capacity</b>			
Basic petrochemicals	2,808	2,679	4.8
Derivative petrochemicals	2,933	2,933	0.0
<b>TOTAL</b>	<b>5,741</b>	<b>5,612</b>	<b>2.3</b>
<b>Sales by type of product</b>			
Basic petrochemicals	874	567	54.2
Derivative petrochemicals	1,744	1,739	0.3
<b>TOTAL</b>	<b>2,618</b>	<b>2,306</b>	<b>13.5</b>
<b>Sales by region</b>			
Europe	2,263	2,000	13.2
Rest of the World	355	306	16.0
<b>TOTAL</b>	<b>2,618</b>	<b>2,306</b>	<b>13.5</b>

Production capacity for the main petrochemical products in the Downstream business, mainly in Europe as of 31 December 2010 is detailed in the following table:

<b>PRODUCTION CAPACITY</b>		TOTAL
		Thousand tons)
<b>Basic petrochemicals</b>		
Ethylene		1,362
Propylene		904
Butadiene		202
Benzene		290
Ethyl tert-butyl ether		50
<b>Derivative petrochemicals</b>		
<b>Polyolefins</b>		
Polyethylene <sup>(1)</sup>		875
Polypropylene		520
<b>Intermediate Products</b>		
Propylene oxide, Polyols, Glycols, and Styrene Monomer		1,189
Acrylonitrile/Methyl methacrylate		166
Rubber <sup>(2)</sup>		115
Other <sup>(3)</sup>		69

(1) Includes ethylene vinyl acetate (EVA) and Ethylene butyl acrylate (EBA) copolymers.

(2) Includes 55,000 tons of production capacity in Mexico.

(3) Includes styrene derivatives and specialties.

### New energy sources

The New Energies Business Unit was created in 2010, assigned to the Downstream Division, to promote and provide business sense to the new initiatives contributing to a vision of the future where energies are more diversified and produce fewer CO<sub>2</sub> 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 have synergies with Repsol's current business and the geographic areas in which it operates. It also develops new business related with CO<sub>2</sub> reduction and CO<sub>2</sub> marketing, in particular CO<sub>2</sub> capture and storage.

In this context, on 4 August 2010, Repsol announced the acquisition of a 20% share in AlgaEnergy, a leading company in microalgae research. The agreement complements and strengthens Repsol's research into the use of microalgae for the production of second-generation biofuels, and its entrance into AlgaEnergy speeds up and diversifies its R+D+i strategy in this field. With this stake, Repsol enters in a business project with a technological basis and of high scientific quality for the selection, improvement, farming and marketing of microalgae, including the capture and storage of CO<sub>2</sub>, and the harvesting of raw materials for biofuel. Simultaneously, Repsol will continue developing other research lines in this field.

On 16 September, Repsol agreed to buy 47% of Orisol, an international company that promotes renewable energy projects, which boasts professional that is highly regarded in the sector.

On 13 October, Repsol and Ente Vasco de Energia (EVE - Basque Energy Agency) announced the creation of IBIL, a company that manages the recharging of electric vehicles. This company, where both Repsol and EVE hold a 50% stake each, is located in Bilbao and its mission is the development of a network for recharging the batteries of electric vehicles and the marketing of recharging services (electricity and added value services) in the private and public sectors; its aim is to become the leading company in the Basque Country in terms of recharging points and a technological benchmark for the electrical vehicle recharging technology market.

On 28 October, Repsol and the Mexican Group KUO signed an agreement to create a joint venture called KUOSOL, devoted to the development of bioenergy by farming jatropha curcas, an oilseed with high non-edible oil content. KUOSOL will be owned by Repsol (50%) and the KUO Group (50%), its headquarters will be in Mexico and it will receive a total investment estimated at US\$ 80 million. Its activities range from farming to the industrial facilities, and its objective is to fully harness the biomass from the jatropha curcas plantations, the production of oil as the raw material for biofuel and the generation of bioenergy, with high sustainability criteria.

### Investments

Investments in Downstream totalled €1,613 million, down 2% compared to €1,649 million the previous year. Most of this amount was spent on ongoing refining projects, particularly in Spain, upgrading operations, installations and fuel quality, and on safety and the environment, as described above.

### Divestments

On 25 March 2010, Repsol, Petronor and BBK signed an agreement through which BBK purchased a 5% stake in CLH that Repsol indirectly owned through Petronor. The selling price was €145 million. Repsol thus reduced its interest in CLH to 10%, while a competitive process is still open to divest a further 5% in the logistics company.

In December 2010, Repsol sold Petrobras its 30% stake in the Refinería Alberto Pasqualini (Refap), located in the Brazilian state of Rio Grande do Sul, for the amount of US\$ 350 million (€ 261 million). With this sale Repsol brought the process to sell non-integrated Downstream assets in Latin America, which had started in 2007, to a close.

## YPF

Since 1 January 2008, the date on which the new organisational structure of the Repsol Group was presented, the value chain integrated activities (exploration, production, refining, logistics, marketing, and chemicals) conducted by YPF and its affiliates, have been reported separately. In essence, most YPF operations, assets, and clients are located in Argentina.

In April 2010 the company's new strategic lines for the 2010-2014 period were presented under the name *YPF, un proyecto de futuro* (YPF, a plan for the future). This is an action plan that is based on values and ideas such as efficiency, quality, safety, responsibility, austerity, commitment and profitability.

The major aspect in the action plan supporting this strategy, is the 2010-2014 Exploration Development Programme, presented at the end of 2009 in the presence of the president of Argentina, Cristina Fernandez de Kirchner and other authorities. The key objective of this plan is to obtain information on all exploration blocks that could contain oil and gas reserves which the Government of Argentina or the local authorities have not yet awarded to any company. This programme also includes improving the oil recovery factor by applying new technologies and the development of unconventional gas, such as shale oil, tight gas and shale gas. Within this programme's framework, there have been agreements signed with 12 provinces, although this project's goal is to cover the whole country.

### Results

YPF posted €1,453 million in operating income in 2010, 42.3% more than the €1,021 million recorded in 2009.

This increase is a result of bringing fuel prices in service stations closer to the international parity in dollars, and of the higher international product prices, which affect both the income stemming from exports (such as fuel oil and petrochemicals) and the income from those products whose prices, despite being sold in Argentina's internal market, are linked to international prices, such as petrochemicals, aviation fuel and LPG.

The average annual production was 541 kboe/d, compared to 572 in 2009, a 5.4% decrease. The decrease has been 7.9% in gas, and 3.2% in production of liquids, and 1.6% in crude oil. The smaller drop in crude oil production is a result of the investment effort carried out as a response to the Petroleo Plus programme.

### Investments

Investments were €1,548 million compared to €956 million the previous year. About 70% of the money spent in 2010 was used in the development of oil and gas exploration and production projects, and nearly 27% was spent in updating projects for the refining and chemical production system.

### Upstream

This is the area in charge of exploration, exploitation and production of hydrocarbons, mainly in Argentinean territory, the source for the rest of the company's value chain. In Argentina the company has 26 onshore and offshore exploration blocks with a surface area of over 110,000 km<sup>2</sup>, being direct or associate operator in 91 productive areas located in the Neuquén, Golfo de San Jorge, Cuyo, Noroeste and Austral basins. The company also develops activities in the United States and Guyana, through YPF International.

### Exploration and development activities

The following tables show the number of positive and negative exploration wells and of appraisal wells by geographic area in 2009 and 2010:

	As of 31 December 2010 <sup>(1)</sup>							
	Positive		Negative		Under evaluation		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Argentina	6	6	8	6	–	–	14	12
United States	–	–	–	–	–	–	–	–
<b>TOTAL</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>–</b>	<b>–</b>	<b>14</b>	<b>12</b>

	As of 31 December 2009 <sup>(1)</sup>							
	Positive		Negative		Under evaluation		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Argentina	3	1	14	8	–	–	17	9
United States	–	–	1	*	–	–	1	*
<b>TOTAL</b>	<b>3</b>	<b>1</b>	<b>15</b>	<b>8</b>	<b>–</b>	<b>–</b>	<b>18</b>	<b>9</b>

<sup>(1)</sup> A gross well is a well in which YPF owns a working interest. The number of net wells is the sum of the fractions of interest held in gross wells.

\* Fewer than one exploratory well.

The following tables show the number of both positive and negative development wells that have been drilled in each geographic area in 2009 and 2010:

	As of 31 December 2010 <sup>(1)</sup>							
	Positive		Negative		TOTAL			
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Argentina	709	616	8	7	717	623		
United States	–	–	–	–	–	–		
<b>TOTAL</b>	<b>709</b>	<b>616</b>	<b>8</b>	<b>7</b>	<b>717</b>	<b>623</b>		

	As of 31 December 2009 <sup>(1)</sup>							
	Positive		Negative		TOTAL			
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Argentina	494	402	18	18	512	420		
United States	1	*	–	–	1	*		
<b>TOTAL</b>	<b>495</b>	<b>402</b>	<b>18</b>	<b>18</b>	<b>513</b>	<b>420</b>		

<sup>(1)</sup> A gross well is a well in which YPF owns a working interest. The number of net wells is the sum of the fractions of interest held in gross wells.

\* Fewer than one exploratory well.

### Acreage

The table below shows information on YPF's developed and non-developed acreage, by geographic area, as of 31 December 2010:

(km <sup>2</sup> )	As of 31 December 2010			
	Developed <sup>(1)</sup>		Undeveloped <sup>(2)</sup>	
	Gross <sup>(3)</sup>	Net <sup>(4)</sup>	Gross <sup>(3)</sup>	Net <sup>(4)</sup>
Argentina	4,603	3,264	143,988	72,033
Guyana	–	–	8,400	2,520
United States	117	16	1,161	672
<b>TOTAL</b>	<b>4,720</b>	<b>3,280</b>	<b>153,550</b>	<b>75,224</b>

(1) A developed acreage is the area assignable to producing wells.

(2) The non-developed acreage covers the surface area in which no wells have been drilled, or where any wells have not been drilled to the point of permitting oil and gas production in economically viable quantities, regardless of whether said area has proven reserves or not. The amounts shown belong to the acreage, both in terms of exploration and exploitation.

(3) The gross acreage figures do not take into account Repsol YPF's percentage stake in it.

(4) The net acreage is the sum of the interests held in the gross acreage.

### Discoveries

In December 2010, a major discovery of unconventional natural gas (shale gas) in the Neuquén basin was confirmed; the volume of this relevant discovery is still under assessment. Also, an important discovery of shale oil was made in the same basin in the Quintuco field's PSG x2 well, currently in production. Also in this basin, to the south of the Loma La Lata area, the existence of unconventional gas with an estimated volume of approximately 4.5 TCF has been confirmed after drilling four tight gas exploration wells. These discoveries are part of the Exploratory Development Plan 2010-2014 and can be added to other exploratory projects undertaken in the Neuquén basin that show signs of significant unconventional gas potential in this basin.

YPF has signed an agreement with the mining company Vale do Rio Doce for the development of a supply of about 1,6 million m<sup>3</sup>/day of gas from the Lajas formation (Neuquén) to supply the mining project in Mendoza. In its first phase, Vale will invest up to US\$ 150 million in 3D seismics, well drilling and in building a gas pipeline. Once these investments have been carried out, YPF will begin to take part in the rest of investments with a 50% stake. This contract paves the way for the first massive tight gas development in Argentina.

### Production

YPF's oil and gas production during 2010 was 197.4 Mboe, 5.4% lower than in 2009. The production of liquids was 107.3 Mbbl, while crude oil was 88.1 Mbbl, and gas 90.1 Mboe. Union strikes and a lower gas demand cut production by 4.8 Mboe. This decrease is partly due to the natural decline of these rather mature fields. Regarding crude oil, the decrease in production has been nearly reversed thanks to the investment effort undertaken as part of the Petroleo Plus programme.

As a result of this activity, and focusing on improving the recovery factor, crude oil production in 2010 was 1.6% lower than in 2009, thus reversing the trend of 5% drops per year.

The incentives obtained through the Petroleo Plus Programme have helped to sustain production. Within the framework of another incentive programme known as Gas Plus which promotes the production of unconventional gas, YPF secured authorisation for the "Rincon del Mangrullo" and "Precuyano - Cupen Mahuida" projects. In the areas held in association, the company also secured approval for the Gas Plus projects in Aguada Pichana and in Lindero Atravesado.

The table below shows YPF's total crude oil and natural gas production:

	2010			2009		
	Liquids (Mbbl)	Gas (bcf)	TOTAL (Mboe)	Liquids (Mbbl)	Gas (bcf)	TOTAL (Mboe)
Argentina	107	505	197	110	549	208
United States	1	1	1	1	1	1
<b>TOTAL NET PRODUCTION</b>	<b>107</b>	<b>506</b>	<b>197</b>	<b>111</b>	<b>550</b>	<b>209</b>

The table below shows the number of wells per geographic area as of 31 December 2010:

	As of 31 December 2010 <sup>(1)</sup>			
	Crude <sup>(2)</sup>		Gas <sup>(3)</sup>	
	Gross	Net	Gross	Net
Argentina	11,036	9,378	831	542
United States	7	1	–	–
<b>TOTAL</b>	<b>11,043</b>	<b>9,379</b>	<b>831</b>	<b>542</b>

	As of 31 December 2010 <sup>(1)</sup>			
	Crude <sup>(2)</sup>		Gas <sup>(3)</sup>	
	Gross	Net	Gross	Net
Argentina	11,151	9,597	785	505
United States	7	1	–	–
<b>TOTAL</b>	<b>11,158</b>	<b>9,598</b>	<b>785</b>	<b>505</b>

(1) A gross well is a well in which YPF owns a stake. A net well is when the sum of the stakes in several wells equals 100%. The number of net wells is the sum of the stakes in gross wells, expressed in whole numbers and fractions.

(2) Net and gross wells include one well with multiple terminations.

(3) Net and gross wells include three wells with multiple terminations.

### Reserves

As of 31 December 2010, YPF's proven reserves, calculated in accordance with SEC guidelines, totalled 992 Mboe, of which, 532 Mboe (54%) relate to crude oil, condensate and liquefied gases and the remaining 460 Mboe (46%) to natural gas.

The trend in the company's reserves was positive in 2010, having achieved an oil replacement rate of 100% for the first time in more than 10 years. The key to this achievement was the incorporation of 88 Mbbl.

Activity

YPF'S CURRENT ACTIVITY BY GEOGRAPHIC AREA					As of 31 December 2010	
	Acreage <sup>(1)</sup>				No. of exploration wells being drilled <sup>(3)</sup>	
	No. of blocks		Net acreage (km <sup>2</sup> ) <sup>(2)</sup>		Gross	Net
	Development	Exploration	Development	Exploration		
Argentina	91	26	26,444	48,852	3	3
Guyana	–	–	–	2,520	–	–
United States	5	50	16	672	–	–
<b>TOTAL</b>	<b>96</b>	<b>76</b>	<b>26,461</b>	<b>52,043</b>	<b>3</b>	<b>3</b>

(1) Operated and non-operated by YPF.

(2) The gross acreage is the size of an area in which YPF owns a stake. The net acreage is the sum of the stakes in a gross acreage.

(3) A gross well is a well in which YPF owns a stake. A net well is when the sum of the stakes in several wells equals 100%. The number of net wells is the sum of the stakes in gross wells, expressed in whole numbers and fractions.

**Argentina**

YPF's exploration activity in Argentina in 2010 focused on two areas:

*Offshore*

**Shallow waters:** The offshore exploration campaign in shallow waters was finished, and all the wells drilled were abandoned after yielding negative results or being deemed unprofitable. The poor results obtained in this drilling campaign led the company to return block GSJM-1 and part of block E2, and YPF is currently reassessing the remaining area looking for opportunities to drill new exploration wells.

**Deep waters:** YPF currently operates four blocks:

- CAA40 and CAA46, in the Malvinas basin (Argentina), at a depth of 480 metres. YPF holds a 33.5% stake. The project has scheduled the beginning of drilling works for the first quarter of 2011.
- Block E1, in the Colorado basin (Argentina), at a depth of 1,600 metres, which is at an early well planning stage. YPF holds a 35% stake.
- Area 3, in the Punta del Este basin (Uruguay), where YPF holds a 40% stake.

YPF also owns a 30% share in block E3 of the Colorado basin. Furthermore, YPF holds a 40% stake in the Area 4 block, in the Punta del Este basin (Uruguay). In these blocks the operator is one of the partners.

*Onshore*

Exploration activities have continued in the areas surrounding productive blocks. In addition, exploration has advanced in six additional courses of action:

- **Shale gas:** The shale gas project started in late 2009 with the PSG x-2 well in the Loma La Lata (LLL) block. This exploration well has led to a discovery of oil in the Quintuco formation. However, the discovery does not reach the Vaca Muerta formation. That first well was followed by another five wells. The LLLK.x-1 well (Loma La Lata Karst.x-1, in block LLL) was drilled and finished in the Vaca Muerta formation, leading to the discovery of rich, condensed gas. Another well in Vaca Muerta, LLL-479 (Loma La Lata-479, in the same block), was drilled and finished, yielding oil and gas. The LLL-482 well was drilled and has been producing oil and gas since the same time. Well LLL.x-475 was drilled and will be finished by early 2011. Finally, the horizontal well LLLK.x-2c, is being drilled near LLLK.x-1 to test productivity in horizontal wells.

The plans are to continue with intense exploration activity during 2011, including the drilling of several wells whose main objective is to determine the potential of the Vaca Muerta formation as a reservoir of unconventional gas and oil (shale gas and shale oil) in various blocks of the Neuquén basin.

- **Shale oil:** In late October 2010, the drilling of Argentina's first shale oil well (SOil.x-1, in the Loma Campana block) began. It is expected to be finished in 2011. This is the first of a total of three planned wells for this block, including two vertical wells and a horizontal well. The objective of this project, as was mentioned above, is to prove the productive potential of the Vaca Muerta formation as an unconventional oil reservoir, using state-of-the-art technology such as microseismic and massive hydraulic stimulation.

- **Quintuco formation:** The new exploration concepts developed in these traditional reservoirs continued to be worked on. Five discovery wells were drilled during 2010: PSG x-2, La Caverna x-5, Loma Campana a-3, Los Gusanos x-1 and Los Gusanos x-2 and one negative well (La Caverna x-3) in the Bandurria block. The company plans to continue this exploration activity by drilling five additional wells in 2011.

- **Liasico Inferior:** A new exploration campaign was launched in 2010 on mature blocks, and 55 kilometres. of 2D seismics were recorded in the Valle del Rio Grande block, which is owned entirely by YPF.

- **Ramos xp-1012:** Ramos, a Temporary Joint Venture operated by Pluspetrol Energy, in which YPF holds a 42% stake, finished the drilling stage during 2009, reaching a final depth of 5,826 metres. In 2010, the Tarija and Tupambi formations, in the lower block of the field, were appraised with negative results. The Santa Rosa formation is currently under appraisal.

- **Frontier areas:** In 2010, 386 km<sup>2</sup> of 3D seismics were recorded in the Los Tordillos Oeste block, in Mendoza, in a joint venture with Oxy, which holds a 50% stake. During the first quarter of 2011, two wells will be drilled in the Tamberías (province of San Juan) and Gan Gan (province of Chubut) blocks, the latter in association with Wintershall. In November 2010, the company requested the second exploration period in the Bolson del Oeste block (La Rioja), in which the company is committed to recording 200 kilometres of 2D seismics and to drilling a well. In the Rio Barrancas block, the drilling of the Quebrada Butaco x-1 well was finished, at a depth of 2,374 metres and with a negative result. A total of 580 kilometres of 3D seismics have been acquired, as well as 500 kilometres of 2D seismics and 4,100 kilometres of terrestrial gravity and magnetometrics.

In 2010, YPF finished 14 exploration wells in Argentina (8 of them under the company's operation, 7 of them in the Neuquén basin and one in the Noroeste basin). Of these, six were discovery wells (all of them operated by YPF). The total exploration investment in Argentina was about US\$102 million.

Regarding field development activities, 742 development wells were drilled, which, along with secondary repair and infrastructure activities, amounted to an investment of US\$ 1,222 million. Total well construction time was 1% less than in 2009, achieving a 16% accumulated improvement since 2008. This efficiency in terms of time, along with cost savings in various stages of the process, allowed activity to increase about 39% on 2009 levels.

During 2010, YPF continued to work on improving its facilities and optimising oil and gas production. In the sixth stage of the low-pressure compression project in the Loma La Lata field, the gas production and wellhead pressure obtained surpassed the initial forecasts. New simulations of the reservoirs and installations were carried out, with a view to carrying on working on optimising the compression capacity and the above-ground installations in 2011.

YPF's key initiatives for the improvement of productive assets include:

- The WAG (Water Alternating Gas) injection project in Chihuido de la Sierra Negra has finished and its conclusion was that expansion was not economically viable. Current projects are focused on the assessment of chemically enhanced oil recovery opportunities (SP –Surfactant Polymer). Development and delineation works were carried out in Manantiales Behr, Cañadón Yatel, Barranca Baya, Desfiladero Bayo, Señal Picada and Cañadón Amarillo.
- A pilot project to assess the tight gas opportunities in the Las Lajas formation, in the Cupen Mahuida area. The company, using simulated models, is carrying out significant work to optimise the secondary recovery ratio in Chihuido de la Sierra Negra, Los Perales and Cañadon Seco-Cañadón Leon.
- An assessment programme in the field El Medanito field (100% owned by YPF) has been implemented during the last two years, and especially in 2010, to analyse the field's remaining



potential. Thirty-two wells have been drilled as part of a pilot infill water injection project and 57 delineation wells in what is known as the South area. The partial results are encouraging. The new massive development of the field is scheduled for 2011, while continuing with another assessment project.

- During 2010, ten integral development projects have been started in Santa Cruz, divided into four development areas: Las Heras, El Guadal, Los Perales and Cañadon Seco, forming a portfolio of 82 projects. The main ones are Cerro Grande, Maurek, Seco Leon and Los Perales. As part of these projects, 161 wells have been drilled, a total investment estimated at almost US\$ 300 million, including their associated resources. The main objective of these projects is to obtain an integral development of the areas by building new wells, introducing new projects for improved oil recovery and supporting the development of installations in the area in question. In 2011, these projects will continue in line with the planned investments.

In 2010, the company began the process of extending the concessions in the provinces of Mendoza, Santa Cruz, Río Negro and Tierra del Fuego (in the latter, the blocks are held in association with Apache Energía Argentina S.R.L.'s affiliate companies, as a non-operating partner; the negotiation is being handled by the operator). The authorities have called any interested companies to negotiate the aforementioned extension through Public Call No. 1268/10/907 in Mendoza, where YPF has officially communicated its interest in renovating the permits on the areas to the local authorities, and has submitted the relevant documentation.

#### **Non-operated areas**

In the CNQ 7A block the delineation of the reservoirs in El Corcobo Norte, Jagüel Casa de Piedra, Cerro Huanul Sur and Puesto Pinto was finished and their development has begun. This block is operated by Petro Andina Resources Argentina SA (PAR) and YPF holds a 50% stake. The pilot project for water injection in Cerro Huanul Sur was finished with good results.

Exploration wells Lo-x-1 and Lo-x-2 were drilled. The first is in the appraisal phase and the second is yet to be finished.

In September 2010, there was an incident on the offshore platform AM-2 of the Magallanes field, operated by Sipetrol and located in the Strait of Magellan. There was no environmental damage or serious personal injuries. Due to this incident, the field was out of production until December 2010. Its production activity will return to normal during the first half of 2011.

In the Tierra del Fuego area, operated by Apache Corp. and where YPF holds a 30% stake, there has been exploration activity in mature fields. The interpretation of the 3D seismics provided tools for the generation of various drilling projects, mainly in the southern area of the block. During 2010, the Bajo Guadaloso (BGO-x-2001 and BGO-a-2002), Entre Lagos (EL-x-2001) and Bodega (BO-x-2001) projects in Los Chorrillos area, were carried out, where the first two yielded positive results. The operator's strategy is to continue the exploration activity in small geologic structures in Los Chorrillos and to begin activities in the most southerly section, known as Uribe section.

#### **Natural gas**

YPF's natural gas sales totalled 13,959 million m<sup>3</sup> in 2010, about 12% less than in 2009. The most relevant sale reduction was seen in the manufacturing industry, since during 2010 no Bolivian gas was bought from ENARSA to sell to the Compañía Administradora del Mercado Mayorista Eléctrico, S.A. (CAMMESA). YPF enjoys a 31.7% market share in Argentina. The average price of natural gas sold by the company was 5% higher than the previous year, mainly due to the higher rate for industry and factories.

As part of a programme launched by the Argentinean government, an LNG regasification ship, located in Bahía Blanca, was put into operation to incorporate 1,800 million m<sup>3</sup> of gas (125% more than in the previous year) into the country's gas network. Of that total amount, 1,100 million m<sup>3</sup> were injected to help satisfy increased demand throughout the five winter months, about 7.2 million m<sup>3</sup>/day.

Since May 2010 YPF-AESA has been operating the ENARSA propane-air injection plant (PIPA). This plant has injected a total of 30 million m<sup>3</sup> into the network, processing 24,300 tons of

propane. Every injection request received was duly fulfilled. During this period the ENARSA staff received theoretical and practical training.

ENARSA and YPF have entered a Temporary Joint Venture for the purpose of executing and exploiting the Escobar LNG Project. Both companies hold a 50% stake, while YPF has been designated the joint venture's operator.

The project aims to copy the operation that is being carried out in Bahía Blanca in the Escobar area, on the river Parana de las Palmas, that is, mooring a LNG regasification ship, regasifying LNG and injecting it as a gas into the gas pipeline system. For this, a pier must be built in the operation zone, a high pressure unloading arm must be assembled and an interconnecting gas pipeline must be laid.

It is estimated that in the first year an average 5 million m<sup>3</sup>/day of gas will be injected into the system. From the second year onwards, the injection flow could reach an average of about 7 million m<sup>3</sup>/day. The facility is scheduled to start up in the first half of 2011.

#### **United States**

The Neptune development field initiated its production in July 2008 with seven offshore wells. As of September 2010, the platform was producing more than 16,000 gross bbl/d. In 2010, a decision was made to delay finalising the well in the M9 and M10 reservoirs, and to put the M12 reservoir into production. The technical and economic viability of completing well SB-02 to the depth objectives of the M9 and M10 reservoirs is currently being assessed.

In October 2010 the company decided to give up nine OCS (Offshore Continental Shelf) blocks in the Alaminos Protraction area, after analysing the results of their technical assessment.

#### **Refining, logistics and marketing**

YPF has three refineries: La Plata (in the province of Buenos Aires), Lujan de Cuyo (in Mendoza) and Plaza Huincul (in Neuquén). La Plata has a distillation capacity of 189,000 barrels per day and a conversion capacity of 119,000 barrels per day; Luján de Cuyo has a distillation capacity of 106,000 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 product.

The logistics for crude oil are carried out by three companies in which YPF holds a stake (Oldelval, Termap and Oiltanking Ebytem), hired tankers and two pipelines that belong to the company (Puesto Hernández - Lujan de Cuyo and Puerto Rosales - La Plata). The products' logistics are mostly carried out through two polyducts owned by the company (Lujan de Cuyo-San Lorenzo-La Matanza and La Plata-La Matanza), three loading ports, 11 tankers, six barges, four tow boats, 16 terminals (nine of which with connected ports), six LPG plants, 54 aeroplants and 1,105 trucks.

YPF owns a network of 1,618 service stations, of which 169 are directly managed through the company Opeesa (100% shareholding) and has also eight bases for the distribution of diesel oil for agricultural activities, known as YPF Directos.

It also holds a 50% stake in Refinor, a company that refines, transports and markets fuels (70 service stations, or 35 if we take into account YPF's 50% share) and derivatives in the Argentinean northeast.

YPF's refineries processed 47.3 thousands m<sup>3</sup>/day in 2010, 1.8% less than in 2009. This reduction was mainly due to less availability of crude oil in the market, to the scheduled stoppages in the Lujan de Cuyo and La Plata refineries, and to the conflicts with unions, which affected the operations of oil coming from the Gulf of San Jorge.

In spite of those determining factors, the refining performance throughout 2010, in terms of LPG, gasoline and medium distillates was high, in particular regarding aviation fuel (JP1). In October 2010 the production of normal gasoline was discontinued, thereafter producing only high quality gasolines (Super and N-Premium).

Gasoline production for the domestic market was 3.47 million m<sup>3</sup>, accounting for a rise of 4.2% compared to the previous year, and a new record in recent years.

The three YPF refineries, La Plata, Plaza Huincol and Lujan de Cuyo, jointly increased gasoline and diesel oil performance by 0.9% compared to the previous year, which allowed for a reduction in diesel oil imports.

In 2010 the marketing of IFO (naval bunker) grew 48% in relation with 2009, its sales going from 23 to 34 thousand tons per month. YPF's logistic development has positioned the company as one of the main suppliers in the region and increased its market share from 14% in 2007 to about 40% in 2010.

During 2010, the total oil processed in YPF refineries was 111 Mbbbl (Refinor processed about 4.5 Mbbbl, where YPF's stake is 50%), of which 80% came from YPF's own fields, and the rest was bought from other companies.

The table below shows the YPF refineries capacity by 31st December, 2010:

	Primary Distillation (kbbbl/d)	Conversion Index (2) (%)	Lubricants (thousand tons per year)
<b>Refining capacity (1)</b>			
<b>Argentina</b>			
La Plata	189	69	256
Lujan de Cuyo	106	110	–
Plaza Huincol	25	–	–
Refinor (3)	13	–	–
<b>TOTAL (4)</b>	<b>333</b>	<b>74</b>	<b>256</b>

(1) Information disclosed in accordance with the Repsol Group criteria for integration in the financial statements: all the refineries report at 100%, excepting Refinor (50%).

(2) Expressed as the ratio between the equivalent capacity coefficient FCC and primary distillation capacity.

(3) Total primary distillation capacity: 26,100 barrels/day.

(4) This refers to YPF's total distillation capacity in Argentina (three YPF refineries, plus the stake in Refinor's refinery).

The table below shows a breakdown of YPF refineries' production, by their main products:

	As of 31 December	
(Millions of tons)	2010	2009
<b>Feedstock processed</b>		
Crude	15.4	15.7
Other feedstock	0.4	0.4
<b>TOTAL</b>	<b>15.8</b>	<b>16.1</b>

	As of 31 December	
(Thousands of tons)	2010	2009
<b>Refining production:</b>		
Intermediate distillates	7,067	7,128
Gasoline	3,762	3,994
Fuel oil	1,440	1,246
LPG	674	566
Asphalts	205	229
Lubricants	181	157
Other (except petrochemicals)	936	1,534
<b>TOTAL</b>	<b>14,264</b>	<b>14,852</b>

The utilisation of the refining capacity was about 93.2% versus 94.9% in 2009.

Logistics activity increased 5% compared with the previous year. High occupation levels were achieved for road, sea and river transport, as well as in the use of pipelines, terminals and ports.

Investments in refining and logistics in 2010 totalled €282 million, meaning a 66% increase in relation to the previous year (€170 million).

In accordance with Law 26,093 on Biofuels, on 1 January 2010 the obligation of marketing gasoline with bioethanol and diesel oil with biodiesel (FAME) came into force. The works required to adapt the San Lorenzo terminal and the refineries to receive FAME were carried out for this reason. These works finished with the construction of facilities for the reception and processing of bioethanol in the Lujan de Cuyo, Montecristo, San Lorenzo and La Plata terminals.

There is ongoing investments being made to build bioethanol and FAME receiving installations for the gasoline and diesel oil mixture, respectively, in the remaining dispatching terminals, as well as increasing the transport capacity of the Puesto Hernandez duct to the Lujan de Cuyo industrial complex.

Likewise, a programme for the automation of the Monte Cristo and San Lorenzo terminals has been started, followed by a schedule for the rest of the plants; while the investment needed to build storage tanks to enhance the logistics capacity in order to cover market demand by importing diesel oil and gasoline was approved.

In November 2010, the new Topping III furnace at the Lujan de Cuyo was put into operation refinery to increase energy efficiency was started up, which will mean an extra 400 m<sup>3</sup>/day can be processed while improving the unit's energy efficiency.

In line with the objective of reducing the sulphur content in gasolines and diesel oil to meet fuel quality specifications, the investment projects for the hydro-treatment of diesel oil and gasolines continued. In accordance with new legislation from the Energy Secretariat, by 2012 every company should comply with the new fuel specifications; for this reason a new plant for the gasoline and diesel oil hydro-treatment processes is being built and set up in the La Plata refinery. This plant will have a processing capacity of 5,000 m<sup>3</sup>/day. This facility will produce a diesel oil containing less than 50 parts per million (ppm) of sulphur. To fulfil this objective, the Lujan de Cuyo refinery has bought an existing plant with a capacity of 2,640 m<sup>3</sup>/day. In this refinery they have also begun the development of the detail engineering for a gasoline hydro-treatment unit.

In the La Plata refinery the development of the engineering for the new coke unit "A" began. This unit will increase the processing capacity from 110 to 185 m<sup>3</sup>/day.

The participation by YPF in the Refino Plus programme should be highlighted, as it encourages increased fuel production through benefits to be applied in the form of tax relief. In this regard, applications for five investment projects that will avail of this programme have already been approved.

During 2010 YPF launched an image improvement plan for its service stations with the aim of uniting and enhancing the overall image of the network based on the concepts of modernity and rationality. As well as renovating 47 service stations, a new station, Hito, was built in Nordelta and the first station of the Red Camionera (Truck Drivers Network), located in Fighiera (province of Santa Fe), was opened as part of the agreement between YPF and Camión Club Argentino (CCA).

YPF promoted the synergy with the agricultural world by creating the Agrocentros and developing a cereal exchange programme. These Agrocentros sell products such as diesel oil, fertiliser and agricultural chemicals which are paid for with cereal (mainly soya and corn), which is then processed to obtain flour and oil for export. In this new phase, part of the oil obtained will be used for the production of FAME (methyl ester from vegetable oil), nowadays added to commercial diesel oil (up to 5% of its volume).

During the first half of 2010, domestic market prices were gradually brought into line with international prices and prices in neighbouring countries. Resolution 925/2010 froze retail prices from 31 July until December. From November 2010, the company decided to clearly segment the quality of its gasoline products and identify the attributes of each one through its name. For this reason, the highest quality gasoline (grade 3) is now called "N-Premium". This product became the market leader during this year, with a 61% market share.

In the diesel oil area, the premium product with a low sulphur content (D-Euro) was marketed aggressively. This product is recommended for all high performance EURO IV engines. D-Euro has reached a 49% market share in the retail segment.

This strategy enabled the company to market a larger part of the Ultradiesel XXI diesel oil through the industry and transport channels, providing the market with a sufficient supply while minimising imports.

### Chemicals

The chemicals business carries out its operations in the Ensenada industrial complex, integrated with the La Plata refinery, and in the Methanol Plaza Huincul complex, integrated with the Plaza Huincul refinery. Likewise, YPF carries out chemical activity in the Bahia Blanca complex through its investee company Profertil.

These industrial complexes have an aggregated production capacity in excess of 2,000,000 tons per year, for market segments such as modified naphthas, resins, detergents, automotives, agrochemicals and fertilisers, among others.

During 2010, there has been a recovery of international prices in the main products, consolidating the improvement seen in the second half of 2009. The price of methanol rose due to the postponement of new plant projects and to a good level of demand in the United States and China.

The maleic anhydride (the raw material for plastics) trend showed a noticeable improvement, with prices rising compared to 2009. This price increase was due to stronger demand, along with the closure of one of the main European plants in January 2010.

From a commercial perspective, YPF's chemicals business improved significantly in terms of the aromatic and methanol sales mix, with sales increasing in Argentina by 18% compared to the previous year. A larger volume of aromatics was used in the gasoline production process (blending) and the sales of methanol in the Argentinean market to the biodiesel production sector continued to develop.

The building and setting up of the Continuous Catalytic Regenerator (CCR) began as well, which will allow production of aromatics to be increased by 50% and thus be able to meet the needs of growing internal demand for octane components, used in high quality gasoline and hydrogen production, necessary for gasoline and diesel oil hydro-treatment processes at the La Plata refinery. The estimated investment for this project is approximately €250 million, the largest petro-chemical investment in Argentina made in the last decade.

The table below shows the production capacity of the main petrochemicals:

	<b>CAPACITY</b> (tons per year)
<b>Ensenada:</b>	
<b>Aromatics</b>	
BTX (Benzene, Toluene, Xylene)	244,000
Paraxylene	38,000
Orthoxylene	25,000
Cyclohexane	95,000
Solvents	66,100
<b>Olefins and Derivatives</b>	
MTBE	60,000
Butene I	25,000
Oxo-alcohols	35,000
TAME	105,000
<b>LAB/LAS</b>	
LAB	52,000
LAS	25,000
<b>Polybutenes</b>	
PIB	26,000
<b>Maleic</b>	
Maleic Anhydride	17,500
<b>Plaza Huincul:</b>	
Methanol	411,000
<b>Bahia Blanca</b>	
Ammonia/Urea	933,000

## Gas Natural Fenosa

### Results

As of 31 December 2010, Repsol owns 30% of the Gas Natural Group, which is proportionally consolidated. The operating income contributed by Grupo Gas Natural Fenosa in 2010 rose by 17.8% to €881 million compared to the previous year (€748 million).

The additional provision that was made for the risks arising from the Sonatrach dispute has been a determining factor on the results, but their evolution has been supported by the recovery of energy demand in Spain, the growing contribution of international business and the results of the disposal of gas distribution assets in the Madrid Region.

EBITDA in the year was €1,507 million, compared to €1,232 million in 2009, 22.4% higher mainly as the result of the non-incorporation of Union Fenosa in the scope of consolidation until 30 April 2009.

The performance in the aforementioned context highlight the bases of the Gas Natural Fenosa business model, based on the balance between regulated and free business in the gas and electricity markets, with a growing, diversified contribution made by its international presence.

Gas Natural fully integrated Union Fenosa S.A. and its subsidiaries in the scope of consolidation as of 30 April 2009. As a result, the 2009 consolidated financial statement includes Union Fenosa transactions only as of that date. In September 2009, Gas Natural completed the merger by absorption process with Unión Fenosa.

The business' main operating highlights are shown below: For a better understanding, the figures relate to the amounts generated by Gas Natural Fenosa, although the Group's holding in the company is 30%.

### Gas distribution

#### Spain

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

Sales from regulated gas activity in Spain, which includes access services to the network by third parties, both in terms of gas distribution and secondary transport, fell 9.8% from the previous year's figures to 207,174 GWh. This drop was the result of the sale of assets in Cantabria, Murcia, Asturias, the Basque Country and the Madrid Region which, once set aside, imply 3.9% growth, due to the increase in residential demand caused by a cold winter and a slight recovery in industrial demand.

In 2010, Gas Natural Fenosa continued to expand its distribution network, with the addition of 1,152 kilometres in the last 12 months, and reached 33 new municipalities. The number of supply points increased by 84,000 in the last twelve months, 16.8% less than the previous year, due to the impact of the economic crisis, despite the recovery in the last quarter of 2010. Neither effect takes into account the aforementioned divestments.

By year-end, the gas distribution network reached 44,931 kilometres, 5.6% less than the previous year, and the number of supply points stood at 5,274,000, also 7.4% lower than before, according to the divestments carried out to fulfil the Action Plan approved by the Spanish National Competition Commission (CNC) in relation to the Unión Fenosa acquisition process.

#### Latin America

This concerns the gas distribution activity in Argentina, Brazil, Colombia and Mexico. During 2010, the number of gas supply points in the distribution network reached 5,665,000. The high year-on-year growth rates have been maintained, with 243,000 new supply points; the performance was particularly good in Colombia, where the new supply points this year were 152,000, thus exceeding 2 million customers.

Gas activity sales in Latin America, which include gas sales and third-party network access services, amounted to 200,995 GWh, 18.5% more than in the previous year. This increase was mainly in the industrial market and the supply to electricity generation plants in Brazil.

The gas distribution network has been extended 2,177 kilometres in the last 12 months, and by the end of December 2010 it reached 64,492 kilometres, 3.5% more than in 2009.

#### Italy

Business in Italy also includes rate-regulated gas sales.

Gas Natural Fenosa has reached a total of 422,000 supply points in the gas distribution business in Italy, a figure 1.9% higher than year-end 2009.

The gas distribution activity reached 3,387 GWh this year, 3.1% less than in 2009, mainly due to different weather conditions. The distribution network was extended by 204 kilometres, thus amounting to 5,849 kilometres by the end of the period.

### Power distribution

#### Spain

This business includes regulated power distribution activity and customer network services, mainly connection and link-up rights, and other services such as metering and access by third parties to the company's distribution network. The comprehensive tariff ceased to exist on 1 July 2009 following the creation of the last-resort power commercialisation entities. Accordingly, no power sales were made as of that date by the electricity distribution activity in Spain. Electricity supply points have grown slightly, about 0.6%, in 2010, reaching a total of 3,719,000.

#### Latin America

Business activity involves regulated power distribution in Colombia, Guatemala, Nicaragua, and Panama. Electricity sales reached 18,002 GWh, a 49.3% increase, and the customer

portfolio was increased by 17.9%, with a particularly good performance in Colombia due to more up-to-date information in low-income areas, and in Nicaragua, due to the improved effectiveness of subscription campaigns.

#### Moldavia

Business in Moldavia includes regulated power distribution and its marketing at a tariff in the capital and metropolitan area and in the country's central and southern regions. Despite a context of economic slowdown, the customer base in this country grew by 1.1% to reach 816,000.

### Electricity

#### Spain

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

In 2010, electricity demand in the peninsula grew 3.4% in relation to the previous year, an increase that started in the first half of the year, after the fall in demand recorded in 2009. With the corrections due to employment and temperature, the actual growth in demand was 2.9%.

Gas Natural Fenosa power generation in the Iberian Peninsula was 38,338 GWh in 2010. Of this amount, 35,809 GWh came from Ordinary Regime generation, and 2,529 GWh from Special Regime generation. Gas Natural Fenosa's accumulated share in Ordinary Regime generation by 31 December 2010 was 20.2%, slightly higher than the previous year.

Hydroelectric production in 2010 was 4,752 GWh, much higher than 2009 as a result of hydrological conditions at the beginning of the year. Power generation at combined cycle plants in 2010 amounted to 25,928 GWh, also higher than in 2009. Furthermore, nuclear, fuel and coal-fired power generation also increased in comparison with 2009.

In the electricity marketing activity, sales in 2010 were 40,559 GWh.

#### Latin America

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

In Mexico, the assets currently operating are the Hermosillo (270 MW) and Naco Nogales (300 MW) power plants, both located in the state of Sonora; in the state of Veracruz, the Tuxpan III and IV (1,000 MW) power plants; in the state of Coahuila, the Saltillo (248 MW) power plant; and the Norte Durango power plant, with 450 MW, located in the state of Durango, on which construction finished in 2010.

The power generated in Latin America during 2010 was 19,147 GWh, with a 75.4% load factor and 92.9% availability.

#### Other countries (Kenya)

This section includes power generation in Kenya. In 2010, fuel-based power generation reached 645 GWh, far higher than 2009 production, due to the enlargement of the plant's capacity in the third quarter of 2009, when an extra 52 MW started commercial operations.

### Infrastructure

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

The gas transportation activity carried out in Morocco through the companies EMPL and Metragaz represented a total volume of 109,792 GWh, a similar amount to the previous year. Of this figure, 80,740 GWh were transported for Gas Natural Fenosa through the company Sagane and 29,052 GWh for Portugal and Morocco.

Regarding gas exploration and production at the Tanger-Larache project (Morocco) in which the company holds a 24% stake, a seismic campaign was acquired in the second quarter of 2010 and was then processed and analysed in preparation for the drilling activity scheduled for 2011.

### Supply and marketing

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

Gas Natural Fenosa's marketing in the Spanish gas market reached 184,744 GWh, 1.3% higher than the previous year, mainly due to higher gas consumption by residential and industrial clients, while the sales of gas for combined-cycle power generation stayed the same. Moreover, supply for third parties in the Spanish market was 66,141 GWh, showing a 27.4% increase.

### Unión Fenosa Gas

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

The gas supplied to the Spanish market reached 59,518 GWh, an all-time sales record for the company. Furthermore, 27,774 GWh of energy was handled in international sale operations and led to the company posting a sales record in international markets.

### Investments

Taking into account Repsol's 30% stake in Gas Natural Fenosa, investments in the year amounted to €636 million in comparison to €5,060 million in 2009. This reduction is mainly due to the inclusion of the investments for the acquisition of Union Fenosa in 2009.

In 2010, Gas Natural Fenosa assigned 23.4% of its fixed asset investments to the electricity generation activity in Spain and 20.3% to electricity distribution in Spain.

The main investment projects for 2010 were the completion of the combined-cycle power plants in Malaga and the Port of Barcelona, and well as the development of wind farm projects.

At the same time, with the purpose of further promoting a culture of organisation as a way to boost efficiency and ideas in the company, divisions were created within the People and Organisation ED, as well as in each different business, that are in charge of directing the innovation process and the generation and development of initiatives, thus converting them into value for the market.

Also in 2010, the YPF transformation project started which aims to turn YPF into a more dynamic, modern and efficient organisation by revising its processes and structures.

On 30 December 2010, the following changes in the company's top executive level were approved, entering into force in January 2011:

- The functions of the Corporate Strategy and Development CD were incorporated into the Economic and Financial ED.
- The Audit and Control and Reserve Control Departments, operationally reporting to Repsol's Board of Directors' Audit and Control Committee, will now report to the General Counsel and Secretary of the Board of Directors instead of the Economic and Financial ED, thus consolidating its independence.
- The Investors Relations Department will report directly to the Chairman's Office.
- The Communication and Chairman's Office CD will become the Communication and Chairman's Office ED, becoming part of the company's Executive Committee.

### Renovation of the Management team

The Group has continued the process of renovating its structures and its management team, with a view to having the leaders Repsol needs to face the challenges and to guarantee that each business and strategic project has the people it needs.

The positioning and the presence of the company has been reinforced in all the countries it operates in, following the business strategy for each one. The organisational needs and the executive profile have been subjected to analysis in order to ensure that the organisational structures meet business needs, reinforcing aspects such as innovation, business development or safety and the environment.

This has brought career opportunities to those with the desired personal and professional profile, and has made it possible to renew part of the management team. When the 60 new executives appointed in 2010 are incorporated (some of them will take their position in January 2011), the new management team will be more diverse in terms of gender and nationality.

In mid-December, Repsol gathered all of its management team for a two-day world convention held in Madrid, under the motto *Juntos creamos futuro* (Together we create future).

### Diversity, equal opportunities and balance

In 2010, Repsol's Diversity and Balance Committee continued to foster a culture of respect in the company where diversity is valued and promoted, and the balance between the personal and professional life of its employees is made easier.

In addition to continuing to develop programmes from previous years, the company has decided to structure its policies and measures in accordance with the flexible and responsible business management model, and it is currently analysing the elements this includes, such as employment quality, flexibility measures, support to families, professional development and equal opportunities. This work is being carried out across the entire company.

Regarding diversity measures, Repsol has made progress in its programme to integrate people with disabilities, and has continued to promote actions aimed at guaranteeing equal opportunities for all employees.

An important aspect of the work in 2010 were the procedures designed to help incorporate people with disabilities into the industrial sphere. The awareness-raising procedures that have been carried out since the beginning of the programme have been reinforced, and 990 people have taken part in some of the seminars organised this year in various locations within the company.

Likewise, the guide *Superando barreras* (Overcoming barriers) was published and distributed among the employees. This guide contains recommendations, suggestions, best practices and guidelines to improve relations with people with disabilities within the company, thereby helping them to integrate.

## Corporate areas

### People management

At year-end 2010, Repsol had a consolidated workforce of 43,298 people representing over 70 nationalities. Of this figure, a total of 36,323 employees were working in companies directly controlled by Repsol and the figures presented in this section refer to these employees. The company's employees work in more than 30 countries, mainly in Spain (46%) and Argentina (37%), as well as Portugal (3%), Peru (7.2%), Ecuador (2%), and Trinidad and Tobago (1%). Of these employees, 51% work in the Downstream division, 7% in Upstream and LNG, 36% in YPF, and 6% in corporate departments.

The breakdown of the workforce is 1% executive personnel, 6% technical managers, 47% technicians, 4% administrative staff and 42% operators. Permanent work contracts account for 91% of the total and women represent 27% of the total workforce.

### Change in the organisational structure

One of the most significant organisational changes in 2010 was aimed at promoting, boosting and providing business sense to new initiatives contributing to a vision of a more diversified and less CO<sub>2</sub>-intensive future for energy. Some examples are the creation of the New Energies Business Unit, within the Downstream Executive Department (ED); two new offices within the Media Corporate Department (CD); the New Energies Technology Division and the Environmental Footprint and Carbon Unit Division, as well as the creation of the New Energy Development Area in YPF.

In December 2010, and in recognition of the company's work in the social and workplace integration of people with disabilities, Repsol received an award from the Imsero's Recovery Centre for the Physically Disabled.

As well as continuing its collaboration with Fundación ONCE through the second INSERTA agreement, the company has signed new collaboration contracts with the Fundación Seeliger y Conde, Fundación PADEIA (A Coruña), Imsero's CRMF, IVADIS and Afanias, among other institutions.

In January 2011, Repsol received the Telefónica Ability Award to the Best Private Corporation. This award, whose ceremony was attended by Queen Sofia of Spain, publicly acknowledges the work of those Spanish companies and institutions developing sustainable business models and which have integrated people with disabilities as part of their value chain, be they employees, providers or customers.

Repsol has, as of December 2010, a total of 463 employees with disabilities in Spain, of which 360 are directly-hired employees, and the remaining 103 were hired via alternative methods (2.56% of the workforce, according to the legal headcount). In addition to this, there are 90 employees with disabilities in Argentina, 25 in Ecuador, 10 in Peru and 11 in Portugal.

Repsol has also continued to foster measures to improve the balance between the personal and professional life of its employees, adapting them when necessary to the specific nature of the business and to the cultural environments in which the company operates.

Teleworking is becoming consolidated and spreading as one of the best accepted measures. As of 31 December 2010, there are over 557 teleworkers in Spain, 20 of whom are part of the pilot project taking place in industrial complexes. In addition to this, there are 120 teleworkers in Argentina and 14 in Portugal who take advantage of the spatial flexibility of this way of working, one of the top demands of employees reflected in the 2006 opinion poll.

Teleworking, which began in Repsol as a pilot programme in 2008, and has spread gradually through various stages throughout 2009, has become a perfectly normal working mode in the company and is very highly regarded by both teleworkers and their bosses. Both parties stress that the critical factors for success are task planning and the use of technological advances.

The group of teleworkers is made up of employees from virtually all areas of the company, and from all professional groups and age ranges.

Repsol YPF, S.A. was one of 36 companies awarded the *Distintivo de Igualdad en la Empresa* (Equality in Business Badge), from among the 600 that participated in 2010. This badge is promoted by the Spanish government's Ministry of Health, Social Policies and Equality, and it is awarded to entities whose equality in treatment and opportunities policies for their workers are particularly noteworthy. Among other aspects, the Ministry has given special consideration to the work carried out by the Diversity and Balance Committee, the existence of a forum (Equality Department of the Fifth Framework Agreement), where company representatives and the workers' monitor these matters, and the progress seen in both the implementation and the use of the balance measures.

In Argentina, YPF received the Fundación Proyecto Padres award *Hacia una empresa familiarmente responsable* (Towards family responsibility in business) for the second consecutive year, which in 2010 was declared of interest by the Honourable House of Deputies of the Nation.

### Attracting the top professionals

Repsol was once again chosen as the best company to work for, according to the MercoPersonas survey and the Top Employer monitor.

In line with the activity carried out in previous years, the company continues to develop programmes to capture, motivate and commit the best professionals, offering them attractive working conditions and guaranteeing and promoting equal opportunities for their professional development.

Among the most important initiatives launched in 2010 is the improvement of the Welcome and Integration Programme, intended to optimise introductory processes for new employees coming from outside the company as well as those moving between different units within the company. The objective is to streamline their adaptation to the new work environment,

guaranteeing their integration into the company and its values, as well as retaining talent. A new corporate framework for welcoming and integration has been designed this year, as a value proposition Repsol offers its employees that sets it apart from other employers.

Of the new incorporations in 2010, it is important to mention the actions carried out to hire young talent through the master's courses in the Centro Superior de Formación Repsol (CSFR) for technical profiles and the New Professionals Plan for management profiles (71 new professionals were brought in to the company in Spain, Peru and Brazil).

The selection of candidates for the job banks of different profiles (chemical plant workers, bilingual sales representatives, etc.), the technification of profiles and the promotion of hiring people with disabilities for the industrial environment are other aspects worth mentioning.

Repsol has signed over 200 agreements with universities and other educational centres, through which almost 300 trainees have been brought into the company, thus continuing this line of collaboration. Noteworthy among these is the agreement signed with the Universidad de Elche to foster "the best training in the world", which has allowed a student with disabilities to do training at the Information Systems Managing Division. Furthermore, thanks to agreements with foundations and educational centres, students with disabilities have had access to various training programmes and grants offered by the company, some of them in the industrial environment.

Due to its success as a pilot programme, the "Impulsa" Scholarship Programme, which is based on providing training for the grant recipients, was continued in 2010: over 100 grant recipients with university degrees were provided with online training in languages, general skills courses, attending conferences, etc.

The Employment Channel on the repsol.com website consolidated its position among job seekers in 2010, incorporating the company's strategy of making it accessible to people with any disability.

Simultaneously, the company has continued to take part in forums, job fairs, seminars, etc., very often as a benchmark case for the employment of people with disabilities in a number of roundtables and lectures.

Repsol has also featured strongly in social organisation's awards, councils and seminars.

### Talent management

One of the company's goals is to combine the need to have the adequate competencies and skills, acquire those that may be necessary in the future in a planned manner, while committing to offer people professional development opportunities by appropriately managing their talent.

With this aim in mind, 2010 saw the consolidation of the systems the organisation uses to assess and highlight its employees' talents: the People Review model and the professional development scheme for technical areas.

People Review is a development model to identify talent and to plan the main actions for the development of people, which was applied to 3,712 professionals in 2010.

### Professional development in technical areas

Since technical knowledge is a key factor for business growth in Repsol, as well as for the development of people, technical skills charts and position types have been updated during 2010 by means of revision projects in different areas and units. They are a key element for the effective management of technical talent based on a platform of common knowledge shared by all employees.

In 2010 the company defined and approved its own technical career model as a means for professional advancement in critical technical areas, with the objective of attracting, retaining and developing the technical talent needed to reinforce its present activity and promote its future strategy. This mechanism has already been established in all the areas of the company where this type of profile is the base for development.

### Training

Repsol is a company committed to people: it values, promotes and facilitates employee training as a key for their personal and professional development. The training should be focused on developing people's knowledge, skills and attitudes in order to reach the objec-

tives of each unit, while aligned with the company's strategy and oriented towards Repsol's culture and leadership style.

A new Virtual Learning Environment (EVA Repsol) was designed and launched in 2010, based on new information and web 2.0 technologies, with the purpose of improving policies, models and training and learning actions to guarantee the company's present and future competitiveness. This new environment enables and boosts access to quality online training, to both standard courses on offer and to courses and activities designed specifically for Repsol.

Furthermore, in 2010 new training management processes and systems have been revised and developed by and for employees and their bosses, bringing catalogue training and training plans to employees so that they can assess their need for learning, improvement or to acquire new knowledge and skills.

During 2010, more than 1,200,000 hours of training were provided to over 29,500 employees worldwide.

One of the highlights of this tendency was training on the "Repsol Style" addressed to over 700 bosses in 14 countries. The "Repsol Style" is the trademark of Repsol's people managers; it defines the behaviour and attitudes expected and needed by the company to make its strategic plans become a reality. It involved standardising, simplifying and integrating the various reference frameworks on abilities, generic skills and behaviours that existed in the company, and promoting a leadership and management culture.

To meet their different needs, each division has designed its own specific programme based on a common work scheme, which in turn is based in an assessment of the situation.

#### **Mobility**

The approach on internal mobility was consolidated during 2010. The objective is to promote professional growth and the development of people by taking on new roles and challenges, while guaranteeing the maximum added value to the business.

To this end, a number of teams made up by representatives of the company's different divisions and units, known as "Development and mobility desks", have been formed and are expected to generate cross-sectional development opportunities for employees.

In specific cases, when there is a need to present the opportunities that have arisen in a certain business, along with its projects for the future, and simultaneously, attract professionals interested in becoming part of these initiatives, internal job forums, known as "bridge projects" are formed.

In 2010 there were 5,892 employees changed position within the company.

#### **International careers**

In Repsol, 708 employees were working in other countries than the ones in which they were hired in 2010, and they form the group of employees on international assignment.

2010 has been marked by a need to quickly meet the needs that arose regarding the new projects that the company had started in various countries, which involved sending 175 people to other countries and hiring 64 professionals with an international profile, who bring with them specific experience in key areas in order to face these new challenges.

Once again, given its experience in managing expatriates, Repsol has been re-elected to the chairmanship of the Spanish Expatriation Forum (FEEX), for the 2011-2013 period. This forum, in which there are currently 25 Spanish multinationals, is a place to discuss the management of international assignments affecting their employees, as well as sharing experiences, good practices and initiatives.

#### **Performance assessment**

Four years after the introduction of the Repsol performance system, known as *Gestión por Compromisos* (Management by Commitments, GxC), the company has revised and improved the model to meet new needs. To this end, the information received through individual interviews with the top management, as well as the results of the annual audits, the working climate survey, etc have been taken into account.

The evolution of the GxC system reinforces the three pillars on which it is based –responsibility, recognition and development–, and maintains the key role given to manager/worker dialogue

within the process. It is also an evolution and flexibilisation of the assessment system.

These improvements went into force for the 2010 assessment, and they were preceded by an important communication campaign targeting all the parties involved.

The company also has an assessment system designed exclusively for employees covered by the collective bargaining agreement, which is used to appraise their skills and knowledge. It is, at the same time, a tool for identifying strong points and areas that need improvement in different skills areas.

This assessment is carried out through campaigns, according to the company's needs. It was applied during 2010 in Repsol YPF S.A., Repsol Butano and various Marketing areas, covering a total of 2,055 employees.

#### **Innovation and improvement**

Repsol fosters innovation as a key value of management, which is reflected in its quality policy.

During 2010, the company performed a reflection and repositioning process regarding the current quality and knowledge management functions. As a result, the company has made a strong commitment to foster innovation and improvement and incorporate them into management by creating specific areas in the company and the business divisions.

These new areas, based on collaboration and teamwork, and acting as a link between different areas and business divisions, will lead the promotion of a new innovation culture in Repsol, fostering the exchange of experience and good practices, as well as the identification of high-impact cross-sectional and multidisciplinary initiatives. They will also be in charge of driving their execution and of reporting on their results.

The first assessment of the innovation level was carried out in 2010, applying the innovation model as defined by the Club Excelencia en Gestión and the Fundación COTEC.

In addition, the company continued to implement key measures in the Strategic Quality Plan. Regarding self-assessments, it is important to stress that more than 50% of the organisation has performed at least three self-assessments.

In 2010, Repsol's self-assessment methodology was submitted to the European Foundation for Quality Management (EFQM) and the Ibero-American Foundation for Quality (FUNDIBEQ), after the review process started in 2007, for the purpose of ensuring that the self-assessment process is in line with the business strategy, the integration of improvement initiatives, the monitoring of action plans and to make quality a factor in the change management. This methodology has been formally acknowledged by the EFQM and by Fundibeq as "good management practice".

In 2010, Repsol continued to work on the roll-out of process-oriented management across the entire company and on the use of benchmarking as a tool for continuous improvement. The formalisation of processes and identification of indicators and performance measures support decision-making and help to identify and implement improvements to ensure that targets are met.

#### **Knowledge management**

The competitive market in which Repsol operates requires constant innovation in order to adapt to its needs. For this reason, the company has decided to contribute to this adaptation through the creation of value and innovative capabilities in the organisation through knowledge management techniques and tools.

The knowledge management initiatives in Repsol contribute to business results, to improving efficiency and to management through commitments by designing and rolling out a model for development and skill transfer between all the business units and cross-over areas in the company. This becomes the way towards a common framework for generating innovation capabilities, constantly in line with strategic objectives and with quantifiable results to ensure continuous improvement.

Repsol aspires for knowledge management to become an essential part of its employees' daily activity, work processes and assessment systems, thus contributing to the creation of both a continuous improvement and innovation framework and an environment that fosters the participation, involvement and development of the people who work for the company. Repsol would like its employees to feel professionally enriched and motivated through knowledge management, as well as inspired on a personal level to actively participate in the progress of the organisation.

Repsol employees, regardless of where they are located or which unit or area they work in, will have access to all the knowledge available (content, people and processes), so that they can, at any time, locate the relevant knowledge they require, and the good practice identification and transfer in all areas and key processes, contributing to the creation of an environment open to innovation.

Regarding knowledge management and within its strategic framework, new practice communities were created in 2010 which, together with those already in existence, include approximately 26,000 people throughout the company. In 2010 several projects for retaining employees' knowledge and transferring it to others were undertaken in order to ensure that critical knowledge is kept within the company when employees retire, are rotated, change office, or when new professionals or training materials are incorporated, etc. The methodology applied is mainly supported by compiling personal histories and experiences which are recorded and distributed with audiovisual media.

To bring company knowledge to all the employees, and based on the experience of the Moebius pilot project, the semantic search system is undergoing functional analysis for the purpose of making this knowledge that exists in Repsol regarding people, business processes and any other type of content, available to every employee. This analysis involves designing indicators to measure the employees' contribution to the company knowledge, as a key element for making the cultural change that this initiative requires a reality.

In 2010 a project was carried out to define the framework and reference architecture to support the roll-out of the chosen strategy for the management of knowledge in the entire company. In addition to this, the first two business innovation portals, which were designed in accordance with the open innovation paradigm to give employees a channel for their innovation and improvement proposals, have been introduced. Once this has been properly assessed, the company intends to expand the use of this type of portal to other businesses. One element that sets this system apart is the use of semantic technology, which optimises the entire process of collecting, selecting and appraising the ideas received and favours the creation of teams of people linked by the similarity of their innovation and improvement proposals.

#### Work relations

During 2010 in Spain there were negotiations regarding the collective labour agreements to temporarily adapt the workforce of those businesses whose activity has been affected by market conditions.

On 29 September the CC.OO. and UGT unions organised a general strike to protest against the labour market reforms passed by the Spanish government. In the Repsol Group companies, 9.79% followed the strike.

Regarding YPF, the company took part in the roundtables organised by the Argentinean government as part of the so-called "Social Agreement" between companies, unions and the government. At the same time the work guidelines were established for the renegotiation of the Collective Agreement signed with the United Oil and Hydrocarbons Workers Union (Sindicato Unido Petroleros e Hidrocarburíferos - SUPeH). An addendum to this Agreement was also signed with the aforementioned union, incorporating new benefits for the workers.

#### Health and safety

In the health area, the following initiatives were developed in 2010:

- Internal Health Regulation Compliance Audit: the process started in 2009 by the Refining Spain Managing Division came to an end with the audits carried out in the Puertollano and Petronor industrial complexes.
- Standards for the Assessment of the Social, Environmental and Health Impact were developed and, in collaboration with Safety and Environment Department and with the Corporate Responsibility Department, there were workshops for the employees in Madrid and Buenos Aires.
- Preparation of a "Health Management System", with the purpose of standardising the tasks and functions of medical services.
- Health Promotion Campaigns in different countries: such as the Early Detection of Colon Cancer and Detection and Control of Hypertension in Spain; Prevention of Malaria and Hepatitis A in Ecuador, Venezuela and Colombia; Prevention of contagious diseases in Ecuador, Colombia and Brazil, etc.

## Innovation and technology

Repsol YPF considers its R&D investments to be one of the key factors for creating an efficient and sustainable energy system that will be capable of meeting the industry's two main challenges: security of supply and the reduction of CO<sub>2</sub>, while maintaining the competitiveness of the energy system. Consequently, Repsol invests in R&D to find solutions to these major challenges, providing value both for the company and for society as a whole.

Uncertainty about what will be the dominant technologies of the future, prospective R&D results, business cycles and cost reduction stresses 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 set out in the plan cover all the company's businesses: hydrocarbons exploration and production, the natural gas value chain, oil refining and related products and petrochemicals, and new energies for diversifying energy production and its use.

In 2010 Repsol invested €64 million in R&D activities carried out directly at its technology centres in Spain (Mostoles) 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 collaboration with both public and private technology institutes and universities in Spain and internationally. The investment earmarked for these types of agreements was in the region of €8 million in 2010. Repsol participates in R&D financing projects sponsored by different areas of government. In 2010 it took part in 29 projects promoted by the Spanish Government, 10 European Union projects, and 15 projects involving the Argentinean government.

#### R&D programmes

**Upstream.** Repsol applies the most advanced technologies in the exploration of new oil and gas fields. The major finds reported in 2008, 2009 and 2010 are a good example of the efficient application of these technologies, which include the geophysical technology developed in the Kaleidoscope project, placing Repsol at the cutting edge in the exploration of complex areas. The objective of raising the reliability of underground imaging and reducing the uncertainty inherent in the search for oil and gas can be applied at a depth of thousands of meters in difficult areas with significant reserves, such as U.S. waters in the Gulf of Mexico and Brazil, where thick layers of salt hide oil companies' targets.

Meanwhile, new advanced analytical and geo-chemical methodologies to describe oil-bearing systems in detail can be applied in both hydrocarbon exploration and in the development and operation of finds, and the company uses its own proprietary models and methods to assess and assure the flow of oil or gas under adverse conditions, especially in offshore production.

Another key R&D line at Repsol involves the use of improved recovery technologies for extracting more oil and gas from mature reservoirs. Also, the search for unconventional hydrocarbons, world reserves of which are expected to be significantly higher than have been exploited to date, represents a major challenge for the company, requiring the development and application of special technologies.

**LNG.** During 2010, with the start-up of Peru LNG, Repsol consolidates its position as a global leader in the LNG sector. Liquefaction technologies are being developed in this area for use in floating systems, which will make it possible to capitalise on gas reserves that cannot be exploited in an economically viable manner at present. Repsol also systematically monitors alternative technologies that would enable capitalisation of gas reserves, such as the conversion of natural gas into liquid fuels.

**Downstream.** In the area of oil refining and oil derivative products (gasoline, fuel oils, LPG, asphalts, lubricants, specialties, etc.), technological knowledge is applied to the operational optimisation of refineries and the enhancement of product quality with particular attention to advances in energy efficiency and environmental issues.

Developments allowing unconventional crude oils and biofuels to be processed may be cited as an example of progress in this field, as well as co-processing biomass in refineries, innovation for international expansion in lubricants, the development of more environmentally-friendly asphalt, LPG automotive applications and integrated systems providing enhanced energy efficiency.



Technological development lines in petrochemicals are oriented on a priority basis towards new differentiated products and specialties, as well as towards improving the overall efficiency and cost-saving of processes. Some of 2010 highlights are the industrial introduction of new catalysts for polyolefins and the development of piping, injection and fibre products with better properties, the manufacturing of hydrogenated rubber of various degrees of hardness of a higher added value and the development of technologies for the production of next-generation polyols for polyurethane foams, sulphured fertilisers and bioparaffins.

In April 2010, while the New Energies Business Unit was being created, the New Energies Technology Department was also set up to promote and boost new energy-related R&D and demonstration projects, among others, intensifying activity in the bioenergy field by developing projects on the renewable biological fuel production value chain.

In the area of CO<sub>2</sub> management, the activity is focused on developing projects for the geological CO<sub>2</sub> capture and storage and other alternative technologies such as CO<sub>2</sub> fixation by biomass. In addition to this, the investigation of emerging technologies in renewable electricity generation and electricity power supply, recharging and storage systems for hybrid and electric vehicles has begun.

### Technology prospecting studies

In order to achieve a sustainable energy future, we must overcome ambitious technology barriers to arrive at new and better solutions, both in the oil and gas sector and with other energy sources. Repsol carries out systematic prospecting studies to identify opportunities arising from the long-term evolution of key technologies for the energy and petrochemical sectors.

These include studies on bio-energy, future combustion engines, electrification of transport, renewable energy, CO<sub>2</sub> capture and storage and biopolymers. These studies allow Repsol to develop new expertise and guide its future lines of work.

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## Corporate responsibility

Energy companies have taken on a great responsibility by facing the challenges of a sustainable energy model that can guarantee a safe supply, contributes to minimising the effects of climate change and respects human rights in every area.

Since 2003, Repsol has maintained an active commitment to the ten principles of the United Nations Global Compact. The company signed up to this initiative to make the world a fairer, more united place. During 2010 it took part in various Global Compact-related actions. Likewise, Repsol is aware that its oil and gas extraction activities are an important source of income for the governments in the countries that own these natural resources. These resources, if properly managed, can and should be a positive contribution to their economic growth. For this reason, the company signed up to the Extractive Industries Transparency Initiative (EITI) from its launch, and we believe that this global initiative is in the best position to achieve its goal of increasing financial transparency. In 2010, Repsol has provided financial support for the EITI and has been involved in several programmes to spread information and awareness about the initiative.

Likewise, its second 2012 Sustainability Plan was launched. This plan is part of the Corporate Responsibility model, in its phase of managing any necessary changes to maximise social and environmental opportunities, and it consists of actions aimed at reviewing the company's processes and the employees' specific training.

The plan's 61 actions are divided in nine strategic programmes:

1. Safety increased.
2. Ethical behaviour and fight against corruption.
3. Respect human rights.
4. *Compromiso con nuestra gente* (Commitment to our people).

5. Integration into the community.

6. Sustainable energy and climate change.

7. Controlling and minimising environmental impact.

8. Influencing our suppliers, contractors, subcontractors, distributors, partners and customers.

9. Being accountable for our social and environmental performance

Repsol will continue working to make safety a distinguishing feature of the company's culture, promoting initiatives such as updating its risk management system and improving safety in processes, transportation, emergency control and the safety management system.

Ethical behaviour and fight against corruption are the essential base for all other actions. The company will continue to reinforce ethical standards in its businesses, fostering initiatives to increase the ability to make ethical decisions when faced with any dilemma and to reinforce the commitment to the Group's Ethical and Conduct Regulation. Repsol will formally adopt a Policy for the Promotion of Transparency, Against Corruption and Bribery, and it will foster financial transparency in the extractive industry.

The programme for the respect of human rights will help reinforce the requirement to respect human rights that is already in force in the company's code of conduct, by providing a global policy for this purpose. It will also increase employees' capability to act and make decisions to favour human rights, even in unusual situations, supported by specific training programmes, which will become embedded in the training programmes for the company's professionals.

Another programme is the one called *Compromiso con nuestra gente*. This plan gave Repsol the chance to approach certain innovative ideas within the scope of protecting women's equal rights among the employees; the balance between work and personal life; the promotion of innovative ideas; and the promotion of a health culture.

The programme for the integration into the community includes some actions to get to know the expectations of the company's stakeholders; and social performance, with a view to improving it. Repsol will also work on improving our relations with local communities, because it believes that they can benefit from the employment and the purchases the company generates.

Regarding environmental initiatives, the company will continue to identify opportunities to increase its energy efficiency and to reduce its greenhouse gas emissions. It will likewise continue to invest in research and development of new biofuels and other alternative energies, and in technologies for CO<sub>2</sub> capture and storage; in addition to continuing to work to reduce its emissions, optimise water management, improve waste management, heighten spill control and gain a better understanding of the impact on biodiversity.

One of the new areas included in this plan concerns the company's actions to influence its partners and the value chain to take on higher standards in ethical, social and environmental management. Since reputation is largely linked to that of our partners, suppliers, contractors, subcontractors and distributors, Repsol will promote its ethical, social and environmental standards among them, as well as promoting responsible energy consumption among our clients.

The progress made on these issues and ethical, social and environmental performance are detailed in the Corporate Responsibility Report and the United Nations Global Compact Progress Report. Aware of the importance of the impact caused by the company's activities and operations, and therefore, the relevance of being accountable to the local stakeholders, for the second year running the company has published its Repsol YPF Ecuador Corporate Responsibility Report. A new aspect was that the 2009 Ecuador report, published in 2010, was assured by an independent expert. In Argentina, in 2010, YPF has published the first Corporate Responsibility Report.

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

For the fifth year running, the company's performance in terms of corporate responsibility has been acknowledged by remaining in the prestigious FTSE4Good and Dow Jones Sustainability Indexes. In the latter, out of 112 oil firms analysed on an international level, Repsol was one of the 12 companies included in the world index (DJSI World), while it is one of only four European companies in the

oil and gas sector that have made it to the European index (DJSI Europe). Repsol is the second company in the sector on points in the environmental dimension, and the first in the social dimension. Furthermore, for the first time ever, it obtained the maximum overall points in environmental policy and management system, and it has been awarded the maximum qualifications in the sector regarding the following criteria: climate strategy, standards for suppliers, stakeholders engagement, social impact on communities, customer relationship management and transparency.

Also in 2010, Repsol confirmed its continued presence in the Global and European Ethibel Sustainability Indexes (ESI), which recognise the best companies in each sector in terms of their corporate responsibility and sustainability performance.

#### Repsol Foundation

The Repsol Foundation carried out a number of projects in 2010 as part of its commitment to the sustainable improvement of society.

One special area of interest for the Foundation is that of public responsibility. The Citizen R programme can be included in this area of action. This is an initiative to promote a culture of civic participation and commitment, and to promote values such as responsibility, solidarity and respect. During 2010, the Citizen R caravan, a mobile unit with exhibitions and interactive games and workshops, moved around various Spanish cities raising awareness among children about the importance of making a responsible, efficient use of energy, and the need to respect and care for the environment. During its travels, the caravan received over 37,700 visits.

As part of its Energy Observatory, the Foundation updated its Energy Efficiency Index, which provides comprehensive and itemised information on its evolution and its contribution to reducing electricity consumption. It has also developed a new index on Intensity of Greenhouse Gas Emissions. This index offers information, by sectors, on greenhouse gas emissions associated with energy production, distribution and use in Spain and in the European Union's 15 main countries.

In the education and training field, in addition to scholarship programmes and collaboration with universities and other academic institutions, the Foundation fosters scientific research and the generation and dissemination of knowledge. In this sense it is worth mentioning Movilab, a programme developed with the Spanish National Research Council (CSIC) to bring science to the general public and, in particular, to promote an interest in science among schoolchildren. During the academic year, a mobile laboratory installed in a truck's trailer went to the main provincial capitals and other cities in Spain bringing interactive workshops prepared with teaching techniques and scientific rigour.

Contributing to the social and workplace integration of people with disabilities is one of the tasks in which the Foundation is increasingly involved, by working in educational, cultural and sports projects. In the last quarter of the year, in collaboration with the Fundación ONCE, the educational awareness programme *Tu formación no tiene límites. Desarrolla tu futuro* (Training is unlimited. Develop your future) started, with the aim of promoting access to university for people with disabilities and normalise their workplace integration process. Another noteworthy programme is the one carried out in collaboration with the Fundación Bobath, through which young people suffering from cerebral palsy and brain damage can have access to formal education in Administration, which provides them with employment opportunities. In 2010, three students in this programme, which includes an internship in a company, finished their course successfully, obtaining their administrative technician degrees. Regarding sports, the Fundación supports programmes that make possible the practice of mountain sports and adapted cycling for sportsmen with various disabilities in a relaxed environment and in the company of family and friends. Simultaneously and in collaboration with other entities, it promotes creative writing and theatre workshops specifically designed for people with disabilities.

In this line of action is the *"Recapacita"* (Think it over) programme, aimed at raising awareness in society about the problems faced by people with various types of disabilities. *"Recapacita"* is an interactive space with a circuit involving different senses showing, by means of a series of activities in which participants have to put themselves in a disabled person's position, the difficulties they face in their daily lives.

In the area of international cooperation and development aid, the Repsol Foundation has become actively involved in the rebuilding of Haiti. In addition to the initial 100,000 euro donation and the collection of funds among our employees and the general public to help the victims of the earthquake, the Foundation has organised a global aid project to encourage

the development and rebuilding of the Caribbean country. One of its programmes, called *Árboles solidarios* (Tree solidarity), aims to plant 29,000 trees of local species as part of an agroforestry plan to generate resources in a sustainable manner and improve food resources and the social, economic and environmental conditions of the towns in the Pichon area, in the southeast of Haiti. Other projects are focused on fostering local initiatives to promote agricultural, fishing and livestock production, as well as the manufacture and sale of these products in local markets. These programmes are carried out in collaboration with *Solidaridad Internacional*.

In Senegal, collaborating with the Fundación Por Una Sonrisa en Africa, several educational and health centres have been provided with infrastructure. These centres are located in several communities south of Dakar, and 6,000 people have benefitted from this programme either directly or indirectly.

As part of the International Year of Biodiversity, the Foundation contributed to improving knowledge on biodiversity and its importance for life and economic development by organising several activities, such as the exhibitions in the Royal Botanical Gardens of Madrid: *Biodiversidad en España* (Biodiversity in Spain) and *Imágenes del paraíso. Las colecciones de Mutis y Sherwood* (Images from Paradise. The Mutis and Sherwood collections), and the First Seminar on Biodiversity and Social Responsibility. This forum, held in May 2010, considered the issue of biodiversity from economic, social, environmental and scientific points of view, stressing its importance in a sustainable development model.

Another factor that contributes to the development and progress of a community is the dissemination of art and culture. Consequently, the Foundation cooperates with museums, institutions and other cultural foundations to bring music, theatre, art and literature to the public.

The Foundation also promotes and develops social studies of general interest with the intention of gaining more in-depth knowledge about those social problems and needs that are most prevalent in our society, thus contributing to the generation and dissemination of knowledge, both at a popular and at an expert level. Its research lines include a number of areas: social observatory of energy, responsible mobility and science and society. In the area of responsible mobility, two complementary studies were presented in 2010: *La alimentación en los viajes por carretera. Hábitos y comportamientos* (Food during road trips. Habits and behaviours), which analyses drivers' and their companions' main food-related habits and behaviour while on the road; and *Recomendaciones nutricionales durante los viajes* (Nutritional recommendations for journeys), prepared in collaboration with the Spanish Nutrition Foundation to establish the most suitable food guidelines regarding different kinds of journeys, considering factors such as population groups, type of journey, transport used and season. As a complement to these studies, and in collaboration with the Dirección General de Tráfico (Spanish Department of Traffic), the Foundation prepared a set of good practices for good feeding habits on the road, contributing to safer driving.

The Repsol Foundation undertakes its activities in those countries where the company operates its business, with specific projects adapted to the local needs. In Ecuador, for instance, it fosters a microcredit programme in the Orellana and Sucumbios provinces, designed for low-income women who are excluded from the usual financial system, and enables them to become self-employed.

In Peru, the Foundation has opened the Centre for Education and Integrated Human Development (CEDHI) for young people at risk of social exclusion in Arequipa; the educational infrastructure of Pachacutec has been extended by building a secondary school and a basic training space at the Centre for Education and Community Development (CEDEC), making the integration of young people at risk of social exclusion into the education system possible. Construction on the Luisa Astrain School has also begun in order to provide access to education for children living in extreme poverty.

In Bolivia, in the area of health, the building of a paediatric and emergency section has been started to enlarge the capacity of the Hospital San José Obrero in Santa Cruz de la Sierra, an area with significant unmet needs in this field. Similarly, the Foundation continues to work on the healthy home programme to fight Chagas disease in some zones of the country.

These and other programmes and projects are but an example of the Repsol Foundation's commitment to improving society and the welfare of people.

### YPF Foundation

Since its creation in 1996, the YPF Foundation has worked on initiatives relating to education, scientific research, heritage conservation, the dissemination of culture and environmental protection, in Argentina in particular.

A social development path was begun in 2009, in those areas where the company has operations. By 2010 two important milestones were reached: the opening of the Centro Cultural Las Heras, in Santa Cruz, and of the Oil and the Environment Museum, in La Plata.

In education, 33 technical schools in the provinces of Buenos Aires, Chubut, Mendoza, Neuquén and Santa Cruz benefitted from high-level teacher training, next-generation equipment and educational materials. The mobile interpretation centre *Ciencia y Tecnología en Movimiento* (Science and Technology in motion) was presented at the International Book Fair and travelled to schools and science fairs in different parts of the country. In addition to this, 200 students received support in their oil and gas industry-related university studies, as well as 69 professionals who were carrying out post-graduate scientific and technological work.

With the aim of improving people's social and work inclusion, the Foundation has continued to offer a job training programme in the towns where Repsol has operations. A new project was added in 2010, the Re-Conocer programme, which deals with disability related problems by raising awareness and implementing actions for educational and workplace inclusion.

In the area of sustainable development, the YPF Foundation has been working alongside various institutions such as Ecocentro, the NGO Aves Argentinas and Parques Nacionales, to coordinate research and awareness projects on environmental improvement and on the protection and conservation of the environment and biodiversity.

Regarding cultural activities, the First International Violin Competition Buenos Aires 2010 was organised, in collaboration with the Amijai community and as part of the patronage of the Buenos Aires city council: 25 young violin players from all over the world were judged by an internationally-renowned jury chaired by Shlomo Mintz.

For the second consecutive year, the YPF Foundation Cultural Season presented over 100 free plays and musicals for adults and young people in 13 towns. And with *Arte en la Torre* (Art in the Tower), a new contemporary art venue in its Buenos Aires headquarters, the YPF Foundation brought the work of many important Argentinean artists to the general public.

The *Muestras Itinerantes* (Travelling Exhibitions) programme also started, with Marcos López's photography exhibition *Vuelo de Cabotaje*. Another art-related programme, carried out in the provinces of Formosa and La Rioja, was called *Argentina Pinta Bien* 2010. A sculpture called *Los Caballos de San Martín*, made from industrial waste material, was presented by the artists taking part in the Metalwork Art Workshop.

During 2010 the Foundation has worked actively in the conservation of Argentinean heritage. Some of the projects were: the project to restore and conserve Candido Lopez's work; the restoration of the group of sculptures on the facade of the Museo Etnográfico Juan Ambrosetti; renovation of the Teatro Colón tearoom and the recovery of Museo Gauchesco and Parque Criollo Ricardo Güiraldes.

Two books, on the history of the Rosedal (rose garden) de Palermo and the Patio Andaluz, have been published; the book *Parques Nacionales Argentinos* (National Parks of Argentina), by artist Diego Ortiz Mugica, developed in collaboration with the Fundación Parques Nacionales and Telefónica, was presented; and the second volume of the lexical dictionaries *La Academia y La Lengua del Pueblo*, with the Argentinean Academy of Literature was launched.

### Repsol YPF Ecuador Foundation

In line with its firm social commitment, Repsol decided voluntarily to create a foundation in Ecuador with the basic objective of working for the development of indigenous and mixed-race communities in the territories indirectly within the sphere of influence of Block 16. The Repsol YPF Ecuador Foundation was created on 11 May 2001.

Based on a study of socio-economic and cultural conditions in the area, three priorities were identified to improve the conditions of life for the population. The first is related to education and job market insertion; the second is oriented towards health and hygiene; and the third concerns efforts to strengthen production and commercial capability at the micro and local levels. Likewise, it should be mentioned that the Inclusive Business Model was introduced in

2010 which, in addition to generating business profit, creates social and economic value by integrating low-income people into the operations of several companies.

The Repsol YPF Ecuador Foundation took part in 22 social development projects in 2010. Of these, 11 were completed during the year, and the remaining 11 are ongoing projects basically involving monitoring and technical support work. The foundation is convinced that the sustainability of its initiatives requires not only the injection of funds, but also continuous monitoring and support for projects after the funding process is complete, to ensure full autonomy.

A total of 11,865 people benefited from the initiatives funded by the Repsol YPF Ecuador Foundation using its own resources and contributions from counterparty entities, strategic allies of the foundation and the communities themselves.

The foundation is making a consistent effort to generate proposals and seek additional funding with the aim of enlisting the support of multilateral cooperation organisations and other companies in its social and environmental development projects and initiatives.

## The environment

Caring for the environment is an essential aspect in the management of Repsol's activities. This principle is part of the company's strategic vision and its commitment to "contribute to sustainable development and the improvement of the social environment, and to respect human rights, the environment and safety".

Repsol's principles in terms of safety and the environment are defined in its Safety, Health and Environment Policy, applicable to all the activities of the company. One of these principles is incorporating safety and environment criteria to the entire life cycle of the activities, with the purpose of preventing damage to people and assets and minimising the impact on the environment.

The basis for managing safety and the environment is the management system, formed by a large body of regulations, procedures, technical guides and management tools which are constantly updated to adapt them to the sector's best practices.

The ISO 14001 certificate has been promoted in the facilities as a way to foster continuous improvement and to obtain an external validation of the management systems. All the refineries, chemical plants and lubricant and specialties facilities are currently certified, as well as nearly all the exploration and production centres and a growing number of installations devoted to other activities. (See a list of the certified centres at [www.repsol.com](http://www.repsol.com))

Significant environmental investments were made during 2010, with the aim of improving the environmental quality of oil products, minimising air emissions, increasing energy efficiency, optimising water consumption and reducing the pollutant load in water discharges, and of improving spill prevention systems by applying the best practices available and technological innovations. The company has also made a significant effort to identify, appraise and correct possible polluting situations that occurred in the past.

Details of the Group's environmental assets, provisions, expenses and future actions are detailed in Note 35 of the Consolidated Financial Statements. Furthermore, in Repsol's Corporate Responsibility Report 2010 there is a list of the most important actions carried out during the year for the protection and conservation of the environment, as well as the evolution of the most relevant indicators.

## Sustainable energy and climate change

During 2009 and 2010 Repsol has developed the Carbon Strategy to meet the challenge of providing a responsible energy supply. After creating the New Energies business unit (see Downstream and Innovation and Technology sections) and the roll-out of positionings and action plans, a new stage has begun in Repsol's Carbon Strategy, with the purpose of:

- Promote a common carbon-reducing culture and guide the deployment of future projects, both in Upstream and Downstream as well as in the New Energies businesses.
- Identify synergies between all businesses, in order to reduce carbon.

Repsol's Carbon Strategy is geared towards six areas:

- Energy efficiency to curb CO<sub>2</sub> emissions and operating costs.
- Carbon markets, which focuses on covering the expected deficit under the EU emissions trading scheme (ETS), the development of Clean Development Mechanism (CDM) projects and obtaining Certified Emissions Reductions (CER).
- Prospection, development and implementation of technologies for CO<sub>2</sub> capture and storage.
- Biofuels strategy: research, development, production, blending and distribution.
- Development of new technologies for transport, contributing to guarantee the supply of cleaner fuels with less environmental impact.
- Search for business opportunities for renewable electricity generation, establishing synergies with the company's current operations.

In the area of climate change, the following events in 2010 are worth mentioning:

- The United Nations has approved the industrial project for the YPF refinery in La Plata (Argentina) as a Clean Development Mechanism (CDM), thus becoming the first project of this kind approved in the world. The CDM, an instrument included in the Kyoto Protocol, allows companies to develop Greenhouse Gas Emissions reduction projects, thus favouring sustainable development and the introduction of clean technologies in the countries where such investment is made. This project will considerably reduce the emission of greenhouse gases (about 200,000 CO<sub>2</sub> metric tons/year) by reusing waste gas which normally would have been burnt in the flare. The use of this gas in the refinery's equipment partly replaces the use of fuels such as natural gas or fuel oil.

Likewise, for the project to be approved, it was necessary to develop a new methodology which was also approved by the United Nations in 2007 under the name AM0055 "Baseline and Monitoring Methodology for the recovery and utilization of waste gas in refinery facilities". Four projects in the world are currently applying this methodology.

- Once again, the company has been included in the selective Climate Disclosure Leadership (CDLI) index, which groups the 51 best industrial companies in the world featured in the FTSE Global Equity Index Series (Global 500) regarding climate change communication and transparency. The company has also been qualified in the new Climate Performance Leadership Index (CDPI), which recognises the 48 companies with the most highly-developed strategy for the management of climate change-related risks and opportunities and which are adopting the best measures regarding its mitigation. Repsol is one of only two oil companies in the world, and one of two Spanish companies, that is featured in both indexes.
- Additionally, in March 2010, Repsol received the Emissions Tracking Carbon Verification Leaders Award 2010, acknowledging the information disclosed by the company on the verification and accounting of its greenhouse gases. According to the Environmental Investment Organization (EIO), the entity behind this award, Repsol is one of seven companies, among 1,000 analysed in this study, whose Emission Report was entirely verified and accepted and it was also the only energy company to obtain full recognition.

## Communication

Transparency and close relations with the company's different stakeholders are the mainstay of Repsol's communications strategy. Nowadays, society demands accessible information, and Repsol does not hesitate to cater for this need in the smoothest and most reliable way possible with a number of tools.

### Shareholders and investors

These groups have access to all sorts of resources that enable them to find out about the day-to-day business of the company. Since its stock market flotation in 1989, Repsol has had a Shareholder Information Office (OIA) and an Investor Relations Department, and through them it deals with the needs of its shareholders, institutional investors and stock market analysts. Over the last few years the company has been increasingly covered by analysts; currently there are 41 analysts monitoring the company's evolution.

Shareholders can ask for any information they need from the OIA by going to the office in person, calling the 900 100 100 freephone or by post or e-mail. The OIA received about 52,000

calls in 2010 (an average of 200 per day). Most of the enquiries concerned the share price, the Annual General Shareholders' Meeting, the policy on and payment dates of dividends, and the material facts on the company.

In addition, the corporate website ([www.repsol.com](http://www.repsol.com)) provides access to all the relevant information about the company, as well as specific contents in the section "Information for shareholders and investors", which in 2010 had more than 200,000 visits. The portal has also several e-mail addresses (the standard one being [infoaccionistas@repsol.com](mailto:infoaccionistas@repsol.com)) for asking questions or requesting publications. In 2010 over 5,000 e-mails were sent to these mailboxes, mainly asking for information about Repsol.

The Investor Relations Department provides smooth communication with institutional investors and stock market analysts. During this year the company organised a roadshow (meetings with institutional investors outside the Repsol offices) in Europe and the United States, with the participation of the top management, and another 20 meetings with the Investors Relations team. Furthermore, Repsol has been present in several conferences in the sector, both in Europe and in the United States, within which there were also meetings with institutional investors. Adding to the aforementioned the visits received in the company's offices, the total is about 500 institutional investors contacted during 2010. Finally, the Investor Relations Department organised a field trip (a visit for analysts and institutional investors focused on a certain representative asset of the company, with the presence of the top management and the local management) in Peru, attended by 23 analysts who follow the company's evolution.

### Media relations

Repsol's policy for media relations is based on the principles of transparency, immediacy, accuracy and reliability of the information conveyed. The company at all times endeavours to ensure that requests for information from journalists are answered as quickly as possible, keeping up a free-flowing and ongoing contact with the media, which is regarded as vital for conveying developments in the business activity and management of a company that is present in more than 30 countries.

Repsol's Communication and Chairman's Office ED deals daily with general and specialist media at international, national, regional and local level, providing them with information about everything that professionals from this sector need to know. In addition, it works closely with the local media in the places where the company's industrial complexes are located.

All the media are informed of key activities and initiatives undertaken by Repsol by means of press releases. In Spain, Repsol distributed over 70 press releases during 2010, as well as those disseminated locally by the industrial complexes, the information released by the company in the countries where it operates and those related to sports sponsorship projects.

To strengthen the relationship with journalists, press conferences and specific informative meetings are arranged. In this sense, one of 2010 highlights was the press conference for the presentation of the 2009 results, which took place on 25 February 2010, and the one for the presentation of the main projects and investments included in the Horizon 2014 Plan (29 April 2010).

The company's website has a specific space, the press room, that provides immediate access to information about the Group. From this space, the press releases issued by Repsol, as well as publications, pictures, videos and all kinds of relevant information about the company are made available to the media and the general public. It also contains useful tools and a glossary of terms.

Repsol has a press mailbox ([prensa@repsol.com](mailto:prensa@repsol.com)), which aids relations with the different media. Over 4,000 enquiries and requests for information were handled through this channel in 2010. Likewise, every day dozens of queries are answered on the phone.

Repsol's commitment to transparency and truthful information was acknowledged in 2010 with two awards: in February, Repsol was chosen as the energy company with the best relationship with the Spanish press, according to the second wave of the KAR survey carried out by IPSOS. 46% of Spanish journalists polled chose Repsol as the company in the sector that had the best relationship with the press.

In mid-November, the Chamber of Commerce, Industry and Shipping of Barcelona informed Repsol that it had been awarded the 46th Premio Llotja, which acknowledges the company's effort to set up a truthful, complete and accessible information system for its shareholders and investors, and also for the general public.

### Repsol online

For Repsol, transparency and openness with concern groups is a priority. The portal www.repsol.com is, in this sense, a key tool.

In 2010, the company reinforced its interest in digital media by focusing on three main lines of action. In the first place, the creation of new digitised contents to make Repsol, its brands and products better known to users, and to get closer to them via exclusive, interesting content. Secondly, enabling access through new platforms such as the iPad and iPhone, where applications related to the Repsol Guide are already available. And last but not least, fostering dialogue and interaction through its profiles in social networks.

In 2010, repsol.com had 70 million webpage viewings and 5 million visits per month and was once again distinguished by Spanish and European digital communication experts: the Spanish Association of Accountancy and Business Management, which gave the 8th Premio AECA to the Ibex 35 company with the best financial information on the Internet, and the international consultancy company Hallvarsson & Halvarsson who, for the seventh consecutive year, chose Repsol as the top Spanish company, thus retaining its position as one of the ten best European companies in terms of the efficiency and transparency of their corporate websites.

Regarding social networks, Repsol reinforced its presence, focusing mainly on the Repsol Guide and sports sponsorship. Its Facebook and Twitter profiles gather over 60,000 and 4,000 fans respectively. The company also has a gastronomy blog and another two with the Repsol riders Dani Pedrosa and Marc Márquez. In corporate terms, a monitoring and active listening system has been introduced to learn more about the perception of concern groups on the web.

These results and Repsol's constant interest in strengthening the relationship with its stakeholders, fostering interaction and providing direct access to communication via the multiple possibilities offered by digital media, have enabled the consolidation of repsol.com's leadership in online transparency and communication in Spain and Europe during 2010.

### Intangible assets management

A large part of a company's value is in its intangible assets; brand and reputation being the two key strategic values for the differentiation and the generation of trust among stakeholders.

For this reason, the management of these intangible assets in Repsol is handled by the Department of Communication Strategy, Corporate Reputation and Branding.

#### Brand strategy

Repsol understands the concept of brand in its broader sense, from visual identity to different types of communication (internal communication, advertising, marketing, public relations, sponsorship and patronage). And Repsol is convinced of its increasing importance as a key element in product and service differentiation, the continuity of leadership in relation to customers and society in general, and the ability to attract and retain human capital.

A perfectly managed common identity allows the company to issue an unambiguous, differentiated message to its public, as well as building links with them.

Throughout its history, the Repsol brand has received awards and recognition, including high positions in the most prestigious brand rankings such as Interbrand and "Trusted Brands 2010".

#### Reputation

Corporate reputation, understood as the company's ability to generate trust, respect and admiration, is a key factor in business management. The aim of reputation management is to promote the constant improvement of the organisation and of its external recognition.

Repsol, a pioneer in this area, is one of the founding companies of the Corporate Reputation Forum and has adopted the Reprtrak model - an internationally recognized standard - as part of its reputation management and monitoring tools.

To reinforce this function, in 2010 Repsol created a department whose specific objective is to define corporate reputation policies, strategies and management models as well as the periodical monitoring of its status.

Repsol has retained its top ten position in local and international reputation indicators, such as MERCO (Spanish Business Reputation Monitor) and in Fortune's World's Most Admired Companies (Oil & Gas sector).

### Sports sponsorship

During 2010, Repsol took part in the world's top motor sport competitions, like the World Motorcycle Championship, the best possible testing bench for its lubricants and fuels. Thanks specifically to the cumulative experience gained in the development of products for top-level competitions, Repsol is able to maintain its leading position in research and the development of products capable of living up to the expectations of its customers.

In line with our track record, 2010 was an outstanding season in terms of the world championship titles won by the Repsol drivers in international competitions. In MotoGP, Repsol came second with Dani Pedrosa. The Spanish motorcyclist won four grand prix, breaking his personal record, but bad luck and an injury when he was at his best meant he could not fight for the championship in the last few races. The Italian Dovizioso topped the podium seven times, but finished the season in fifth place.

But if there is something to remember about the 2010 season, it is that Marc Márquez won his first 125cc world championship. This motorcyclist, sponsored by Repsol, won ten grand prix, becoming the youngest Spanish rider to win a world title and the second in history. Marc's talent and charisma have made his races as popular as the top category.

Furthermore, the Repsol team won the Indoor and Outdoor Trial World Championship in the male competition and Outdoor Trial in the female competition. Toni Bou has won eight world championships. At 25, he is the rider with the second-highest number of prizes in history. On the female side, Laia Sanz, ten times world champion and winner of the Premio Nacional del deporte Reina Sofia, won the female competition in her first time at the Dakar rally. Similarly, Marc Coma, with Repsol's personal sponsorship, won his third Dakar rally in America in the motorcycle category.

#### Repsol team 2011

Repsol will continue to be the main sponsor for the Honda team. The agreement has in fact been renewed for two more years (2011 and 2012). The season beginning in Qatar on 20 March 2011 will see three out of the five best riders in the world as part of the Honda team. Cassey Stoner, 2007 champion and one of the favourites for the 2011 championship, will join Dani Pedrosa and Andrea Dovizioso. The presence of the Australian motorcyclist in the team will help the international projection of the Repsol brand.

In terms of logistics, the company will continue to provide its products so that the Repsol team enjoys the best fuels and lubricants.

Also, Marc Márquez will ascend to the Moto2 category with a great team, in technical and human terms, designed to help the 125cc champion compete in a few years' time with his role model Dani Pedrosa.

#### Other sponsorships

Repsol is also committed to Olympic sports and cooperates in the ADO plan, which helps young people fulfil their dream of taking part in the Olympic Games. In this way, with the objective of London 2012, Repsol is committed to consolidating this highly successful time in Spanish sports.

### New Repsol headquarters

Construction on the new Repsol headquarters began in November 2008 and work continued apace in 2010.

The underground structure is finished, and 80% of the structure above ground has been built; the underground installations are about 70% finished. In 2010 Repsol submitted the project documentation to the US Green Building Council (certifying body for the LEED sustainability qualification system). This body accepted all the credits submitted; for this reason, the company expects a Gold certification in terms of sustainability.

The final project design for the approval of the interiors was also completed, including the design of the different types of spaces. For the design and functionality of the main services the company enlisted the help of the change agents team and the union representatives.

Lastly, each unit collaborated in assessing in detail their actual installation in the business park, and the work finished with a simulated installation, functionality check and a survey for any particular needs.

The future headquarters of Repsol will consist of a ground floor and four storeys of offices and service rooms. It will also have two basement floors containing facilities and a car park with capacity for 1,800 vehicles. The project includes over 5,000 m<sup>2</sup> providing services to employees. The closed ring layout of the buildings will provide a large tree-lined garden enclosure of almost 10,000 m<sup>2</sup>. Also, a new green area will be created within the perimeter of the business park. Repsol has remained fully committed to sustainability from the design stage of the project. It is expected that the building work and most of the installation of the approved interior design will be finished in 2011 and the rest, in early 2012.

## Supplementary content of the Management Report

(Pursuant to section 116.b of the Spanish Securities Market Act)

### A. Capital structure, including securities not traded on a European Union regulated market, indicating, where appropriate, the different classes of shares and, for each class of shares, the rights and obligations that it confers and the percentage of capital that it represents.

The Share Capital of Repsol YPF, S.A. is currently €1,220,863,463, represented by 1,220,863,463 shares, each with a par value of €1, fully subscribed and paid up, belonging to the same class and, consequently, having the same rights and obligations.

The shares of Repsol YPF, S.A. are issued in book-entry form and have all been admitted to listing on the automated trading system of the Spanish securities markets (Madrid, Barcelona, Bilbao and Valencia) and the Buenos Aires exchange (Bolsa de Comercio de Buenos Aires). At the date of this Management Report, Repsol YPF, S.A. shares, in the form of American Depositary Shares (ADSs), are listed in the New York Stock Exchange (NYSE), although on February 22nd, 2011 the company has formally requested the delisting of its ADSs from said market. In this sense, it is estimated that the last day of trading of the ADSs in the NYSE will be March 4th, 2011.

### B. Any restrictions on the transferability of shares.

As set out in the 11th Additional Provision of Act 34/1998 on the hydrocarbons sector, as per the wording of Royal Decree Law 4/2006, 24 February, administrative authorisation must be sought from the National Energy Commission for certain holding acquisitions involving companies that carry out regulated activities or activities that are subject to administrative intervention which entails a special binding relationship.

The Ruling of the Court of Justice of the European Communities (CJEC) of 28 July 2008 set out that, by enforcing this requirement, the Kingdom of Spain has breached the obligations incumbent upon it under articles 43 (freedom of establishment) and 56 (freedom of movement of capital) of the European Community Constitutional Treaty.

### C. Significant direct or indirect holdings in the capital.

As of the last date available, the following were the most significant holdings in the share capital of Repsol YPF, S.A.:

Shareholder	Total % of the share capital
Sacyr Vallehermoso, s.A. (1)	20.01
Criteria Caixa Corp.	12.97
Petróleos Mexicanos (2)	4.81

(1) The shareholding of Sacyr Vallehermoso is held through Sacyr Vallehermoso Participaciones Mobiliarias, S.L.

(2) The shareholding of Petróleos Mexicanos (Pemex) is held through Pemex Internacional España, S.A. and through several equity swap instruments with certain financial institutions providing mechanisms furnishing Pemex with the financial rights and the exercise of voting rights up to 4.81% of the company's share capital.

### D. Any restriction on voting rights.

Article 27 of the Corporate Articles of Association of Repsol YPF, S.A. lays down that the maximum number of votes than an individual shareholder, or companies belonging to the same Group, may cast at the General Meeting of Shareholders shall be 10% of the Share Capital with voting rights.

Furthermore, article 34 of Royal Decree-Law 6/2000 sets out certain restrictions on the exercise of voting rights in more than one principal operator in the same market or sector. Among others, it lists the markets for the production and distribution of fuels, the production and supply of liquid petroleum gases and the production and supply of natural gas, the principal operator being understood to be any of the entities that hold the five largest shares in the market in question.

Such constraints are specified as follows:

- Natural or legal persons who have a direct or indirect holding of over 3% in the Share Capital or the voting rights of two or more principal operators in the same market may not exercise the voting rights attached to the excess over and above such percentage in more than one of those companies.
- A principal operator may not exercise voting rights representing more than 3% of the Share Capital of another principal operator in the same market.

These prohibitions shall not apply to parent companies which have the status of principal operator with respect to their controlled companies that have the same status, provided that such a structure is imposed by the legal system or is the consequence of a mere redistribution of securities or assets among companies in the same Group.

The National Energy Commission, as the energy market regulatory body, may authorise the exercise of the voting rights attached to the excess, provided that this does not favour the exchange of strategic information or entail risks of coordination in their strategic activities.

### E. Shareholders' Agreements.

Repsol YPF S.A. has not been informed of any shareholders' agreements that include regulating the exercising of voting rights at its general meetings or that restrict or place conditions on the free transfer of Repsol YPF S.A. shares.

### F. Rules applicable to the appointment and replacement of members of the Board of Directors and amendment of the corporate Articles of Association.

#### • Appointment

The General Shareholders' Meeting is entrusted with appointing the members of the Board of Directors, notwithstanding the powers of the Board to appoint Directors from among the shareholders to fill vacancies that arise until the next General Meeting is held.

Persons to whom the prohibitions under section 213 of the Spanish Stock Companies Act apply, and those who are under disqualifying circumstances according to the law in force may not be appointed as directors.

Nor may persons and entities that are in a situation of permanent conflict of interest with the company, including rival entities, their directors, executives or employees and the persons linked with or proposed by them be directors of the company.

Nominees shall be persons who, in addition to fulfilling the requirements for the post stipulated in the law and Articles of Association, have acknowledged prestige and possess the appropriate professional knowledge and expertise for the performance of their duties.

The proposals for the appointment of Directors that the Board submits to the General Meeting, and appointments made by co-option, shall be approved by the Board (i) at the proposal of the

Nomination and Compensation Committee, in the case of Independent Outside Directors, or (ii) subject to a prior report by that Committee in the case of other directors.

• **Re-election**

The Nomination and Compensation Committee is responsible for assessing the quality of work and dedication to the office during the preceding term of office of directors proposed for re-election.

The proposals for the re-election of Directors that the Board submits to the General Meeting, and appointments made by co-option, shall be approved by the Board (i) at the proposal of the Nomination and Compensation Committee, in the case of Independent Outside Directors, or (ii) subject to a prior report by that Committee in the case of other directors.

• **Withdrawal or resignation**

Directors shall cease to hold office when the term for which they were appointed expires (unless they are re-elected) and in the other circumstances provided for in the Law, the Corporate Articles of Association and the Regulations of the Board of Directors.

Furthermore, directors must submit their resignation to the Board of Directors in any of the following circumstances:

- a. When they are under any disqualifying circumstance or prohibition provided for by law, the company's Articles of Association or the regulations that apply to them.
- b. When they have been seriously cautioned by the Nomination and Compensation Committee or the Audit and Control Committee for having breached their obligations as Directors.
- c. When, in the opinion of the Board, subject to a prior report by the Nomination and Compensation Committee:
  1. Their continued presence on the Board may jeopardise the interests of the company or impair the functioning of the board itself or the standing and reputation of the company; or
  2. When the reasons for which they were appointed no longer concur. This includes, in particular:
    - Institutional Outside Directors when the shareholder that they represent or that had proposed their appointment transfers the whole of their shareholding. They must also surrender their post to the Board and, if the Board deems it fit, tender the respective formal resignation, in the corresponding proportion, when such shareholder reduces its shareholding to a level that requires the reduction in the number of its Institutional Outside Directors.
    - The Executive Directors, when they cease to hold the executive posts outside the Board to which their appointment as Director was linked.

The Board of Directors shall not propose the withdrawal from office of any Independent Outside Director before the statutory period for which he/she had been appointed comes to an end, except where there are proper grounds for doing so, in the opinion of the Board subject to a prior report by the Nomination and Compensation Committee. In particular, proper grounds shall be deemed to exist if the Director (i) had breached the duties inherent in his/her office; (ii) were in any of the situations described in the previous paragraphs; or (iii) were in any of the circumstances described in the Regulations of the Board as a result of which he/she cannot be classified as an Independent Outside Director.

Proposals for the withdrawal from office of Independent Outside Directors may also be made as a result of takeover bids, mergers or other similar corporate operations that entail a change in the company's capital structure, to the extent necessary to establish a reasonable balance between Institutional Outside Directors and Independent Outside Directors according to the relationship between the capital represented by the former and the remainder of the capital.

• **Amendment of the Articles of Association**

The Articles of Association of Repsol YPF, S.A., which are available on its website ([www.repsol.com](http://www.repsol.com)), do not lay down different conditions from those contained in the Spanish Stock Companies Act for their amendment, with the exception of the amendment of the last paragraph of section 27, regarding the maximum number of votes that a shareholder or companies belonging to the same Group may cast at the General Meeting. This resolution, as well as the resolution to amend this special rule contained in the last paragraph of section 22 of the Articles of Association, requires, both in the first and in the second call, the favourable vote of 75% of the share capital with voting rights attending or represented at the General Meeting.

**G. Faculties of the members of the Board of Directors and, in particular, those concerning the possibility of issuing or repurchasing shares.**

The Annual General Meeting of Shareholders of the company, held on 30 April 2010 agreed to authorise the Board of Directors to increase the Share Capital, once or several times, during a period of 5 years, by the maximum amount of €610,431,731 (approximately half the current Share Capital), by issuing new shares the counter value of which shall consist of cash contributions.

Likewise, the Annual General Meeting of Shareholders of the company, held on 30 April 2010, authorised the Board of Directors to engage in the derivative acquisition of own shares, under the terms indicated above in the "Financial situation" section of this Management Report.

Finally, in addition to the powers recognised in the company's Articles of Association and the Board Regulations as being conferred upon the Chairman and Vice-Chairmen of the Board, the Executive Directors have each been granted general powers of attorney to represent the company, conferred by the Board of Directors, and which are duly recorded in the Commercial Register of Madrid.

**H. Significant agreements to which the company is party and that take effect, alter or terminate upon a change of control at the company as a result of a takeover bid, and their effects, except when disclosure thereof would be seriously detrimental to the company. This exception shall not apply when the company is under the legal obligation to make this information public.**

The company participates in exploring for and exploiting hydrocarbons through consortiums or joint ventures with other oil companies, both public and private. In the contracts governing the relations between the members of the consortium the other partners are usually granted a right of first refusal over the holding of the partner on which a change of control takes place when the value of said holding is significant in relation to the overall assets of the transaction or when other conditions set out in the contracts occur.

Likewise, according to the rules regulating the oil and gas industry in the different countries in which the company operates, the transfer, total or partial, of research permits and exploitation concessions as well as, on occasions, the change of control in the concessionaire entity or entities and in particular in the entity that has the status of acreage operator, are subject to prior authorisation from the competent administrative authority.

In addition, the agreements entered into by and between Repsol YPF and Caja de Ahorros y Pensiones de Barcelona ("la Caixa") relating to Gas Natural Fenosa S.A., reported as relevant events through the Securities Market Commission, as well as the Industrial Agreement Activity between Repsol YPF and Gas Natural Fenosa S.A. set forth in the abovementioned agreements and disclosed as a relevant event on 29 April 2005 and the Partnership Agreement between Repsol YPF and Gas Natural Fenosa relating to Repsol-Gas Natural LNG S.L. consider the change in the control structure of either of the parties to be grounds for termination.

**I. Agreements between the company and its directors and executives or employees providing for compensation when they resign or are unfairly dismissed or if the employment relationship comes to an end because of a takeover bid.**

• **Executive Directors**

The Chairman and the Secretary and General Counsel are entitled to a Deferred Financial Compensation in the event of the termination of their relationship with the company, provided that said termination does not take place as a result of a breach of their obligations or of their own free will, without there being grounds for it, among those provided for in the contract itself. The amount of the compensation for termination of the relationship shall be three years of their aggregate cash remuneration.

• **Executives**

The Repsol YPF Group has established a sole legal rule for executive staff, which is specified in the Executive Contract, in which the compensation system applicable in circumstances involving termination of the employment relationship is regulated and in which the grounds for compensation are the ones laid down in the current Spanish legislation.

In the case of members of the Executive Committee, they include the resignation of the executive in the event of transfer of undertakings or a major change in its ownership, resulting in a replacement of its governing bodies or of the content and guidelines of its core business activity. The amount of compensation for current members of the Executive Committee is calculated according to the Executive's age, years in the company and salary.

Further information about this matter can be found in Note 33 to the Repsol YPF Consolidated Financial Statements.