Business areas
Income
Operating income from the Upstream division in 2008 was €2.258 billion, 20% higher in comparison with the 1.882 billion obtained a year earlier. EBITDA amounted to €2.864 billion in comparison with €2.631 billion in 2007. The improved results were mainly due to the increase in income as a result of higher average selling prices. The average retail price of the Repsol liquids was US$87.3/barrel (€59.3/barrel) against US$61.5/barrel (€44.8/barrel) in 2007. The average price of gas was US$4.2 per thousand cubic feet, an increase of 37% on 2007. These increases were driven by higher oil prices on the international markets. Oil played a major role in the 2008 economic scenario: after starting the year strongly, the price of oil continued to climb, reaching a record US$147/barrel in July. It then suffered a sharp fall to below US$90/barrel in December.

Extraction lifting cost was US$2.24/barrel, an increase of 1.8% compared to the US$2.20/barrel of 2007. This trend is attributed to the decrease in production largely due to the deconsolidation of Andina in Bolivia and the end of operations in Dubai. Finding costs of proved reserves averaged US$10.9/barrel in the 2003-2008 period.

Activities by countries
In 2008 major strides were made in the consolidation process of the Upstream business in key regions for the company, such as the Gulf of Mexico (United States), Brazil, Peru, North Africa and Trinidad and Tobago. To reinforce the strategy of diversification and growth in OECD countries defined by Repsol, the first steps were taken in 2008 towards commencing operations in Canada and Norway. The objective is to ensure organic growth by maximizing asset profitability and boosting production and reserves over the 2008–2012 period.

United States
Over the past three years, Repsol has significantly enhanced its presence in deep waters of the US Gulf of Mexico, participating in the major Shenzi oil development project and securing a large number of exploration blocks. This region is considered one of the most profitable with the greatest deepwater potential in the world.

The company holds a 28%
Repsol has a significant presence in North Africa, centred on Libya and Algeria, countries in which it has major ongoing projects which guarantee sustainable and profitable growth over the coming years.

In June 2008 production commenced in Libya at the I/R field situated in the prolific Murzuq basin in Blocks NC-186 and NC-115. Repsol participates in both of these blocks. Discovered in 2006, the I/R field is one of the most important exploration discoveries made in the history of the company and the largest in Libya in the last decade. With a production potential of 90,000 barrels/day, development of this field will give a major boost to the company’s reserves and production in this country. This field is one of the ten key growth projects defined by Repsol in its 2008–2012 Strategic Plan. At the end of 2008, the Libyan National Oil Company NOC approved the development plans submitted for the “J” and “K” fields in block NC-186 (Repsol, Total, OMV and StatoilHydro). The development plan for field “E” in block NC-200 (Repsol and OMV) should be approved in the first half of 2009, thereby enabling production to commence in these three new fields. A new exploration discovery was also made in 2008 in block NC-186 with the Y1 well.

On 17 July, Repsol and NOC signed a new agreement extending the term of the oil exploration and production contracts in this country. The new agreement extends the term of the contracts for blocks NC-115 and NC-186 until the year 2032, which represents an additional 15 years for the block NC-115 contract and another five to nine years, depending on the fields, for the block NC-186 contract. The agreement ensures that Repsol will be able to exploit the abundant resources discovered in both blocks, for which the exploration licenses were also extended for an additional five years.

In Algeria, 2008 saw two new gas discoveries in the Reggane basin in block 351c-352c operated by Repsol. These finds are in addition to those made in the same block in previous years. It is expected that Reggane will be declared commercially viable by Sonatrach in 2009, which will enable development of this major interest in the Shenzi field, one of the largest deepwater discoveries made to date in the Gulf of Mexico. Repsol commenced production of oil and gas in this field in March 2009. Development of the first phase of the project was completed ahead of schedule and on budget.

In Exploration Round 206 carried out in early 2008, Repsol obtained 32 new exploration blocks in the Gulf of Mexico which, together with others achieved in recent years, comprise a very sound exploration project portfolio. The company’s participation in these rounds forms part of its strategy for diversification and growth in OECD countries. In March 2009 Repsol obtained a further 20 exploration blocks in Round 208.

In Exploration Round 206 carried out in early 2008, Repsol obtained 32 new exploration blocks in the Gulf of Mexico which, together with others achieved in recent years, comprise a very sound exploration project portfolio. The company’s participation in these rounds forms part of its strategy for diversification and growth in OECD countries. In March 2009 Repsol obtained a further 20 exploration blocks in Round 208.
gas project to commence. Two other exploration discoveries were also made in this country in the Mi’Sari Akabli block, also operated by Repsol.

**Latin America**

Brazil is one of the principal areas for the future growth of Repsol, one of the leading companies in offshore exploration mining acreages in the Santos, Campos and Espíritu Santo basins with a total of 21 exploration blocks (the company is an operator in 11 of these). Repsol holds a 10% interest in the Albacora Leste field (Santos basin), which has been in production since April 2006. Output in this major Brazilian deepwater field was approximately 140,000 barrels/day in 2008. It has over 400 million barrels of proved and probable crude oil reserves.

A new major discovery was made in the second quarter of 2008 in Brazilian deep waters in block BM-S-9 in the Santos basin with the Guara well. This find is in addition to the Carioca field, situated in the same block, discovered at the end of 2007. Preliminary appraisals indicate that both fields offer a great potential of high-quality oil resources. The Brazilian offshore region is proving to be one of the world’s most high potential deepwater areas.

The exploration discoveries in block BM-S-9 reinforce the company’s strategy in the Brazilian offshore region and represent one of the key growth projects in the Upstream area. In 2009 two additional wells are to be drilled in this block. One of these, the Iguaçu well, proved positive in April 2009.

In Bolivia, an agreement was signed in May 2008 with the Bolivian company YPFB for the sale of a 1.08% share of the company Andina. Following this transaction, the shareholder structure of Andina is YPFB (51.08%) and Repsol E&P Bolivia (48.92%). Similarly, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operations and management of this company. This agreement came into force in November 2008. Repsol also discovered the Huacaya gas well in Bolivia.

In Trinidad and Tobago, Repsol is one of the leading private companies in terms of oil and gas production and reserves, together with BP, with which it shares ownership of the company bpTT. The firm, in which Repsol holds a 30% stake, is the operator of an extensive offshore hydrocarbon production area in the country, which in 2008 reached an average production of more than 460,000 barrels of oil equivalent.

The Teak Blow Down gas compression project for domestic sales was completed in the fourth quarter of 2008, boosting gas production by 700,000m3/day as of January 2009. The bP TT Mango and Cashmina fields, which commenced production in the fourth quarter of 2007, contributed to increasing production in 2008 as well as availability of gas for Train 4 at the Atlantic LNG liquefaction plant in which Repsol holds a 22.22% stake. In Peru, work continued in 2008 towards complete development of the Camisea field (blocks 56 and 88), in which Repsol holds a 10% interest. These blocks will supply natural gas to the future liquefied natural gas plant, part of the Peru LNG project, which is due to be operational in 2010 and in which Repsol holds a 20% stake. Two fields are being developed in block 88, San Martin (in production since 2004) and Cashiriari (currently under development), and in block 56 production in the Pagoreni field commenced in September 2008.

Also in Peru, in January 2008 Repsol made a major discovery with the Kinteroni well in block 57, which is located in the Ucayali-Madre de Dios basin in the country’s central jungle, 50 km from the Camisea gas-condensate field. The presence of gas and condensate in the Kinteroni field was confirmed with a significant resource potential that is currently being appraised. Repsol, with a 53.84% stake, is the operating company.

In Colombia, the Capachos Sur field in the Capachos block commenced production in April 2008. Repsol owns 100% of this 259 km2 block situated in the Llanos basin.

**Alaska and Canada**

In the first quarter of 2008 Repsol was awarded 82 blocks in Alaska in Exploration Round 93. These offshore blocks are located in the Chukchi Sea and cover a total area of 2,139 km2. The company’s objective is to create a large project portfolio in this almost unexplored area which offers a high potential.
In 2008 Repsol made a total of ten new exploration discoveries in Brazil, Peru, Algeria, Colombia and Libya, in addition to six further discoveries made by YPF.

of undiscovered resources. In July 2007 Repsol reached an agreement with Shell Offshore Inc. and Eni Petroleum US LLC to explore 71 adjacent offshore blocks in the Beaufort Sea, north of the prolific Prudhoe Bay and the Kuparuk oil fields. Repsol holds a 20% stake in these blocks. In Canada, at the end of 2008 Repsol won exploration rights for three blocks in the Newfoundland (Terranova) and Labrador offshore areas. Two of these blocks are situated in the Central Ridge/ Flemish Pass area and the other is in the Jeanne d’Arc basin. Repsol’s partners in these blocks, which have a combined area of 4,000 km², are the Canadian companies Husky Oil and PetroCanada. The awarded exploration rights represent a further step forward in the company’s plans to increase its presence in oil and gas exploration and production activities in OECD countries.

Europe

In Norway, and again in line with the strategy of diversification and growth in OECD countries, an agreement was signed in September 2008 with the Norwegian company Det Norske Oljeselskap ASA (Det Norske) for the joint study of the areas available in Exploration Round 20. Repsol holds a 40% stake in this project, with Det Norske holding the remaining 60%. In November, a joint bid was submitted for four blocks. Repsol also presented a bid for 100% of another three blocks. The result of this round is expected to be announced in 2009. Also in Norway, in October 2008 Repsol, jointly with Det Norske, Bayerngas and Svenska, presented a bid for four blocks situated between the Nord and Draugen (Norwegian Sea) blocks, in the APA Round 2008 (Award of Predefined Areas). Repsol obtained one exploration area.

Discoveries

In 2008 Repsol made a total of 10 new exploration discoveries in Brazil, Peru, Algeria and Libya. In Brazil, Repsol discovered a second oil field in June 2008 in block BM-S-9, in deep waters of the Santos basin in Brazil. The new field, known as Guara, is adjacent to the Carioca field discovered at the end of 2007 in the same block. Preliminary appraisals indicate that both fields contain a high potential of high-quality oil resources and confirm this basin as one of the deepwater areas with the greatest potential worldwide.

The presence of light oil with a density of approximately 28ºAPI was found in the new Guara field, discovered by the consortium formed by Petrobras (45% and the operator), BG (30%) and Repsol (25%), 310 km off the coast of the State of Sao Paulo, at a depth of 5,000 metres beneath over 2,000 metres of water.

In 2009 Repsol and its partners in the block will continue to carry out the activities and investments necessary in order to more accurately determine the exact size of the Carioca and Guara fields and to define the future development plan. Two additional wells are to be drilled in 2009 (one of these proved positive in April 2009) and a production test will be conducted in the Guara well. Development of these deepwater projects in the Santos basin is one of the ten key growth initiatives included by Repsol in its 2008–2012 Strategic Plan.

Two other major discoveries were also made in Brazil at the beginning of 2009 in deep waters of the Santos basin in the Piracuca and Panoramix fields.

In Peru, a significant exploration discovery was made in January 2008 in block 57, located in the Cuzco province at the Kinteroni exploration well. Repsol, with a 53.84% stake, is the operator of the consortium that will exploit the field (Petrobras holds the remaining 46.16%). Preliminary exploration tests registered flows of one million cubic metres of gas per day (0.365 bcm/year) and 198 cubic metres per day of associated hydrocarbon liquids (72,270 m³/year). In order to define a commercial and development plan for this discovery, a 3D seismic survey will be conducted on the Kinteroni structure and several delineation and exploration wells will be drilled in the block.

All these activities will enable a more accurate assessment of the resources discovered, which are initially estimated at around 2 TCF (56 bcm). Kinteroni, next to the Camisea gas field in blocks 56 and 88 in which Repsol holds a 10% stake, will supply gas to one of the company’s major Liquefied Natural Gas (LNG) projects: Peru LNG.

In Algeria, two new exploration discoveries were made with the...
During 2008, there was an increase in hydrocarbons production mainly in Peru, Trinidad and Tobago and the United States.

AZSE-2 (Azrafil SE) and KLS-1 (Kahlouche S) wells in block 351c-352c (Reggane Nord), located in the Reggane basin. Repsol, with a 33.75% stake, is the operator of this block, which covers a total surface area of 4,682 km². Situated in the south-central part of the Algerian Sahara desert, the block covers an extensive area of 4,682 km². This discovery is in addition to another four made in the same block, the first in 2005 (Reggane 5 well), another two in 2006 (with the Sali 1 and Kahlouche-2 wells) and the last in 2007 (with the Reggane 6 well). Another two exploration discoveries were made in this North African country in the M’Sari Akabi block with the TGFO-1 and OTHL-2 (Oued Talha) wells. Repsol holds a 33.75% stake and is the operator of this block, which covers a total surface area of 8,103 km². At the beginning of 2009, a discovery was announced in the Gassi Chergui area with the AL-2 well in the Berkine basin. In Colombia, three new discoveries were made. Two of them were with the Cosecha Z and Cosecha Y Norte wells in the Cosecha block in the Llanos Orientales basin, in which Repsol holds a 25% stake and Oxy, the operator, holds the remaining 75%. The Cosecha block has a surface area of 2,856 km². The third discovery was made with the Capachos Sur 1 well, in the Capachos block in which Repsol is the operator with a 100% stake.

In Libya, a new exploration discovery was made at the beginning of 2008 in the prolific NC-186 block with the Y1 well. With a 32% stake, Repsol is the operator of this 4,295 km² block in the Murzuq basin. In the deep waters of the US Gulf of Mexico, a major oil discovery was made at the beginning of 2009 at the Buckskin well located in the Keathley Canyon area, 300 kilometres off the coast of Houston. Repsol is the exploration operator of the consortium which discovered this new field, in which a hydrocarbon column of around 100 metres has been discovered. The new well is 10,000 metres deep beneath 2,000 metres of water.

Production
Repso’s hydrocarbon production in 2008 stood at 332,721 barrels of oil equivalent per day, 14.6% less than in 2007. Excluding contractual variations in Dubai (5,000 boepd), Venezuela (3,200 boepd) and Bolivia (47,600 boepd), production levels were similar to those of the previous year. Production increased, particularly in the United States (1,200 boepd), thanks to the start of production of new wells in the Shenzi field, in Trinidad and Tobago (3,900 boepd); and in Peru (1,900 boepd), where the Pagoreni field in block 56 commenced production.

Investments
In 2008 the Upstream business area invested a total of €1.184 billion, 18% less than the 1.439 billion invested in 2007. These expenditures were mainly allocated to development of the Shenzi field in the United States and exploration activities in North Africa, Brazil and the Gulf of Mexico.
The Upstream area of the 2008–2012 Strategic Plan includes all Repsol’s oil and natural gas exploration and production activities outside YPF. Management of the asset portfolio focuses on profitable, diversified, sustainable growth committed to safety and the environment. This strategy is based on growth in production and reserves, geographical diversification of the business, operative excellence and profitability, with an increase in average unit margins.

In coming years Repsol’s Upstream business area will focus on organic growth in three main areas: deep waters of the Gulf of Mexico, in the United States, and Brazil; North Africa; and northern Latin America and Trinidad and Tobago. Major strides were made in 2008 and the first months of 2009 in the consolidation process of the Upstream business in these key regions for the company. Repsol was awarded 32 new exploration blocks in the Gulf of Mexico in 2008 and a further 20 in 2009. An important discovery was made in the Santos basin (Brazil) with the Guara well in 2008 and Iguazu in 2009, while production commenced at the I/R field (Libya) and, in 2009, in Shenzi (United States), among other milestones. In 2008 the company participated in three of the world’s five largest hydrocarbon discoveries and, to reinforce the objective of geographical diversification and growth in OECD countries, the first steps were taken towards commencing operations in Canada and Norway. In the first quarter of 2009, Repsol had already announced eight discoveries in the five key regions identified for exploration in the 2008–2012 Strategic Plan.
At the close of the year, Repsol’s Upstream area was participating, either directly or through its subsidiaries, in oil and gas exploration and production blocks in 23 countries and was the operator in 19 of these blocks. Repsol holds a stake in the Russian exploration and production company West Siberian Resources (WSR) and commenced exploration operations in Norway and Canada, taking the Upstream area’s presence to 26 countries.

Reserves
As of 31 December 2008, the Repsol Group’s proved reserves amounted to 2.21 billion barrels of oil equivalent, 60% of which correspond to proved developed reserves.

Proved reserves of liquids totalled 902 million barrels, 41% of the total of reserves. Gas reserves amounted to 7.34 trillion cubic feet and represent 59% of Repsol YPF’s proved reserves.

The Repsol Group added 154 million boe in 2008. The additions of Argentina (75 million boe), Bolivia (21 million boe), Algeria (19 million boe) and Libya (18 million boe) were particularly significant.

The Group’s reserves are mainly located in Argentina (25%), and Trinidad and Tobago (22%). 17% is located in the rest of the South American countries (Venezuela, Peru, Bolivia, Brazil, Ecuador and Colombia), 7% in North Africa (Algeria and Libya) and the remaining 2% in the Gulf of Mexico.

<table>
<thead>
<tr>
<th>UPSTREAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2007</strong></td>
</tr>
<tr>
<td><strong>Millions of euros</strong></td>
</tr>
<tr>
<td><strong>1 q</strong></td>
</tr>
<tr>
<td>Operating income</td>
</tr>
<tr>
<td>North America and Brazil</td>
</tr>
<tr>
<td>North Africa</td>
</tr>
<tr>
<td>Rest of the world</td>
</tr>
<tr>
<td>Adjustments</td>
</tr>
<tr>
<td>Ebitda</td>
</tr>
<tr>
<td>North America and Brazil</td>
</tr>
<tr>
<td>North Africa</td>
</tr>
<tr>
<td>Rest of the world</td>
</tr>
<tr>
<td>Operating revenue</td>
</tr>
<tr>
<td>North America and Brazil</td>
</tr>
<tr>
<td>North Africa</td>
</tr>
<tr>
<td>Rest of the world</td>
</tr>
<tr>
<td>Inversiones</td>
</tr>
<tr>
<td>North America and Brazil</td>
</tr>
<tr>
<td>North Africa</td>
</tr>
<tr>
<td>Rest of the world</td>
</tr>
</tbody>
</table>

Repsol’s Upstream area is currently present in 26 countries on four continents.

Repsol exploration work in Libya.
In January 2008 an important gas discovery was made in Peru in block 57 with the Kinteroni well.

In February 2008 exploration well Y1 in block NC-186 in Libya’s Murzuq basin was completed with a positive result.

February also saw an exploration discovery with the Capachos Sur 1 well in Colombia.

Repsol was awarded 32 new exploration blocks in Exploration Round 206 carried out in the Gulf of Mexico at the beginning of 2008.

In February 2008 production commenced at the second production well of the Shenzi-Genghis Khan (Manifold K, K1-2) megafield, an extension of Shenzi, through the neighbouring Marco Polo platform.

In the first quarter of 2008, Repsol obtained 93 exploration blocks in Alaska in the Chukchi Sea, in an area with a high potential of resources to be discovered.

In the second quarter of 2008 an important discovery was made in Brazilian deep waters, in block BM-S-9, in the Santos basin, with the Guara well.

The I/R well in Libya commenced production on 3 June 2008. Eleven wells were already in production in this area at 31 December 2008.

On 17 July, Repsol and the Libyan national oil company NOC signed a new agreement extending the oil exploration and production contracts in blocks NC-115 and NC-186 in Libya until 2032.

Production at block 56 (Pagoreni field) in Peru commenced on 10 September. This block, together with block 88, in production since 2004 and in which Repsol also holds a 10% stake, make up the Camisea field, which forms part of the Peru LNG project. This will enable natural gas to be supplied to the future Pampa Melchorita liquefaction plant.

Also in September 2008, the agreement for the sale of Repsol YPF Ecuador S.A.’s 25% stake in block 14 was signed with the company PetroOriental S.A. (CNPC).

On 23 September 2008 an AMI (Area of Mutual Interest Agreement) was signed with the Norwegian company Det Norske Oljeselskap ASA (‘Det Norske’) for the joint study of the areas available in Exploration Round 20 in Norway. On 7 November a joint bid was submitted for four blocks and another for 100% of another three blocks. At the end of 2008, Repsol obtained an exploration area in Norway.

In the fourth quarter of 2008, Repsol was awarded exploration rights for three blocks in the offshore area of Newfoundland (Terranova) and Labrador, in Canada.

The Teak Blow Down gas compression project for domestic sales was completed at the end of 2008, boosting gas production by 700,000 m3/day as of January 2009.

At the end of 2008, the national Libyan company NOC approved the development plans submitted for the “J” and “K” fields in block NC-186 (Repsol, Total, OMV and StatoilHydro), which will enable production to commence.

At the beginning of 2009, Repsol commenced production of oil and gas in the Shenzi field in deep waters of the US Gulf of Mexico, on a platform located in the Green Canyon 653 block.

At the end of March 2009, Repsol discovered gas in the Tangiers-Larache exploration zone, 40 kilometres off the coast of Morocco.

On 1 April 2009 a new gas discovery in Algeria was announced, the second find in the Ahnet basin and Repsol’s eighth discovery in 2009.

The third discovery in block BM-S-9, in the Brazilian Santos basin with the Iguazu well, was announced on 15 April 2009.

At the beginning of 2009, the Panoramix and Piracuca wells, in the Brazilian Santos basin, were completed with a positive result.

In February 2009 Repsol successfully commenced its operated drilling campaign in the deep waters of the Gulf of Mexico with the announcement of a discovery with the Bueckskin well.

In March 2009 Repsol reached a preliminary agreement with the Government of Ecuador on the terms of the company’s presence in the country which will enable it to increase the value of its assets and provides for a reduction in the tax on excess profits from 93% to 70%.

In March 2009 Repsol commenced production of oil and gas in the Shahenzi field in deep waters of the US Gulf of Mexico, on a platform located in the Green Canyon 653 block.
At the close of 2008, Repsol held mineral rights on 393 blocks in Spain: 327 of these blocks are exploration blocks, totalling a net surface area of 243,113 km². In 2008, Repsol completed 38 exploration drillings, ten of which proved positive. At the end of the year, ten exploration wells were in the drilling phase.

Spain
At the close of 2008, Repsol held mineral rights on 32 blocks in Spain: 20 exploration blocks, with a net area of 9,722 km², and 12 exploitation blocks totalling a net area of 929 km². In 2008, Repsol produced a total of 0.7 Mboe (around 1,968 boepd) through its facilities in Casablanca, Rodaballo, and Boqueron (Mediterranean Sea) and Gaviota (Cantabrian Sea). Proved net oil reserves at year-end were estimated at 2.4 Mboe.

The Royal Decree on the Awarding of Research Permits for Canary Island permits 1-9 remains suspended as a result of a Supreme Court ruling on an error in the wording of the text of this decree. A new decree has been drafted by the Ministry for Industry to correct this error and is currently being processed. The first exploratory drilling, located at water depths of between 1,000-1,500 m, is ready to begin preparation for drilling operations as soon as the corresponding authorization is received. No exploratory drillings were carried out in Spain in 2008, although 1,023 km² of 3D seismic were acquired.
Saudi Arabia
As of 31 December 2008, Repsol YPF held mineral rights to an exploration block (block C) in the country’s Rub’ Al’ Khali basin, with a net area of 15,420 km². On 7 March 2004, Repsol signed a contract with Saudi Arabia’s Ministry of Petroleum and Mineral Resources granting exploration of non-associated natural gas in block C to the consortium formed by Repsol (30%), Eni (50%) and the operator) and Saudi Aramco (20%). In 2007 the drilling of the Ubaylah 2 well was completed. In 2008 drilling of two wells was concluded with a negative result and the remainder of the wells will be completed in 2009.

In November 2008, the partners decided to carry out a 3,000 km² 3D seismic survey in order to reevaluate the exploratory potential of the northern sector of the block and define the conditions for the fourth exploration well to be performed in block C. To complete this campaign an 18-month extension of the contract has been requested.

Algeria
At the close of 2008, Repsol held mineral rights on 5 blocks in Algeria: 3 exploration blocks, with a net area of 7,289 km², and 2 development blocks with a net area of 581 km². The year’s net production was 1.8 Mboe/d of liquids and 21.2 bscf of natural gas, with an equivalent net production of 5.5 Mboe (15,138 boepd), originating mainly from the TFT block (operated jointly by Sonatrach and Total) and, to a lesser extent, from the Issaouane block operated by Repsol. Net proved reserves of liquids and natural gas were estimated at 42.3 Mboe at the end of the year.

Over the year 8 exploration wells were completed, 4 of which gave positive results (2 in the Reggane block, AZSE-2 and KLS-1 wells, announced in 2009. Repsol holds a 33.75% stake and is the operator of this block which has a surface area of 8,103 km².

In 2008 197 km of 2D seismic and 870 km² of 3D seismic were acquired in Algeria.

2008 Milestones
- Two new exploration discoveries were made in block 351c-352c (Reggane Nord) in the Reggane basin with the AZSE-2 (Azrafil SE) and KLS-1 (Kahlouche S) wells, the second of which was announced in 2009. With a 33.75% stake, Repsol is the operator of the consortium, together with the national Algerian company Sonatrach (35%), Germany’s RWE Dea (22.5%) and Italy’s Edison (18.75%). Located in the central-southern part of the Algerian Sahara, the block covers an area of 4,682 km². This discovery is in addition to four other discoveries made in the same block, the first in 2005 (Reggane 5 well), another two in 2006 (Sali 1 and Kahlouche-2) and the fourth in 2007 (Reggane 6 well). Sonatrach is expected to declare Reggane commercially viable in 2009, which will enable development of this important gas project to commence, a project which is included in the 2008-2012 Strategic Plan as one of the company’s key initiatives.

- Two further exploration discoveries were made in the M’Sari Akabli block, TGFO-1 and OTLH-2 wells (Oued Talha), announced in 2009. Repsol holds a 33.75% stake and is the operator of this block which has a surface area of 8,103 km².

At the beginning of 2009 three exploration discoveries were announced in Algeria, in the Reggane block (KL5-1), the adjacent Ahnet basin (OTLH-2) and in the Cassi Chergui area (AL-2).

A new gas discovery in Algeria was announced on 1 April 2009, the second find in the Ahnet basin and Repsol’s eighth discovery in 2009.
Bolivia

As of 31 December 2008, Repsol held mineral rights on 31 blocks in Bolivia: 6 exploration blocks, with a net area of 7,022 km², and 25 exploitation blocks, with a net area of 1,486 km², located in the Beni, Pie de Monte, Subandino Sur and Subandino Norte basins.

The year’s net production was 2.4 Mmbbl of oil, including condensates and liquids separated from natural gas, and 35.4 bscf of natural gas. Total equivalent net production was 11.9 Mboe (32,425 boepd), concentrated mainly in the fields operated by Andina and in the Mamore block. Proven hydrocarbon reserves corresponding to Repsol at the close of the year were 91.8 Mboe. Analysis of the data and information generated during the drilling and formation tests of the Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.

Huacaya discovery commenced in 2008 in order to select the best technical-economic alternative for assessing the discovery and establishing the future development plan. The Huacaya X-1 exploratory discovery was made at the end of 2007. The declaration of commercial viability for the area corresponding to the structure discovered has already been presented to the competent body. The remaining exploration area was returned to YPFB.

Work continued in 2008 on full development of the important Margarita gas and condensate field, located in the Caipipendi block, to the north of the Tarja province. The contract for this block, which is operated by a consortium formed by Repsol (37.5%) and the operator, BG (37.5%) and PAE (25%), came into effect on 2 May 2007 and is for a term of 24 years.

2008 Milestones

• In May 2008 an agreement was signed with the Bolivian company YPFB for the sale of a 1.08% stake in Andina. Following this transaction, the shareholder structure of Andina is broken down into YPFB (51.08%) and Repsol E&P Bolivia (48.92%).

In addition, the Shareholders Agreement was signed in October 2008 which will regulate the administration, operation and government of the company. This agreement came into force in November 2008.
At the end of 2008, Repsol held mineral rights on an offshore exploration block off Cuba that covers six exploration areas (N25/26/27/28/29/36), plus area 35, awarded at the beginning of 2005. The areas total a net area of 4,512 km² and are all included under the same contract.

No exploration wells were drilled in Cuba in 2008.

Cuba

At the end of 2008, Repsol held mineral rights on 2 development blocks in Canada with a net area of 4,478 km², and 2 exploitation blocks (Capachos and Cravo Norte), with a net area of 268 km². The year’s net production was 2.6 Mbbl (7,218 bopd) of oil. Net proved reserves of this hydrocarbon at the close of the year were estimated at 4.4 Mbbl.

No exploration wells were completed in Ecuador in 2007.

On 4 October 2007, President Rafael Correa signed an Executive Decree whereby the state’s share in excess revenues was increased from 50% to 99%.

In March 2009 Repsol reached a significant agreement with the Government of Ecuador which will enable the company to establish a stable contractual framework within a year. This agreement extends the exploitation period of block 16 by six years, from 2012 to 2018 and establishes a transitory period of one year during which the Government of Ecuador will reduce the tax on excess profits from 99% to 70%.

During this one-year period both parties will negotiate a long-term services provision contract which will govern Repsol’s activities in this country.

2008 Milestones

• In 2008 three new discoveries were made in Colombia, two with the Cosecha Z and Cosecha Y Norte wells, in the Cosecha block in the Llanos Orientales basin, in which Repsol has a 25% stake and Oxy, the operator, holds the remaining 75%. The Cosecha block has a surface area of 2,866 km². The third discovery was made with the Capachos Sur 1 well, in the Capachos block in which, with a 100% stake, Repsol is the operator.

• In April 2008, the Capachos Sur field in the Capachos block commenced production. Repsol owns 100% of this 259 km² block situated in the Llanos basin.

In 2008 three new discoveries were made in Colombia, two with the Cosecha Z and Cosecha Y Norte wells, in the Cosecha block in the Llanos Orientales basin, in which Repsol has a 25% stake and Oxy, the operator, holds the remaining 75%. The Cosecha block has a surface area of 2,866 km². The third discovery was made with the Capachos Sur 1 well, in the Capachos block in which, with a 100% stake, Repsol is the operator.

• In April 2008, the Capachos Sur field in the Capachos block commenced production. Repsol owns 100% of this 259 km² block situated in the Llanos basin.

In 2008 three new discoveries were made in Colombia, two with the Cosecha Z and Cosecha Y Norte wells, in the Cosecha block in the Llanos Orientales basin, in which Repsol has a 25% stake and Oxy, the operator, holds the remaining 75%. The Cosecha block has a surface area of 2,866 km². The third discovery was made with the Capachos Sur 1 well, in the Capachos block in which, with a 100% stake, Repsol is the operator.

• In April 2008, the Capachos Sur field in the Capachos block commenced production. Repsol owns 100% of this 259 km² block situated in the Llanos basin.

Ecuador

At the end of 2008, Repsol held mineral rights on 2 development blocks in Ecuador with a net area of 770 km². The year’s net production was 5.2 Mbbl (14,135 bopd) of oil, the majority obtained from block 16. Net proved oil reserves at the end of the year were estimated at 11.2 Mbbl.

No exploration wells were completed in Ecuador in 2007.

On 4 October 2007, President Rafael Correa signed an Executive Decree whereby the state’s share in excess revenues was increased from 50% to 99%.

In March 2009 Repsol reached a significant agreement with the Government of Ecuador which will enable the company to establish a stable contractual framework within a year. This agreement extends the exploitation period of block 16 by six years, from 2012 to 2018 and establishes a transitory period of one year during which the Government of Ecuador will reduce the tax on excess profits from 99% to 70%.

During this one-year period both parties will negotiate a long-term services provision contract which will govern Repsol’s activities in this country.

2008 Milestones

• In 2008 three new discoveries were made in Colombia, two with the Cosecha Z and Cosecha Y Norte wells, in the Cosecha block in the Llanos Orientales basin, in which Repsol has a 25% stake and Oxy, the operator, holds the remaining 75%. The Cosecha block has a surface area of 2,866 km². The third discovery was made with the Capachos Sur 1 well, in the Capachos block in which, with a 100% stake, Repsol is the operator.

• In April 2008, the Capachos Sur field in the Capachos block commenced production. Repsol owns 100% of this 259 km² block situated in the Llanos basin.
which will be of great help in enhancing its presence in the Gulf of Mexico.

In July 2007 Repsol reached an agreement in Alaska with the companies Shell Offshore Inc. and Eni Petroleum US LLC to explore 71 adjacent offshore blocks in the Beaufort Sea, just to the north of the prolific Prudhoe Bay and the Kuparuk oil fields. Repsol holds a 20% stake in these blocks.

**2008 Milestones**
- The second production well in the western area of the Shenzi field (previously known as Genghis Khan) commenced production in February 2008 through the neighbouring Marco Polo platform. Shenzi is one of the largest discoveries to date in this region’s deep waters.
- In Exploration Round 206, carried out in the Gulf of Mexico at the beginning of 2008, Repsol obtained 32 new exploration blocks which, together with those achieved in recent years, create a sound portfolio of exploration projects. The company’s participation in these rounds forms part of its strategy of diversification and growth in OECD countries.
- In the first quarter of 2008, Repsol obtained 93 blocks in Alaska in Exploration Round 193. These blocks are located in the Chukchi Sea and cover an area of 2,139 km². The company’s objective is to create an extensive project portfolio in this almost unexplored area with a high potential of undiscovered resources.
- A major oil discovery was made in early 2009 in deep waters of the Gulf of Mexico with the Buckskin well in the Keathley Canyon area, 300 kilometres off the coast of Houston. Repsol is the exploration operator of this new field where a hydrocarbon column of around 100 metres has been discovered which it is estimated could be even greater at the top of the structure. The new well is at a depth of 10,000 metres beneath 2,000 metres of water.
- In March 2009, ahead of schedule, Repsol commenced oil and gas production at the Shenzi field with its own platform. The company holds a 28% share in this unified field. The production platform was installed in the summer of 2008.
- Repsol obtained 20 new exploration blocks in Exploration Round 208, held in March 2009.
At the close of 2008, Repsol held mineral rights on an offshore exploration block off Guyana with a net area of 8,625 km². No exploration wells were drilled in 2008, but 1,715 km² of 3D seismic were acquired.

In September 2007, the International Court of Maritime Laws issued its ruling on the litigation regarding the border issue of the Georgetown block (in which Repsol holds a 75% share) between Guyana and Surinam. According to the ruling, 100% of this block is located in territorial waters of Guyana.

As of 31 December 2008, Repsol held mineral rights on 2 exploration blocks totalling a net area of 14,638 km². An exploration well in the offshore Mehr block was completed in 2008 with a negative result (BKH-4N).

In 2004, Repsol and Shell signed an agreement with the National Iranian Oil Company (NIOC) to develop the integrated LNG project, Persian LNG. The final decision regarding investment in the liquefaction plant and commencement of exploration and development operations has not yet been taken.

With regards to the Band E Karkheh-2 well, located in the onshore Mehr block discovered in 2005, NIOC announced its commercial viability in January 2007. This was officially confirmed in June 2007. The viability of developing the field is currently being analysed.

In the second half of 2007 the reprocessing of the 1,100 km of 2D seismic acquired in the block between 2002 and 2005 started. A geological survey of the block and the adjacent area in the north of the Caspian Sea was also commenced. In 2008 the project partners requested a new extension of the contract for a two-year period. Drilling of the first well is expected to be carried out in 2010 or 2011. In 2009 a decision will be taken regarding the most suitable site and drilling equipment for this operation.
Libya

At the end of 2008 Repsol held mineral rights on 15 blocks in Libya. 14 of these are exploration blocks (including block NC-186 which, although officially classified as an exploration block, has fields in production) with a net area of 58,224 km². The only exploitation block (NC-115) has a net area of 874 km². The year’s net production was 18.4 Mbbl of oil (50,197 bopd), obtained from blocks NC-115 (El-Sharara field) and NC-186, in the Murzuq basin. In 2008 total production of the two blocks in production in Libya amounted to 302,000 bopd. Net proved reserves of oil at the close of the year were estimated at 115.9 Mbbl.

2008 Milestones

- At the beginning of 2008 a new discovery was made in the prolific NC-186 block with the Y-1 well. With a surface area of 4,295 km², this block is located in the Murzuq basin and is operated by Repsol through the company’s 32% stake.
- In June 2008 production commenced in blocks NC-186 and NC-115 in the I/R field, also located in the Murzuq basin. Repsol holds stakes in both of these blocks. Discovered in 2006, this field is one of the most important oil finds in the company’s history and the most important in Libya in the last decade. With a production potential of 90,000 barrels per day, development of this field will enable the company to significantly increase reserves and production in this country. The I/R field is one of the 10 key projects defined in Repsol’s 2008-2012 Strategic Plan.
- On 17 July, Repsol and NOC, Libya’s national oil company, signed a new agreement extending the oil exploration and production contracts for blocks NC-115 and NC-186 until 2032. The new agreement extends the term of the contracts for these blocks in the Murzuq basin, with 15 additional years in the contract for the first block and 5 or 9 years, depending on the fields, for the second block. The agreement guarantees Repsol exploitation of the numerous resources discovered in both blocks. Repsol and its partners also extended their exploration licenses for these blocks by 5 years, which may increase oil production and reserves.
- At the end of 2008 NOC approved the development plans submitted for the “J” and “K” fields in block NC-186 (Repsol, Total, OMV and StatoilHydro). The development plan for field “E” in block NC-200 (Repsol and OMV) is expected to be approved in the first half of 2009, thereby enabling production to commence in these three fields.

Liberia

As of 31 December 2008 Repsol held mineral rights in Liberia on 3 exploration blocks (LB 15, LB 16 and LB 17) with a net area of 1,711 km². In the first international bidding process carried out by the Liberian government in 2005, Repsol was awarded the exploration and development rights on block 16, located in this African country’s territorial waters. In the summer of 2004 the company had already obtained the rights to block 17 through direct negotiation. This block is adjacent to block 16 and borders the blocks previously signed in territorial waters of Sierra Leone (blocks 6 and 7).

At the end of 2008 Repsol held mineral rights on 15 blocks in Libya. 14 of these are exploration blocks (including block NC-186 which, although officially classified as an exploration block, has fields in production) with a net area of 58,224 km². The only exploitation block (NC-115) has a net area of 874 km². The year’s net production was 18.4 Mbbl of oil (50,197 bopd), obtained from blocks NC-115 (El-Sharara field) and NC-186, in the Murzuq basin. In 2008 total production of the two blocks in production in Libya amounted to 302,000 bopd. Net proved reserves of oil at the close of the year were estimated at 115.9 Mbbl.

2008 Milestones

- At the beginning of 2008 a new discovery was made in the prolific NC-186 block with the Y-1 well. With a surface area of 4,295 km², this block is located in the Murzuq basin and is operated by Repsol through the company’s 32% stake.
- In June 2008 production commenced in blocks NC-186 and NC-115 in the I/R field, also located in the Murzuq basin. Repsol holds stakes in both of these blocks. Discovered in 2006, this field is one of the most important oil finds in the company’s history and the most important in Libya in the last decade. With a production potential of 90,000 barrels per day, development of this field will enable the company to significantly increase reserves and production in this country. The I/R field is one of the 10 key projects defined in Repsol’s 2008-2012 Strategic Plan.
- On 17 July, Repsol and NOC, Libya’s national oil company, signed a new agreement extending the oil exploration and production contracts for blocks NC-115 and NC-186 until 2032. The new agreement extends the term of the contracts for these blocks in the Murzuq basin, with 15 additional years in the contract for the first block and 5 or 9 years, depending on the fields, for the second block. The agreement guarantees Repsol exploitation of the numerous resources discovered in both blocks. Repsol and its partners also extended their exploration licenses for these blocks by 5 years, which may increase oil production and reserves.
- At the end of 2008 NOC approved the development plans submitted for the “J” and “K” fields in block NC-186 (Repsol, Total, OMV and StatoilHydro). The development plan for field “E” in block NC-200 (Repsol and OMV) is expected to be approved in the first half of 2009, thereby enabling production to commence in these three fields.

Morocco

At the close of 2008 Repsol held mineral rights on 3 exploration blocks in Morocco located in the Rharb basin and totalling a net area of 4,396 km². No exploration wells were drilled in 2008.

2008 Milestones

- At the end of March 2009, Repsol discovered gas in the Tangiers-Larache exploration area, 40 kilometres off the coast of Morocco, with the Anchois well. Repsol has a 48% interest and is the operator of the Tangiers-Larache 1-2-3 exploration blocks. In 2008 preparations were made for this well, which was commenced in January 2009.
Mauritania
As of 31 December 2008 Repsol held mineral rights in Mauritania on 2 exploration blocks with a net area of 45,439 km². In 2005 the Mauritanian authorities awarded Repsol exploration blocks TA-9 and TA-10 located in the Taoudenni basin. The company is the operator of these blocks and controls a 70% share, with RWE Dea holding the remaining 30%. No exploration wells were drilled in 2008, but 1,194 km of 2D seismic were acquired.

Mexico
At the close of 2008 Repsol held a multiple services contract for the Reynosa-Monterrey development block located in the Burgos basin in the north of the country. The company took charge of this operation in March 2004. The area already had 16 gas fields that had been discovered and were in production, and the aim was to substantially increase output of these fields through additional development investment. The contract was awarded in 2003 as part of the first international tender held by the Mexican national company Pemex for participation in gas field development and production activities in the country. With this contract Repsol became the first international company to participate in hydrocarbon development and exploitation activities in Mexico. When Repsol took over the operation, production was 10.5 Mscfd. At the end of 2004 a level of 18.2 Mscfd was reached and a year later production of 39.6 Mscfd was achieved. In 2006 the average was 37.8 Mscfd and in 2008 the figure stood at 44.6 Mscfd. In January 2008 a maximum production of 55 Mscfd was obtained, five times the amount recorded for 2004.

In five years of activity in this region, Repsol has drilled 57 gas wells with an average depth of 2,900 metres, acquired 754 km² of 3D seismic and 137 km of pipelines and constructed 44 km of access roads.

Norway
In September 2008, in line with the company’s strategy of diversification and growth in OECD countries, an AMI (Area of Mutual Interest) was signed with the Norwegian company Det Norske Olie & Gass (Det Norske) for the joint study of the areas available in Exploration Round 20. Repsol holds a 40% interest in this project, with Det Norske holding the remaining 60%. In November a joint bid was submitted for four blocks. Repsol also presented a bid for 100% of another three blocks. The result of this round is expected to be announced by mid 2009.

Also in Norway, in October 2008 Repsol, together with Det Norske, Bayerngas and Svenska, submitted a bid for four blocks located between the Nyord and Draugen fields (Norwegian Sea), in the 2008 APA (Award of Predefined Areas) Round. Repsol obtained one exploration area.
At 31 December 2008, Repsol held mineral rights on 8 blocks in Peru: 6 exploration blocks, with a net area of 31,395 km², and 2 development blocks, with a net area of 202 km². Net production of hydrocarbons in 2008 was 3.2 Mboe (8,722 boepd), from block 88 (Camisea field). Net production of crude oil, including condensates and liquids, was 1.5 Mbbl and natural gas 9.3 bscf. Net proved reserves of crude oil and gas were estimated at 113.5 Mboe at the close of the year. 589 km of 2D seismic were acquired in 2008.

In 2008 work continued on schedule for complete development of the Camisea oil field (blocks 56 and 88) in which Repsol holds a 10% stake. These blocks will supply natural gas to the future Pampa Melchorita LNG plant which forms part of the Peru LNG project. This facility, in which Repsol holds a 20% interest, is expected to be operative in 2010. There are two fields in block 88, San Martin (in production since 2004) and Casiriari (currently in production) and the Pagoreni field in block 56 which commenced production in September 2008.

**2008 Milestones**

- In January 2008 a significant exploration discovery was made in Peru in block 57, located in the Cuzco province, with the Kinteroni exploration well. Repsol is the operator of the consortium which will exploit this field, and holds a stake of 53.84%. The remaining 46.16% is owned by Petrobras. Preliminary production tests showed flows of one million cubic metres of gas per day (0.365 bcm/year) and 198 cubic meters per day of associated liquid hydrocarbons (72,270 cubic metres/year). In order to define a commercial and development plan for this discovery, a 3D seismic campaign will be conducted at the Kinteroni structure and several delineation and exploration wells will be drilled in the block. All these activities will enable a more accurate assessment of the resources discovered, which are initially estimated at around 2 TCF (36 bcm).

- On 10 September production commenced at block 56 (Pagoreni). Together, this block and block 88, in which Repsol also controls 10%, make up the Camisea field.

**Russia**

In February 2006 Repsol reached a strategic agreement with West Siberian Resources (WSR) through which it acquired a 10% stake in the company. The agreement includes an industrial alliance for joint development of hydrocarbon exploration and production projects in Russia, where WSR holds a significant portfolio of assets. The alliance with this company enabled Repsol to enter the hydrocarbon sector in Russia and represents an excellent opportunity to gain presence in this region.

In December 2007 WSR signed an MOU (Memorandum of Understanding) to merge with the Russian company Alliance Oil, whose main assets are the Khavarsk refinery, which has a capacity of 4 Mta, 156 service stations in the Russian Far East, storage terminals and two production licenses in Kazakhstan and Tatarstan, with 100 Mbbl of proved and probable reserves. The merger process was completed in 2008. During the year the integrated company produced 48,000 bopd and refined around 66,500 bopd. Total proved and probable reserves amounted to 489 Mbbl at the close of 2008.

**Sierra Leone**

At the end of 2008, Repsol held mineral rights in Sierra Leone on 2 offshore exploration blocks totalling a net area of 2,625 km². The company was awarded these blocks (SL-6 and SL-7), in which it holds a 25% stake, in January 2003 following a bidding round. Its partners are Anadarko (50%) and Woodside (25%). The water depth of the blocks ranges from 100 to 3,800 metres. No exploration wells were drilled in 2008.
Suriname
At the end of 2008 Repsol held mineral rights in this country on one exploration block with a net area of 5,574 km². Repsol YPF Surinam is the operator of the block with a 40% stake. Its partners are Noble Energy Suriname (30%), Noble Energy Caribbean (15%) and Petro Hunt Suriname (15%). In 2008 the West Tapir-1 well was drilled, where findings showed the amounts of hydrocarbons to be insufficient to be commercially viable.

Trinidad and Tobago
At the close of 2008 Repsol held mineral rights on 7 offshore exploitation blocks with a net area of 2,363 km², including 30% of the company bpTT’s offshore exploration and production assets in Trinidad and Tobago, through its stake in the company BPRY. The year’s net production was 6.5 Mtbl of liquids and 274.9 bscf of natural gas, with net equivalent production of 55.4 Mboe (151,436 boepd). Net proved reserves of oil and natural gas were estimated at 488 Mboe at 31 December 2008. No exploration wells were drilled in the country in 2008. Repsol is one of the two largest private companies in the country in terms of oil and gas production and reserves together with BP with which it shares ownership of the company bpTT. This company, in which Repsol holds a 30% stake, operates an extensive offshore hydrocarbon production area off Trinidad and Tobago and in 2008 reached an average daily production of over 460,000 barrels of oil equivalent. In the fourth quarter of 2007 bbTT’s Mango and Cashmina fields commenced production, providing increased production in 2008 and availability of gas for train 4 of the Atlantic LNG liquefaction plant, in which Repsol holds a 22.22% share.

2008 Milestones
• The Teak Blow Down gas compression project for domestic sales was completed in the fourth quarter of 2008, increasing gas production by 700,000 cubic metres per day as of January 2009.

Venezuela
At 31 December 2008 Repsol held mineral rights in Venezuela on 7 blocks: 2 exploration blocks, with a net area of 659 km², and 5 exploitation blocks, with a net area of 753 km². The year’s net production was 2.7 Mtbl of oil and liquids separated from natural gas, and 60.1 bscf of gas, with an equivalent total of 13.4 Mboe (36,542 boepd), mainly obtained from the Quiriquire, Barrancas, Mene Grande and Yucal Placer blocks. Net proved reserves of liquids and natural gas were estimated at 122.9 Mboe at the close of the year. No exploration wells were drilled in 2008. On 1 April 2008 Repsol and PDVSA agreed on the final conditions for the process of migrating from operative agreements to joint ventures. This agreement reflects the new stakes – PDVSA (60%) and Repsol (40%) – for the Mene Grande and Quiriquire Somero crude oil fields, and for the Quiriquire Profundo gas field – Repsol (60%) and PDVSA (40%). The agreement also establishes a 20-year extension of the Quiriquire and Mene Grande concessions, and establishes an increase in sale prices and the possibility of accessing new business in the country. In May 2007 Repsol signed a Memorandum of Understanding (MOU) with PDVSA, with the conditions for including the Barua and Motatan fields within the Petroquirquire joint venture, in which Repsol YPF holds a 40% stake. At the end of 2008 the agreement was pending approval by the National Assembly of Venezuela. Work continued in 2008 on securing Repsol’s participation in one of the new heavy crude oil projects in the Orinoco Strip and the company continued to collaborate with PDVSA on evaluation of the Junin 7 block.
Liquefied Natural Gas (LNG)

Revenues
Operating revenue from the LNG activity in 2008 was €125 million against the previous year’s €107 million, an increase of 17%. EBITDA increased to €173 million in comparison with €146 million in 2007.

Prices of the main commodities saw an upward trend in the first half of 2008, followed by a decline in the second half of the year. Throughout 2007 and the first part of 2008 natural gas prices increased in all markets due to record crude oil prices, growing demand in both new and established markets, and significant delays in investments. Despite steep prices during this period, demand in large importing markets, such as Spain and Asian countries, did not decline, showing a sharp upward trend in the first half of the year. In the second half of the year, however, the global financial crisis and shrinking demand contributed to reversing this trend with prices falling back to the levels of some years ago.

In the first half of 2008, the average price of Henry Hub, the main reference index for natural gas, was $10.1/MBtu, 36.5% higher than for the same period in 2007. The average for the year as a whole was lower, $8.9/MBtu, an increase of 25.3% over the previous year. It should also be noted that in addition to the high prices in the first half of the year, Asian markets, unlike the European and North American markets, were paying a premium, with prices linked to oil product prices. As a result, the industry diverted shipments from the Pacific and Atlantic basins to this market since it was more profitable.

With regards to the electricity generation market, the average accumulated price of the Spanish electricity pool in 2008 was €64.4/MWh, 63.9% higher than in 2007. This increase is attributable, among other factors, to increased demand, the rise in international commodity prices, and the higher cost of CO₂ emission rights. The trading volume in the Spanish

Quarry used in the Peru LNG project.
The Canaport (Canada) plant will commence operations in mid 2009, enabling a significant increase in the volumes of gas marketed in Canada and north-eastern United States.
The first financing instalment was made in November 2008. Regasification plant
In Spain, Repsol holds a 25% stake in Bahia Bizkaia Gas, S.L. (BBG). This company owns a regasification plant with unloading facilities for LNG tankers of up to 140,000 m³, two 150,000 m³ LNG storage tanks, and a vaporization capacity of 800,000 Nm³/hour. BBG is the operator of this plant which has a regasification capacity of 7 bcm/a, forms part of the Spanish gas system, and is remunerated by the National Energy Commission (Comisión Nacional de la Energía, CNE) by means of tariffs, tolls and fees. The plant is located in the harbour of Bilbao and has three other partners (BP, EVE and Iberdrola) each holding a 25% stake. Expansion of this facility is currently being appraised. This would involve the construction of a third tank, also with a 150,000 m³ capacity, and the addition of a further 400,000 Nm³/hour regasification capacity. In 2008, the regasification plant had an availability rate of 96% and a load factor of over 68%, both figures higher than those for 2007 and the average in Spain, where the average load factor is 52%.

Repsol also holds a 25% stake in Bahia de Bizkaia Electricidad, S.L. (BBE), a company which owns a combined cycle power plant with an installed capacity of 800 MWe. Electricity generated at this plant is fed to the grid for residential, major initiatives envisioned in the 2008-2012 Strategic Plan and a key project for the company’s growth. Repsol has been involved in this project, in which it holds a 20% stake, since 2005, in partnership with Hunt Oil (50%), SK (20%) and Marubeni (10%).

Other key initiatives
The Peru LNG project entails the construction and operation of a liquefaction plant in Pampa Melchorita, in which Repsol holds a 20% stake, and a gas pipeline that will connect with the existing pipeline in Ayacucho. Natural gas will be supplied to the plant by the Camisea consortium, in which Repsol also has a stake. The project also includes exclusive marketing by Repsol of the liquefaction plant’s entire production, estimated at over 4.5 million tonnes per year. The term of the gas purchase agreement signed with Peru LNG is 18 years from commencement of commercial operations. In terms of volume, this is the largest LNG acquisition ever made by Repsol.

In September 2007, Repsol was awarded the international public tender offered by the Federal Electricity Commission (Comisión Federal de Electricidad, CFE) to supply LNG to the natural gas terminal at the port of Manzanillo on Mexico’s Pacific coast. The contract envisages the supply of over 67 bcm of LBG to the Mexican plant for a 15-year period. The Manzanillo plant, which will supply gas to CFE’s power plants in the central-western region of Mexico, will be fed with gas from the LNG Peru project.

At the end of 2008, construction work on the onshore part of the liquefaction plant was 68% complete, after advancing 41% over the course of the year. The offshore installations were 72% complete, and the gas pipeline 62% complete. The plant is expected to commence operations in mid-2010. The finance agreements for this project were established in December 2007 and concluded on 26 June 2008.
The Repsol-Gas Natural LNG (Stream) joint venture, in which both companies hold a 50% stake, is one of the world’s leading companies in marketing and transport of LNG.

**LNG transport and marketing**

The Repsol-Gas Natural LNG (Stream) joint venture, in which both companies hold a 50% share, is one of the world’s leading companies in LNG marketing and transport and one of the largest operators in the Atlantic Basin. One of this company’s missions is to ensure optimized management of both partners’ fleet, which comprises a total of 11 LNG tankers. In 2008 Repsol, with management support from Stream, marketed 4.7 bcm of LNG and handled 65 cargoes, mostly from Trinidad and Tobago with Spain as the main destination.

At the close of 2008, Repsol’s fleet consisted of three LNG tankers under time charter agreements, with a total capacity of 416,700 m³. The company also had another fourth tanker, the Sestao-Knutsen, which can carry up to 138,000 m³ of gas and is owned 50%-50% by Repsol and Gas Natural. At the beginning of the second half of 2009, the fleet will be increased with the addition of the new Iberica Knutsen Tanker, which Repsol and Gas Natural will share on a 50-50% basis. Additionally, in early 2007, Repsol signed time charter agreements for four new LNG transport vessels, one from Naviera Elcano and three from Knutsen OAS. The four vessels are scheduled to commence operations in 2010 and are equipped with the latest technology and have a nominal capacity of 173,000 m³ of LNG. The vessels will be used mainly for transporting supplies associated with the contract between Repsol and Peru LNG.

**LNG Milestones**

- In 2008 the final construction work on the Canaport regasification plant, which will supply the north-eastern coast of North America, was carried out.
- In 2008 Repsol commenced marketing activities in the New England area and the north-eastern United States. These markets will expand significantly in 2009 when the Canaport terminal commences operations.
- At the end of 2008, construction work on the onshore part of the Peru LNG liquefaction plant was 68% complete, after advancing 41% over the course of the year.
- The Trinidad and Tobago liquefaction trains increased production in comparison with 2007. Both the volume of LNG marketed and the unit margin also increased.

**Investments**

In 2008 investments in the LNG business totalled €242 million, 37% less than the €387 million invested in 2007. These investments were mainly applied in the construction of the Canaport regasification plant (Canada) and the Peru LNG liquefaction project. This last project was financed with capital contributions from the partners until November 2008, at which time the first external financing disbursement was made.
Revenues
Operating revenue in the Downstream business area was €1.111 billion, down 49.6% in comparison with €2.204 billion in 2007. This drop was mainly due to the following factors:

a) Lower non-recurring income, for a value of €329 million, mostly due to capital gains (€315 million) on the sale of a 10% stake in CLH in 2007.

b) The negative trend of the accounting effect of inventories of raw materials and products (€495 million) in comparison with the positive effect recorded in 2007 (€234 million).

c) Lower income from the Chemical business (€332 million) in comparison with 2007 (€100 million). This drop was mainly the result of a fall in sales (16.4%) due to falling demand and a reduction in stock in the manufacturing and distribution chain; and because of narrower margins, affected by high naphtha prices in the first half of the year and the sale and depreciation of stocks in the second half of the year.

Excluding the effects of non-recurring income and inventory valuations in the last two years, the drop would have been 2.1%, from €1.67 billion in 2007 to 1.622 billion in 2008.

If the contribution of the chemical business in both years is also excluded, income would have increased by 22.7%, from €1.565 billion in 2007 to 1.92 billion in 2008, reflecting the positive performance of the other Downstream businesses (Refining, Marketing, LPG and Trading) in comparison with 2007 (on a like-for-like basis, excluding the impact of non-recurring items and inventories).

Refining
The capacity of Repsol’s five refineries in Spain (Cartagena, A Coruña, Petronor, Puertollano and Tarragona) increased by 30,000 bbl/day in 2008 thanks to the investments made to eliminate bottlenecks. This enabled installed capacity in Spain to increase from 340,000 bbl/day to 370,000 bbl/day. Installed capacity at the La Pampilla refinery (Peru), in which Repsol holds a 51.03% stake and is the operator, is 102,000 bbl/day.

In 2008, Repsol sold its 31.13% stake in the Brazilian Manguinhos refinery, maintaining its 30% holding in the Refap refinery, also in Brazil.

In 2008, the Repsol refineries within the Downstream division processed 39 million tonnes of crude oil, slightly less than the figure for 2007.

The refining margin in Spain in 2008 was $7.4/bbl, 15% higher than in 2007, thanks to the strength of middle distillates and fuel oil and despite weaker petrol performance. The higher dollar/euro exchange rate reduced this advantage and, consequently, the euro/barrel margin in 2008 was fairly similar to the 2007 margin.

The new European specifications on automotive petrols and diesels came into force on 1 January 2009 by which the sulphur content is reduced from 50 ppm to 10 ppm. Repsol’s Spanish refineries completed the necessary investments and are prepared to manufacture according to these new specifications.

With the aim of consolidating its leadership in Spain, Repsol is currently implementing an ambitious investment plan to increase the refining capacity and conversion level, while also enhancing safety, environmental protection and the efficiency of its facilities. The project for expanding the Cartagena refinery and for conversion at the Petronor refinery in Bilbao are key aspects of this plan. Progress was made in 2008 towards developing these projects according to plan.

Marketing
Repsol markets its range of products through an extensive 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. The marketing activity also includes other sales channels and the marketing of a wide range of products such as lubricants, asphalts, coke and derivatives.

Total oil product sales (excluding LPG) amounted to 42.86 million tonnes, 7.75 less than in the previous year. This drop was due to weaker demand and to the sale of the marketing business in Ecuador and Brazil and of the marketing business in Chile in 2007. Sales in Europe were down 2.4% and 29.3% in the rest of the world. With regards to sales...
The capacity of Repsol’s five refineries in Spain (Cartagena, A Coruña, Petronor, Puertollano and Tarragona) increased by 30,000 barrels per day

The following operational magnitudes (refining, marketing and LPG) were achieved:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processed materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude</td>
<td>40.1</td>
<td>39.0</td>
<td>(2.7)</td>
</tr>
<tr>
<td>Other loads and raw</td>
<td>6.5</td>
<td>5.1</td>
<td>(20.8)</td>
</tr>
<tr>
<td>Total</td>
<td>46.6</td>
<td>44.1</td>
<td>(5.2)</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle distillates</td>
<td>20,906</td>
<td>19,994</td>
<td>(4.4)</td>
</tr>
<tr>
<td>Petrols</td>
<td>7,820</td>
<td>7,235</td>
<td>(7.5)</td>
</tr>
<tr>
<td>Fuel oils</td>
<td>7,337</td>
<td>7,308</td>
<td>(0.4)</td>
</tr>
<tr>
<td>LPG</td>
<td>1,017</td>
<td>1,013</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Asphalts</td>
<td>1,741</td>
<td>1,558</td>
<td>10.5</td>
</tr>
<tr>
<td>Lubricants</td>
<td>249</td>
<td>212</td>
<td>(14.8)</td>
</tr>
<tr>
<td>Others (excluding petrochemical)</td>
<td>1,627</td>
<td>1,674</td>
<td>(2.9)</td>
</tr>
<tr>
<td>Total</td>
<td>40,696</td>
<td>38,995</td>
<td>(4.2)</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle distillates</td>
<td>20,906</td>
<td>19,994</td>
<td>(4.4)</td>
</tr>
<tr>
<td>Petrols</td>
<td>7,820</td>
<td>7,235</td>
<td>(7.5)</td>
</tr>
<tr>
<td>Fuel oils</td>
<td>7,337</td>
<td>7,308</td>
<td>(0.4)</td>
</tr>
<tr>
<td>LPG</td>
<td>1,017</td>
<td>1,013</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Asphalts</td>
<td>1,741</td>
<td>1,558</td>
<td>10.5</td>
</tr>
<tr>
<td>Lubricants</td>
<td>249</td>
<td>212</td>
<td>(14.8)</td>
</tr>
<tr>
<td>Others (excluding petrochemical)</td>
<td>1,627</td>
<td>1,674</td>
<td>(2.9)</td>
</tr>
<tr>
<td>Total</td>
<td>40,696</td>
<td>38,995</td>
<td>(4.2)</td>
</tr>
<tr>
<td>Sales of petrol products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas oils/Kerosene</td>
<td>25,853</td>
<td>23,723</td>
<td>(8.2)</td>
</tr>
<tr>
<td>Petrols</td>
<td>7,757</td>
<td>6,775</td>
<td>(12.7)</td>
</tr>
<tr>
<td>Fuel oils</td>
<td>7,397</td>
<td>7,234</td>
<td>(2.2)</td>
</tr>
<tr>
<td>LPG</td>
<td>3,405</td>
<td>3,223</td>
<td>(5.3)</td>
</tr>
<tr>
<td>Rest</td>
<td>5,448</td>
<td>5,130</td>
<td>(5.8)</td>
</tr>
<tr>
<td>Total</td>
<td>49,860</td>
<td>46,085</td>
<td>(7.6)</td>
</tr>
<tr>
<td>Sales by areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>39,156</td>
<td>38,183</td>
<td>(2.5)</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>10,704</td>
<td>7,902</td>
<td>(26.2)</td>
</tr>
<tr>
<td>Total</td>
<td>49,860</td>
<td>46,085</td>
<td>(7.6)</td>
</tr>
</tbody>
</table>

(1) Does not include Refaps since July

The expansion of the Cartagena refinery is one of the key initiatives in the 2008–2012 Strategic Plan. An investment of €3.262 billion will make this complex one of the most modern in the world and will double its capacity to 220,000 bbl/day. The project includes, as the main units, a hydrotreater, a coker, atmospheric and vacuum distillation units and desulphurisation and hydrogen plants.

In 2008 the administrative permits necessary for the extension were obtained. This initiative has met with a highly favourable response from both the region and the administrations, as it will boost the economy of the Region of Murcia. Around 1,000 people are already employed in the works, which are forecast to be completed on schedule. This project will enable production of clean transport fuels to be maximized and will provide employment to over 6,000 people during the construction phase. Once operative, it will create around 700 jobs. Over 50% of the products produced in the complex will be middle distillates, which will play a significant role in reducing the shortage of these products in Spain.
developing environmentally-friendly and advanced technology products. Repsol sells a wide range of latest generation fuels that comply with the strictest quality standards: Efitec 95 and 98 petrol, Diesel e+ and Diesel e+10. In keeping with its commitment to society, Repsol continued to promote projects for the integration of people with disabilities, who at the end of 2008 amounted to 230 employees in the Marketing division, more than 3% of its workforce.

Liquefied Petroleum Gas
Repsol is one of the world’s leading retail distribution companies of LPG and the market leader in Spain and Latin America. The company is present in ten countries in Europe, North Africa and Latin America.

Total LPG sales in 2008 amounted to 3.22 million tonnes, a decrease of 5.3% in comparison with the previous year. In Peru, LPG sales increased 93% thanks to development of the market. Sales in Spain fell 1.9% compared to the previous year.

In Spain, Repsol distributes bottled, bulk and piped LPG through collective distribution networks and has more than 10 million bottled LPG customers supplied through a network of 522 distribution agencies. Bulk LPG sales accounted for 39% of total retail LPG sales in 2008.

To reinforce its leadership position on the Spanish market, improve service quality and guarantee supply, the company implemented an efficiency plan for factories in Spain over the 2007-2009 period.

Investments in the Downstream area increased by 64% in 2008

In Portugal, Repsol distributes bottled and bulk LPG to end customers and supplies other operators. Sales in 2008 reached 184,199 tonnes, making the company the third 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 on the Argentinean retail market to the domestic, commercial and industrial sectors, with sales totalling 325,836 tonnes.

In November 2008, the company sold its 51% stake in Repsol YPF Gas de Bolivia S.A., abandoning the bottling and bulk marketing activities in this country.

Chemicals
The company’s chemical business, which forms part of the Downstream area, incurred an operating loss of €352 million compared to an operating profit of €100 million in 2007. This was mainly due to a decrease in sales as a result of shrinking global demand and the reduction in stocks in the entire transformation and distribution chain, as well as narrower margins due to high naphtha prices in the first half of the year and depreciation of stocks in the second half of the year.

Sales to third parties in 2008 stood at 2.60 million tonnes, 16.4% less than the 2007 figure of 3.11 million tonnes.

The project for the extension of the Sines complex (Portugal), which aims to double output and increase competitiveness through greater integration and energy efficiency, was approved in June 2008. The project includes three new plants—one for linear polyethylene, one for polypropylene and a third for cogeneration—as well as extension of cracker capacity by more than 40%, to 570,000 tonnes/year. The new linear polyethylene and polypropylene plants will be in a highly competitive position thanks to both their size and latest generation technology.

Investments
Investments in the Downstream area increased by 64%, totalling €1,534 billion in comparison with €936 million the previous year. Most of this amount was allocated to ongoing refinery projects, particularly in Spain, and to operation improvements, installations and fuel quality, as well as safety and the environment.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic petrochemical</td>
<td>2,664</td>
<td>2,679</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Derivative petrochemical</td>
<td>2,937</td>
<td>2,927</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5,601</td>
<td>5,606</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td><strong>Sales by products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic petrochemical</td>
<td>772</td>
<td>629</td>
<td>18.6</td>
<td></td>
</tr>
<tr>
<td>Derivative petrochemical</td>
<td>2,341</td>
<td>1,973</td>
<td>15.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,113</td>
<td>2,602</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td><strong>Sales by markets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>2,776</td>
<td>2,348</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Rest of the world</td>
<td>337</td>
<td>254</td>
<td>24.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,113</td>
<td>2,602</td>
<td>16.4</td>
<td></td>
</tr>
</tbody>
</table>
The Downstream area comprises the following activities: refining, logistics, crude oil and product trading and marketing of fuels, including liquefied petroleum gas (LPG) and chemicals, on both the wholesale and retail markets. Repsol YPF is the largest oil refiner in Spain and Peru and is also present in Brazil. With regards to marketing activities, the Group markets products through its service stations distributed over five countries. It is the leader on the Spanish and Argentinean markets and one of the reference companies in Peru.

**Improvements in refining**
Excluding YPF, Repsol operates five refineries in Spain and another in Peru with a total installed capacity of 872,000 barrels per day. It also holds a stake in the Refap refinery (Brazil). The company has introduced a number of improvements in recent years. In 2002 it installed a hydrocracking unit in the Tarragona refinery and in mid-2004 a mild hydrocracker commenced production in the Puertollano refinery. In 2005 a new FCC hydrotreatment unit commenced operations in the A Coruña refinery, an isomerisation unit in Tarragona and an FCC Naphtha desulphurization unit in Bilbao, where in mid-2006 a middle distillates desulphurization unit was installed. In 2008 Repsol’s Spanish refineries finalized the investments necessary for manufacturing automotive fuels with the quality specifications adopted in the European Union. Repsol’s international supply and marketing activities are centralized through the company Repsol YPF Trading y Transporte (RYTTSA), which has offices in Madrid, Buenos Aires, Houston and Singapore.

**Logistics**
Most of the distribution of products refined in Spain is handled by the Compañía Logística de Hidrocarburos (CLH), in which Repsol holds a 15% stake. At 31 December 2008, the company’s transport network consisted of 3,835 km of oil pipelines and two tankers. CLH also has 38 storage facilities – all connected to the oil pipeline...
network, with the exception of Gijon, Motril and the four facilities in the Balearic Islands—and 28 airport installations which, together, represent a total capacity of approximately 6.6 million m³.

In Peru there is a contracted storage capacity of 125,000 m³.

LPG Marketing
The Group supplies liquefied petroleum gases mainly through the refineries in Spain and acquisitions from third parties on the international markets. Nearly a third of its requirements are met with the group’s own production. In Europe and North

Intra-Group Trade
- 2007
- 2008
- Total

<table>
<thead>
<tr>
<th></th>
<th>1 q</th>
<th>2 q</th>
<th>3 q</th>
<th>4 q</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>9,114</td>
<td>9,935</td>
<td>10,457</td>
<td>11,272</td>
<td>40,798</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>1,233</td>
<td>1,365</td>
<td>1,521</td>
<td>1,528</td>
<td>5,647</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(406)</td>
<td>(444)</td>
<td>(457)</td>
<td>(590)</td>
<td>(1,897)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1 q</th>
<th>2 q</th>
<th>3 q</th>
<th>4 q</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>574</td>
<td>803</td>
<td>939</td>
<td>10,334</td>
<td>37,048</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(68)</td>
<td>(107)</td>
<td>44</td>
<td>52</td>
<td>271</td>
</tr>
<tr>
<td>EBITDA</td>
<td>2,401</td>
<td>2,709</td>
<td>2,633</td>
<td>2,383</td>
<td>7,727</td>
</tr>
<tr>
<td>Europe</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(68)</td>
<td>(107)</td>
<td>44</td>
<td>52</td>
<td>271</td>
</tr>
<tr>
<td>Operating profit</td>
<td>1,775</td>
<td>1,775</td>
<td>1,775</td>
<td>1,775</td>
<td>1,775</td>
</tr>
<tr>
<td>Europe</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(68)</td>
<td>(107)</td>
<td>44</td>
<td>52</td>
<td>271</td>
</tr>
<tr>
<td>Investments</td>
<td>1,534</td>
<td>1,534</td>
<td>1,534</td>
<td>1,534</td>
<td>1,534</td>
</tr>
<tr>
<td>Europe</td>
<td>198</td>
<td>170</td>
<td>220</td>
<td>348</td>
<td>936</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>198</td>
<td>170</td>
<td>220</td>
<td>348</td>
<td>936</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(9)</td>
<td>(18)</td>
<td>15</td>
<td>24</td>
<td>77</td>
</tr>
</tbody>
</table>

In Peru there is a contracted storage capacity of 125,000 m³.

LPG Marketing
The Group supplies liquefied petroleum gases mainly through the refineries in Spain and acquisitions from third parties on the international markets. Nearly a third of its requirements are met with the group’s own production. In Europe and North

Intra-Group Trade
- 2007
- 2008
- Total

<table>
<thead>
<tr>
<th></th>
<th>1 q</th>
<th>2 q</th>
<th>3 q</th>
<th>4 q</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>9,114</td>
<td>9,935</td>
<td>10,457</td>
<td>11,272</td>
<td>40,798</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>1,233</td>
<td>1,365</td>
<td>1,521</td>
<td>1,528</td>
<td>5,647</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(406)</td>
<td>(444)</td>
<td>(457)</td>
<td>(590)</td>
<td>(1,897)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1 q</th>
<th>2 q</th>
<th>3 q</th>
<th>4 q</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>574</td>
<td>803</td>
<td>939</td>
<td>10,334</td>
<td>37,048</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(68)</td>
<td>(107)</td>
<td>44</td>
<td>52</td>
<td>271</td>
</tr>
<tr>
<td>EBITDA</td>
<td>2,401</td>
<td>2,709</td>
<td>2,633</td>
<td>2,383</td>
<td>7,727</td>
</tr>
<tr>
<td>Europe</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(68)</td>
<td>(107)</td>
<td>44</td>
<td>52</td>
<td>271</td>
</tr>
<tr>
<td>Operating profit</td>
<td>1,775</td>
<td>1,775</td>
<td>1,775</td>
<td>1,775</td>
<td>1,775</td>
</tr>
<tr>
<td>Europe</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>506</td>
<td>696</td>
<td>530</td>
<td>598</td>
<td>2,130</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(68)</td>
<td>(107)</td>
<td>44</td>
<td>52</td>
<td>271</td>
</tr>
<tr>
<td>Investments</td>
<td>1,534</td>
<td>1,534</td>
<td>1,534</td>
<td>1,534</td>
<td>1,534</td>
</tr>
<tr>
<td>Europe</td>
<td>198</td>
<td>170</td>
<td>220</td>
<td>348</td>
<td>936</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>198</td>
<td>170</td>
<td>220</td>
<td>348</td>
<td>936</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(9)</td>
<td>(18)</td>
<td>15</td>
<td>24</td>
<td>77</td>
</tr>
</tbody>
</table>

In June 2008 Repsol signed an agreement with the company Primax for the sale of the Ecuadorian companies Recesa and Oihtbrader for a sum of $47 million (€32 million). In the case of lubricants, Repsol will maintain a marketing and distribution contract with Primax and, in the case of aviation, a technical-commercial contract.

In September 2008 commencement of the extension works of the Sines petrochemical complex (Portugal) was announced. This project includes the construction of new linear polyethylene and polypropylene units which will triple the current capacity of this industrial complex.

Downstream Milestones
- In 2008 the administrative permits necessary for extension of the Cartagena refinery were obtained. The project, which is the largest industrial investment in the history of Spain (€1.262 billion), will make this industrial complex one of the most modern in the world.
- Within the framework of the strategy of divestment of non-strategic assets, Repsol sold its 31.13% stake in the Manguinhos refinery in Brazil. In December, the company sold the liquid fuel marketing activities in Brazil to the Brazilian group AteSat for 55 million dollars.
- In February 2008 the company divested the polymethyl methacrylate (PMMA) business with the sale of the Bronderslev (Denmark) and Polivar (Italy) subsidiaries.
- In June 2008 Repsol signed an agreement with the company Primax for the sale of the Ecuadorian companies Recesa and Oihtbrader for a sum of $47 million (€32 million). In the case of lubricants, Repsol will maintain a marketing and distribution contract with Primax and, in the case of aviation, a technical-commercial contract.
- In September 2008 commencement of the extension works of the Sines petrochemical complex (Portugal) was announced. This project includes the construction of new linear polyethylene and polypropylene units which will triple the current capacity of this industrial complex.

Africa, Repsol is present in Spain, Portugal, the south of France and Morocco. The strategy followed in all these countries consists of offering clients a top quality product combined with excellent service.

Repsol Butano is the largest bottled LPG distribution company in Europe, in terms of both revenues and volume. It also distributes bulk propane via individual installations (Personalised Plan) or collective distribution networks (piped propane installations and town pipelines) to domestic, commercial and industrial clients. These sales represent 34.3% of total sales.

In 2007 the Administration liberalized maximum prices
for LPG in the case of cylinders weighing over 20 kg and for use as a fuel. Only LPG in cylinders of between 8 and 20 kg is subject to a maximum price, which still represents 91% of total sales of bottled LPG, as well as piped LPG with quarterly and monthly updates. Prices for bulk supplies are not fixed.

Repsol has been present in Portugal since 1993. The last two years have seen the effective integration of logistics and distribution networks in this country, while the brand image has been unified with the launch of cylinders in new colours and a common valve for all types of bottles.

In France, where Repsol distributes bottled and bulk LPG, sales in 2008 reached 16 kt, under a mixed distribution model of cylinders at the sales point and a home delivery service. The bulk business focuses on small clients and domestic use with commercial formulas similar to the Personalised Plan.

Leader in Latin America
Repsol YPF is the leader in LPG distribution in Argentina, Ecuador, Peru and Chile. This position, together with the production sources located in Argentina, Bolivia and Peru, represents a strong competitive advantage, as it strengthens vertical integration.

Lipigas, a company in which Repsol holds a 45% stake, is the leader on the Chilean market, with a 37.6% market share and sales in 2008 of 430 kt. In Peru, Repsol participates in the LPG market through the brand Solgas Repsol and is the leading company in terms of prestige and quality, with a 38.5% market share. Sales in 2008 amounted to 408 kt.

The Chilean and Peruvian markets are totally liberalized. Distribution of bottled LPG is carried out through distributors (both exclusive and non-exclusive) who in turn resell the product to the sales point.

In Ecuador, Repsol participates through Duragas, the leading LPG distribution company which operates nationwide with a market share of 38.9%. In 2008, Duragas marketed 390 kt of LPG. The sale price of bottled LPG in Ecuador is heavily subsidized by the state. Marketing is carried out through a network of exclusive distributors. In Bolivia, since YPBF assumed control of natural resources, pursuant to a decree law on nationalization of hydrocarbons, product availability has been drastically reduced, resulting in a decrease in sales volume. Despite
this, sales in the retail segment stood at 22 kt of LPG and market share was 6%. Repsol commenced marketing LPG in Brazil in 2004 in the bulk segment and through wholesale sales. In 2008 sales amounted to 21 kt.

High level of integration
The Repsol Group produces, distributes and markets petrochemical products directly. This activity is mainly carried out in Spain (Tarragona and Puertollano), Argentina (Ensenada, Bahia Blanca and Plaza Huincul) and Portugal (Sines). The most important markets are Europe and the Mercosur countries.

Most of the units share the industrial complex with the Repsol refineries, thereby enabling a high level of integration between both activities.

The Group’s basic petrochemicals production focuses on obtaining olefins and aromatics. In derivatives, the three main petrochemical products are polyolefins, intermediate products and industrial products.

Chemicals in Spain
Repsol is the market leader in basic and derivative petrochemical products in Spain, where its main assets are located at the Tarragona and Puertollano industrial complexes. These plants have an olefin cracker and polyolefin and intermediate product production units. This enables a high level of integration between basic and derivative chemicals, as well as a high level of integration with the refining activities.

Through a joint venture with Dynasol (50%), Repsol produces synthetic rubber at the Santander plant. In Spain it also produces styrene-derived plastics and polyolefin compounds as well as specialised chemical products (accelerants and agrochemicals, for example).

Other countries
In Portugal, Repsol carries out chemical activities at the Sines complex, around 160 km south of Lisbon. This complex has production plants similar to those of the Puertollano and Tarragona complexes and consists of an olefin cracker, two polyethylene plants and an energy plant which provides power to the complex. The expansion of these installations will enable production to double and increase competitiveness thanks to greater integration and energy efficiency.

In Mexico, Repsol has a plant at Altamira which produces synthetic rubber through the previously mentioned joint venture with Dynasol (50%).

Marketing
Repsol markets its chemical production directly. Sales of derivative petrochemical products are carried out through a commercial network divided into five regions: Atlantic, Mediterranean, Northern Europe, Southern Europe and South America. The company is also a charter member of the ChemConnect website, the leader in e-commerce of chemical products.
YPF operating revenue amounted to $1.159 billion in 2008, 5.6% less than in 2007. This drop was due to the international crisis, which intensified in the last few months of the year.

On 21 February 2008, Repsol concluded the sale of a 14.9% stake in YPF to the Petersen Group for 2.235 billion dollars. This transaction, which values YPF at 15 billion dollars, forms part of the company’s strategy of enhancing the geographical distribution of its assets and implementing global management with a local focus. The agreement also allows for the Petersen Group to increase its YPF holding to 25% through an option to purchase an additional 10.1%. The Petersen Group has already exercised an option for an additional 0.1% stake.

Extension of concessions
In 2008, YPF investments amounted to $1.508 billion compared with 1.374 billion the previous year. Nearly 80% of these expenditures were allocated to oil and gas development and exploration projects, including the agreement for extending the concession in the Neuquen province.

Average annual production in Argentina was 617,100 barrels of oil equivalent per day (boepd) versus 649,200 in 2007, a decrease of 4.8%. Output was affected by labour strikes and a fall in demand for gas. Without taking these effects into account, average annual production would have reached 628,300 boepd.

Operating costs increased in 2008, mainly because of taxes - which rose from $179 million to $685 million in 2008 due to the effect of withholdings, amortization, purchases from third parties, environmental and legal contingencies, and severance pay and compensation.

Although international prices were higher than in 2007, they fell sharply in the last quarter of 2008. This affected both domestic and foreign market prices although in the latter case this was curtailed by withholdings, which were higher than in 2007 following the implementation of Resolution 394 which affects oil and crude oil product exports, and Resolution 127, which affects natural gas and liquefied natural gas exports.

With the exception of petrol for the internal market, 2008 saw a fall in demand mainly as a result of the international crisis and other factors, such as the farmers’
In 2008, YPF made five oil discoveries and another gas discovery, out of a total of 17 wells drilled.

The Luján de Cuyo refinery (Argentina), with the Andes in the background.

The Luján de Cuyo refinery (Argentina).
YPF’s natural gas sales in 2008 totalled 16.4 billion m³, and increased above all in the distribution, industrial and manufacturing segments. YPF’s market share in Argentina was 40% and the average price of the natural gas sold by the company increased by 32% in 2008, enabling the gradual alignment of prices on the domestic market.

The first liquefied natural gas (LNG) regasification operation commenced in June 2008 at the Bahia Blanca harbour with the Excelsior regasification tanker contracted for this purpose in order to meet the country’s demand. This project was developed for the Argentinian Government and was successfully completed in record time, incorporating an average of approximately 4 million cubic metres/day in the winter season between June and September. This operation, the transfer of LNG from one vessel to another anchored vessel, from the Excelsior to the Excelerate, was the first of its kind in the world. Additionally, within the framework of the programme for supporting the Government of Argentina, in the winter of 2008 YPF constructed the world’s largest propane-air plant in Buenos Aires. The plant, with a supply capacity of 1.5 million cubic metres/day, will be used to meet peak winter demand in the capital of Argentina.

With regards to the Refining, Logistics and Marketing activity, YPF refineries processed 18.7 million cubic metres of oil, 1% less than in 2007. Over the course of 2008, full use of the refineries’ installed capacity was maintained thanks to the operational reliability plans being carried out which enable the units’ maintenance cycles to be extended, thus increasing effective processing capacity and enabling maximum use of assets to meet Argentina’s growing demand for fuel.

Petrol production for the domestic market amounted to 3 million cubic metres, 14% higher than in 2007 and a new record in recent years. This was accompanied by enhanced quality of the petrols produced and made it possible to meet the Argentinean market’s increasing demand.

Record production
YPF completed the remodelling of the catalytic cracker (FCCB) at the La Plata refinery, which enabled an increase in the production of middle distillates and petrols, with a new record set in the production of diesel and Jet A1 aviation fuel at this facility in October, reaching an average of 13,625 cubic metres/day. Middle distillate production at this refinery thus surpassed, for the second consecutive month and the fourth time in its history, the threshold of 400,000 cubic metres/month.

Middle distillate production at this refinery thus surpassed, for the second consecutive month and the fourth time in its history, the threshold of 400,000 cubic metres/month.

With regards to heavy products, the production of 2 million cubic metres of fuel oil was noteworthy, similar to the figure for previous years. This was accompanied by enhanced quality of the petrols produced and made it possible to meet the Argentinean market’s increasing demand.

YPF’s supply of liquid fuels was in line with the growth recorded in Argentina, ensuring a permanent, high-quality supply to all its clients. This supply, particularly in the case of petrol, a key supply for sustaining growth levels, was made from the company’s refineries, or was imported to meet exceptional levels of demand.

At the end of 2008, YPF had 1,642 service stations, 1,642 of which were under own management. The company has begun to update the image of its sale outlets, seeking a more modern image and bringing...
At the end of 2008, YPF had 1,678 service stations, 1,642 of which were under own management. The company has begun update the image of its sale outlets.

it in line with the slogan “Let’s invent the future”. Prices in the domestic market gradually adapted to international prices and those of bordering countries.

At the close of 2008, YPF launched a new fuel, YPF D. Eurodiesel, at low sulphur content fuel (less than 50 parts per million), which is recommended for all high-performance EURO IV engines.

Increased margins

The Refining, Logistics and Marketing areas obtained a profit of €743 million in 2008. Investments in this area amounted to €167 million.

With regards to YPF’s chemicals business, profits increased by 20%, reaching an all-time high of €158 million thanks to an increase in margins in all lines and the integration of the refining, exploration and production activities. This was achieved despite the fall in international prices in the fourth quarter of 2008 and declining demand for fertilizers due to the farmers’ strike in Argentina. These enhanced financial results were shored up by high international prices in the first three quarters of the year, the application of a cost savings and expense curtailment plan, and a policy aligned to prices in the local market which boosted the Argentinean industry’s growth.

Investments in the year amounted to €25 million.

In 2008, the company Profertil, in which YPF holds a stake, won the National Quality Prize in the large company category, and also renewed its exemption on customs duty for methanol exported to the United States.

YPF’s workforce at the end of 2008 comprised 11,038 employees, a year-on-year decrease of 1.3%. 271 new employees joined the Exploration and Production area, an increase of 16% over 2007. The workforce of the company Astra Evangelista (AESA) was reduced by 540 workers.

The Repsol YPF Group commenced implementation of a teleworking pilot project. In Argentina, the project was launched with the collaboration of the Ministry of Labour. YPF is the first company in the country to implement this new work arrangement, which was adopted by several of its employees, and which was recognised with the awarding of the Meta 4 Prize for Innovation in Human Resources.

Three labour agreements govern the employment conditions of YPF’s refinery, field, service station and LNG employees. In 2008, several salary agreements were reached with trade union representatives.

With regards to Research and Development (R+D), within the framework of the Asset Development Plan (PLADA), YPF began to evaluate and develop technologies for the exploitation of heavy oil fields, enhancing the recovery factor of mature fields, and recycling the water used in production processes for irrigation and other purposes.

The Chemicals area launched a new fertilizer made with liquid sulphur generated by the hydrocarbons processed at the refinery. With regards to environmental protection, the company continued to develop soil recovery technologies.
Exploration and production
At 31 December 2008, YPF held mineral rights in Argentina on 113 blocks covering a net area of 76,722 km²: 21 exploration blocks (50,221 km²) and 92 exploitation blocks (26,501 km²), located in the Neuquina, Cañadon Asfalto, Bolsones Intermontanos, Gulf of San Jorge, Austral, Colorado Marina, Cuyana, Noroeste and Malvinas basins.

Logistics
In Argentina there is no company operating primarily in the distribution of oil products, and each operator therefore carries out their own distribution. YPF has a network of 1,801 km of oil pipelines for distribution of its refined products which link up its two main refineries with the 16 storage and supply installations, which can house up to 983,620 m³ of products. It also has 53 airport installations, 40 of which are owned by the company (24,000 m³ of storage capacity), and 27 company-owned tanker trucks. The YPF refineries receive crude oil through pipelines: the Lujan de Cuyo refinery from Puesto Hernandez through a 528 km oil pipeline, and the La Plata refinery from Puerto Rosales through a 585 km oil pipeline. YPF also holds a 37% stake in Oldelval, the company which manages the oil pipeline linking the Neuquina basin with Puerto Rosales, and a shareholding of 33.15% in Termap, an operator with two storage and port installations: Caleta Cordova, located in the southern province of Buenos Aires.

Net proved reserves of liquids and natural gas in Argentina at the close of 2008 were estimated at 1,141 Mboe.

YPF Information

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1q</td>
<td>2q</td>
</tr>
<tr>
<td></td>
<td>1q</td>
<td>2q</td>
</tr>
<tr>
<td>Operating income</td>
<td>1,989</td>
<td>2,065</td>
</tr>
<tr>
<td>Upstream</td>
<td>1,053</td>
<td>1,171</td>
</tr>
<tr>
<td>Downstream</td>
<td>1,439</td>
<td>1,718</td>
</tr>
<tr>
<td>Corporation</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Adjustments</td>
<td>(739)</td>
<td>(797)</td>
</tr>
<tr>
<td>EBITDA</td>
<td>715</td>
<td>730</td>
</tr>
<tr>
<td>Upstream</td>
<td>502</td>
<td>575</td>
</tr>
<tr>
<td>Downstream</td>
<td>241</td>
<td>159</td>
</tr>
<tr>
<td>Corporation</td>
<td>(28)</td>
<td>(4)</td>
</tr>
<tr>
<td>Operating profit</td>
<td>328</td>
<td>296</td>
</tr>
<tr>
<td>Upstream</td>
<td>139</td>
<td>211</td>
</tr>
<tr>
<td>Downstream</td>
<td>210</td>
<td>116</td>
</tr>
<tr>
<td>Corporation</td>
<td>(21)</td>
<td>(31)</td>
</tr>
<tr>
<td>Investments</td>
<td>303</td>
<td>287</td>
</tr>
<tr>
<td>Upstream</td>
<td>234</td>
<td>247</td>
</tr>
<tr>
<td>Downstream</td>
<td>56</td>
<td>39</td>
</tr>
<tr>
<td>Corporation</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>

YPF
Millions of euros

Additional YPF information
YPF Milestones

- In February Repsol concluded the sale of 14.9% of YPF to the Petersen Group for 2.235 billion dollars. This operation forms part of the company’s strategy to enhance geographical distribution of its assets and apply global management with a local focus. The agreement allows for the Petersen Group, which has already exercised an option for 0.1%, to extend its stake in YPF to 25%.

- The concessions in the province of Neuquen were extended for a ten-year period (2017-2027), which represents the extension of the concessions of almost half of YPF’s reserves in Argentina.

- In June 2008 the first liquefied natural gas (LNG) regasification operation in South America commenced in the port of Bahia Blanca.

- YPF completed the remodelling of the catalytic cracker (FCCB) at the La Plata refinery, enabling production of middle distillates and petrols to increase.

In February Repsol concluded the sale of 14.9% of YPF to the Petersen Group for 2.235 billion dollars. This operation forms part of the company’s strategy to enhance geographical distribution of its assets and apply global management with a local focus. The agreement allows for the Petersen Group, which has already exercised an option for 0.1%, to extend its stake in YPF to 25%.

The concessions in the province of Neuquen were extended for a ten-year period (2017-2027), which represents the extension of the concessions of almost half of YPF’s reserves in Argentina.

In June 2008 the first liquefied natural gas (LNG) regasification operation in South America commenced in the port of Bahia Blanca.

YPF completed the remodelling of the catalytic cracker (FCCB) at the La Plata refinery, enabling production of middle distillates and petrols to increase.

In 2008, YPF completed the first liquefied natural gas regasification operation in South America.

In Argentina, YPF has a network of 1,678 service stations, 1,642 of which are company managed and the remainder form part of Repsol YPF’s 50% stake in Refinor, a company with a refinery located in Campo Duran and a Refinor brand service station network located mainly in the country’s north-eastern provinces. This represents almost a third of the total number of sales points in Argentina, making the Group the leader in this market, as is the case in Spain.

In Argentina, YPF’s chemical business focuses mainly on the manufacture of industrial products, including a wide range of raw materials for chemical, industrial and agricultural activities. Production is located at the Ensenada, Plaza Huincul and Bahia Blanca complexes. Production of urea and ammonia in Argentina is carried out through Profertil, a joint venture with Agrium.

YPF is the largest LPG producer in Argentina. On the retail market it sells bottled and bulk LPG on the domestic, commercial and industrial markets, with a 34.8% market share. Until May 2005, the market was liberalized, although since 2002 agents reached agreements with the Administration on stability of prices for butane. After 2005 the new LPG Law stipulates that the Energy Department will establish quarterly wholesale prices for butane and propane and will recommend maximum retail prices for bottled gas for domestic use. Distribution of bottled LPG is carried out entirely through distributors who in turn resell the product to the sales points.

Marketing

In Argentina, YPF has a network of 1,678 service stations, 1,642 of which are company managed and the remainder form part of Repsol YPF’s 50% stake in Refinor, a company with a refinery located in Campo Duran and a Refinor brand service station network located mainly in the country’s north-eastern provinces. This represents almost a third of the total number of sales points in Argentina, making the Group the leader in this market, as is the case in Spain.

In Argentina, YPF’s chemical business focuses mainly on the manufacture of industrial products, including a wide range of raw materials for chemical, industrial and agricultural activities. Production is located at the Ensenada, Plaza Huincul and Bahia Blanca complexes. Production of urea and ammonia in Argentina is carried out through Profertil, a joint venture with Agrium.

YPF is the largest LPG producer in Argentina. On the retail market it sells bottled and bulk LPG on the domestic, commercial and industrial markets, with a 34.8% market share. Until May 2005, the market was liberalized, although since 2002 agents reached agreements with the Administration on stability of prices for butane. After 2005 the new LPG Law stipulates that the Energy Department will establish quarterly wholesale prices for butane and propane and will recommend maximum retail prices for bottled gas for domestic use. Distribution of bottled LPG is carried out entirely through distributors who in turn resell the product to the sales points.
Gas Natural SDG’s operating revenue increased by 7.6% to €555 million. This growth is largely due to the positive performance of the electricity business in Spain as a result of improved prices in the electricity pool, the incorporation of the Mexican power business in 2008 and growth in distribution activities in Latin America.

Investments in 2008 amounted to €894 million, an increase of 37%, mainly attributable to the financial investment carried out for the acquisition of a percentage stake in the electricity company Union Fenosa. Excluding this operation, material investments were slightly lower than the previous year and were applied above all to gas and electricity distribution activities.

Through its 30.9% stake in Gas Natural SDG, Repsol participates in the entire gas value chain, from supply to distribution and marketing. Through the Repsol-Gas Natural LNG (Stream) joint venture, the company consolidated its position in 2008 as the world’s third-ranking company in terms of volume of liquefied natural gas (LNG) transported. Founded in 2005, the objective of this joint venture company is to maximize the value of its partners’ contracts through efficient management and marketing, as well as facilitating access to LNG supply sources and strategic markets.

**Sales volume**

Gas distribution in Spain contributed 34.6% of Gas Natural’s results, with sales for regulated activity amounting to 276,073 GWh. The distribution network increased by 6.9% to 40,578 kilometres. Sales in Latin America increased 16.2% to 208,408 GWh and the distribution network increased 2.8% to 61,196 kilometres.

In 2008, Gas Natural SDG strengthened its presence on the Italian market with the acquisition of the Pitta Costruzioni Group, which operates in the Puglia region in southern Italy, for the sum of €30 million. This acquisition, together with the incorporation of Italmeco at the end of 2007, has enabled Gas Natural SDG to increase its distribution area in Italy, which now comprises 187 municipalities in eight regions: Molise, Abruzzo, Puglia, Calabria, Basilicata, Campania and Lazio. In 2008, gas sales in Italy amounted to 2,031 GWh, there were 397,000 supply points and the distribution network totalled 5,521 kilometres.
In the electricity industry, the company operates a total of 6,495 MW installed power for electricity generation divided between Spain, Puerto Rico and Mexico. In Spain, Gas Natural SDG has operational combined cycle electricity generation installations in Malaga and a further two, totalling 800 MW, in the port of Barcelona. In addition, an application is currently being processed for two 400 MW groups in Lantaron (Alava). In generation, the total of combined cycle plants together with installed capacity for cogeneration and wind generation produced 18,130 GWh at year-end 2008, that is, 6.8% more than in the previous year.

Petroleum Oil & Gas España (100% owned by Gas Natural) is participating, jointly with Repsol, in the offshore well to be drilled in 2009 at the Montanazo concession off the coast of Tarragona. The preparatory work for this project was carried out in the fourth quarter of 2008. Repsol and Gas Natural, in consortium with other companies, have signed a shareholders’ agreement to develop an integrated gas project in Angola. The company Gas Natural West Africa (60% Repsol-40% Gas Natural), which will manage this project, has been incorporated. In the initial phase, an appraisal will be made of the gas reserves before making the necessary investments for development and subsequent export of LNG. Progress has been made defining the seismic exploration and drilling work to be carried out in 2009.

With regards to the Gassi Touil project and following Sonatrach’s decision in August 2007 to unilaterally terminate the agreement, the international arbitration process is still underway in which Repsol and Gas Natural will defend their rights and which will decide on the validity of the termination and on the damages caused. The arbitration court’s decision is expected to be announced in 2009.

Supplies
Most natural gas consumed in Spain comes from imports. Algeria is the main source of supplies, although recent years have seen a significant effort to diversify. The supplies of the company Gas Natural SDG come from a number of sources. The group purchases LNG from producers in Algeria, Libya, Trinidad and Tobago, Nigeria and the Middle East and natural gas from producers in Algeria, Norway and Spain.

An important element of the Gas Natural SDG group’s supply strategy is the Maghreb-Europe gas pipeline, which has a diameter of 48 inches and is 540 km long. It was completed in 1996 and connects the production fields in Hassi R’Mel, in Algeria, with the consumer centres in Spain and Europe through Morocco and the Strait of Gibraltar. From January 2005 its capacity was extended from 9 bcm to 11.7 bcm. Gas Natural SDG holds a 72.6% stake in the company Europe-Maghreb Pipeline Ltd. (EMPL), which holds the exclusive right to operate the section of the Maghreb-Europe gas pipeline located in Morocco and the Strait of Gibraltar. The remaining 27.4% is owned by Transgas, a company which distributes natural gas in Portugal.

Distribution and marketing
Gas Natural SDG is the largest distributor of natural gas in Spain. Most sales are concentrated in the industrial sector and power stations. In line with the planned schedule, on 1 July 2008 the gas sector in Spain was totally liberalized with the abolition of the regulated supply market, in accordance with Law 12/2007, published on 3 July 2007, and with Order ITC/2309/2007, published on 31 July 2007. Distribution companies have ceased tariffed supply activity and have created last resort supply. Royal Decree 1968/2007, published on 28 July 2007, regulates the introduction of last resort supply in the natural gas sector, which is available to consumers connected to gas pipelines with pressures less than or equal to 4 bar and with an annual consumption of less than 3 GWh may take part. Gas Natural SDG is one of the companies which have undertaken a commitment to last resort supply Repsol YPF participates through Gas Natural SDG, in the distribution of natural gas in Argentina, Colombia, Brazil and Mexico to 5.25 million clients.

The group participates in the distribution of natural gas in six of the largest Latin American cities: Mexico City, Monterrey, Santa Fe de Bogota, Buenos Aires, Rio de Janeiro and Sao Paulo. In general, prices to end consumers are regulated. In Argentina and Mexico there is a market of industrial
On 12 December 2008, Gas Natural SDG purchased a 4.7% stake in Union Fenosa from Caixanova. Therefore, at 31 December 2008 Gas Natural’s stake in Union Fenosa amounted to 14.7%. Once the threshold of 30% of voting rights in Union Fenosa had been exceeded, Gas Natural SDG was under the obligation to submit a takeover bid, within one month, for the remaining shares in the electricity company. Therefore, in September 2008 the company initiated the process for securing the corresponding permits from the appropriate authorities.

The acquisition of Union Fenosa represents a significant step forward in the development of Gas Natural SDG and its strategy of integration of gas and electricity, and will accelerate compliance with the 2008–2012 Strategic Plan...