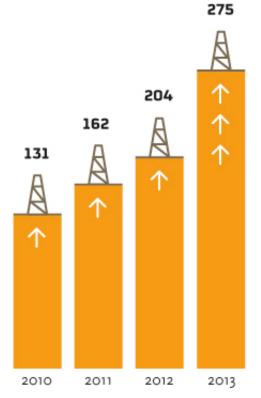


# Key figures

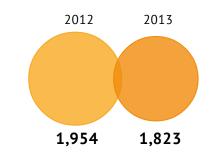
In 2013, Repsol's recurring <u>CCS</u> net income, which specifically measures how the business is performing, was €1,823 million, 6.7% less than in 2012. Net income, which came to €195 million, is primarily affected by extraordinary write-downs related to the agreement between YPF and YPF Gas, as well as the provisioning efforts made.



Proven reserve replacement ratio



# Recurring <u>CCS</u> net income € million



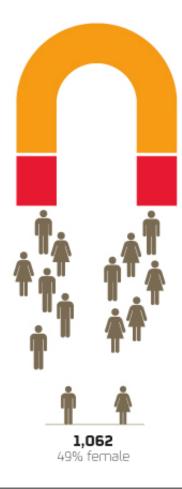




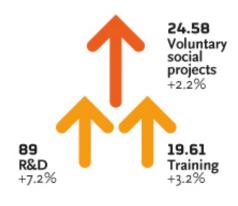
\* Excluding Gas Natural Fences and including preference shares



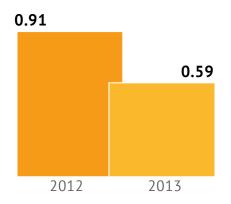
Attracting talent New permanent contracts in 2013



Contribution to society € million



Occupational safety Injury frequency rate



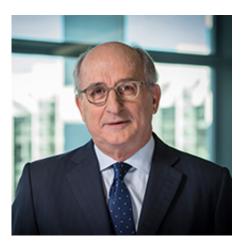
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# Letter from the Chairman

Dear Shareholders,

I am pleased to inform you of the most notable events affecting Repsol in 2013 and the first few weeks of 2014.



It was precisely during these past few weeks that we finally saw the results of almost two years of intense efforts to achieve suitable compensation for the expropriation from Repsol of 51% of the share capital of YPF and YPF Gas, which took place in April 2012.

During these past two years, Repsol's strategy was based on defending the rights and interests of all its shareholders, through a two-pronged approach: a broad and firm legal offensive before the courts and international arbitration bodies, coupled with a willingness to engage in open dialogue toward an amicable compensation agreement that would be satisfactory for the company.

"The agreement regarding the expropriation of YPF guarantees suitable financial compensation and allows us to move into a new era free from uncertainty, to shore up our financial strength and to increase our options for growth"

This two-pronged strategy finally proved successful. After months of hard work, on February 25, Repsol's Board of Directors approved the "Amicable Solution Agreement and Compromise on Expropriation" with the Argentine government. In the agreement, Argentina acknowledged Repsol's right to receive \$5,000 million for the expropriation, the legal and financial mechanisms necessary for collection of this sum were put in place, and both parties withdrew from and waived a series of claims and counterclaims.

At Repsol, we are satisfied with this agreement because, in addition to guaranteeing suitable financial compensation, it allows our company to move into a new era free from uncertainty, to shore up our financial strength and to increase our options for growth.

Many opportunities lie ahead of us; in the coming years, these opportunities will begin to unfold. I would like to thank you, our shareholders, as well as everyone at Repsol, for the efforts and support you have shown over the past two years. We defined a strategy, we worked hard, and now we can reap the reward.

As I shared with you at the last Annual General Meeting in May 2013, the Board of Directors and, more particularly, I as Chairman, intend to submit the agreement to you for your consideration and approval. This agreement will also come before the Argentine National Congress for ratification.

At the same time, in the day-to-day management of Repsol's businesses, our company has demonstrated its ability to respond to complicated situations, such as the conflict in Libya and the general economic downturn. In 2013, Repsol obtained recurring net income, excluding atypical results and considering the costs of crude oil and products at replacement value, of  $\leq$ 1,823 million, down 6.7% on the previous year. Final net income for the year was  $\leq$ 195 million, mainly due to the extraordinary write-downs of  $\leq$ 1,279 million for the agreement reached with the Argentine government and the  $\leq$ 1,105 million in provisions made for North American LNG assets not included in the sale agreed with Shell in the past year. In terms of business performance, 2013 was marked by increases in our company's output and our oil and gas reserves, with a proven reserve replacement ratio of 275%, one of the highest in the industry worldwide.

"We are particularly proud of Repsol's commitment to creating jobs and attracting talent. In 2013, the headcount increased by 219"

The 4% rise in oil and gas output was essentially due to the start-up of new key Upstream projects, which offset the production stoppages in Libya. This increase, together with the higher turnover in the <u>LNG</u> business, helped offset lower refining and chemical margins as a result of the slowdown in global growth and weak refining margins across all of Europe.

During the year, three of our strategic growth projects were launched: Sapinhoá (Brazil), Syskonsininskoye (Russia) and phase II of Margarita-Huacaya (Bolivia). In addition, in February 2014 the company connected a second well in the Sapinhoá project.

In 2013, we maintained our investment expenditure in exploration projects and continued our successful track record which began in 2005, with nine finds in Brazil, Alaska, Algeria, Russia, Colombia and Libya. This boosted our resources by more than 300 million barrels of oil equivalent during the year and helped us attain the annual targets set in our 2012-2016 Strategic Plan.

In the Downstream business, we once again demonstrated the high quality of our assets, even more so after the launch of major refining projects in Cartagena and Petronor. We stand at the forefront of our European competitors in terms of integrated refining and marketing margin. Conversion units in the refining system were used at a rate of 99%. This success was achieved despite the continued fall in demand in Europe, particularly in Spain, which weakened refining and chemical margins as well as retail sales.

With respect to <u>LNG</u> assets, on January 1, 2014, we completed the sale to Shell of Repsol's stake in liquefaction plants (Atlantic <u>LNG</u> and Perú <u>LNG</u>) as well as certain supply and transport assets. This deal brought in proceeds of almost \$4,300 million.

At the 2013 year end, Repsol's net debt (stripping out Gas Natural Fenosa) stood at €5,358 million, down 27.9% year on year. Repsol also had a high liquidity level, at ?9,282 million.

For yet another year, Repsol maintained an attractive return for its shareholders ( $\leq 0.96$  per share), equaling a 6% dividend yield. Through the Repsol Flexible Dividend program, the company continued to allow shareholders to choose to receive payment, in full or in part, either though bonus shares or in cash. In 2013,  $\leq 467$  million was paid out to shareholders and 46,293,180 new shares were issued.

In January 2014, under the same program and in lieu of an interim dividend, the company paid out €232 million in cash (€0.477 per share, gross) to those shareholders who opted to

sell their bonus share rights and delivered 22,044,113 million shares (equivalent to  $\leq$ 389 million) to those shareholders who opted to receive new shares. Similarly, on February 25 of this year, the Board of Directors resolved to propose to the shareholders at their general meeting, that the traditional final dividend for the year be replaced by a scrip issue equivalent to payment of  $\leq$ 0.50 per share.

As for stock market performance, Repsol shares gained 19.5% in the year, outperforming our European peers (10.4%). Other significant events in 2013 included the sale of treasury shares (5%), which allowed us to welcome Temasek, one the world's most prestigious investment companies, as a <u>shareholder</u>, and carry out the preference shares voluntary buy-back.

During the year, Repsol earned a number of awards for its corporate responsibility efforts and its commitment to society. We also play key leadership roles in the institutions and associations in which we participate. In September 2013, we unveiled our 2013-2014 Sustainability Plans, which put the company at the cutting edge of corporate responsibility practices.

We are particularly proud of Repsol's commitment to creating jobs and attracting talent. In 2013, the headcount increased by 219, thanks to the 1,062 new hires made during the year.

We are also satisfied with our safety record, although we will continue to seek even more rigorous safety targets. In 2013, no workplace fatalities were recorded, either among our own staff or contractor personnel, while the lost time injury frequency rate fell by more than 35% compared to the prior year, meeting our annual target and bringing the accumulated drop to 55% since 2011.

The Repsol Diversity and Work-Life Balance Committee continued to promote the programs rolled out in previous years: telecommuting, recruiting people with disabilities, flexible working hours, efficient time management and cultural diversity. At the 2013 year end, over 1,200 people had adhered to the telecommuting program worldwide, up 18% on the 2012 figure. In addition, a total of 32 new vacancies were covered by disabled people in the year. At December 31, 2013, over 650 differently-abled people were working at Repsol, up 19.5% year on year. More funds were also earmarked for training, research and development, and voluntary social projects.

These achievements would not have been possible without the support and motivation we receive from all of you. For this, I am most sincerely grateful. I encourage you to continue to back us in this exciting project to which we dedicate our very best efforts.

Antonio Brufau Niubó Chairman and CEO



# 2013 milestones



# Increase in production and record replacement ratio

In 2013, the Exploration and Production division (Upstream) was once again the driver of Repsol's growth, with a considerable improvement in its key indicators. Net output stood at 346,000 barrels of oil equivalent per day, up 4% on 2012.

During the year, three strategic growth projects were launched: Sapinhoá (Brazil), Syskonsininskoye (Russia) and phase II of Margarita-Huacaya (Bolivia). In addition, in February 2014 the company connected a second well to the Sapinhoá project, which will contribute net output of more than 4,000 barrels per day to the Repsol Group. These projects are in addition to those rolled out in 2012 in Spain (Lubina and Montanzo), the United States (Mississippian Lime), Russia (AROG) and Bolivia (phase I of Margarita). The remaining strategic projects continued to be developed, including the Carioca field in block BM-S-9 in Brazil, which secured its declaration of commercial viability during the year.

The proven reserve replacement ratio was 275%, one of the highest in the industry worldwide in 2013 and Repsol's all-time high. At year end, proven reserves came to 1,515 million barrels of oil equivalent. During 2013, Repsol maintained its investment expenditure in exploration projects and continued its track record of success, with nine finds in Brazil (BM-S-50), Alaska (North Slope), Algeria (SE Illizi), Russia (Karabahsky-2), Colombia and Libya. This boosted resources by more than 300 million barrels of oil equivalent during the year and helped the company attain the annual targets set in the 2012-2016 Strategic Plan.

To guarantee exploration activity in the long term, Repsol incorporated 65 exploration blocks into its mining holdings, with a total surface area of 64,183 km<sup>2</sup> (37,194 km<sup>2</sup> net for Repsol), mainly in the United States (44 blocks) and Norway (6 blocks).



### Agreement for the expropriation of YPF

At its meeting on February 25, 2014, the Board of Directors of Repsol resolved to sign an agreement with the Argentine government, whereby the latter undertakes to pay \$5,000 million as compensation for the expropriation of 51% of YPF and YPF Gas. This agreement, which is subject to approval at Repsol's Annual General Meeting and by the Argentine National Congress, will bring in proceeds for the recovered value, shore up the group's financial soundness and boost Repsol's capacity for growth and investment in the coming years.

The "Amicable Solution Agreement and Compromise on Expropriation" establishes the guarantees securing effective payment of the compensation and requires the parties to mutually withdraw any legal and arbitration actions lodged and to waive any further claims.

The agreement stipulates that, as payment of the compensation, the Argentine government will give Repsol a fixed portfolio of government bonds (in USD), with a nominal value of \$5,000 million and, where applicable, an additional securities portfolio for a maximum nominal value of \$1,000 million. The handover of this second securities portfolio will be adjusted so that the market value of all Argentine bonds given to Repsol equals at least \$4,670 million, with a maximum nominal value of \$6,000 million.

Argentina's debt with Repsol will be deemed settled upon collection of the compensation in full, whether through the sale of the securities or through the regular collection of the debt at the respective maturity dates.

As an additional guarantee, the Republic of Argentina acknowledges that in the case of restructuring or failure to settle amounts due on the bonds, Repsol would be entitled to

accelerate debt collection and to claim, in international arbitration subject to UNCITRAL (United Nations Commission on International Trade Law), the amounts pending payment up to the sum of \$5,000 million. The compensation agreement will be protected by the Reciprocal Promotion and Protection of Investments Agreement between Spain and Argentina.



Gains on the sale of LNG assets

In February 2013, Repsol entered into an agreement to sell Shell its LNG business comprising investments in liquefaction plants (Atlantic LNG and Perú LNG) as well as certain supply and transport assets. On December 31, 2013, the first phase of this sale was completed with the transfer of the interests in the liquefaction plants and the main LNG procurement and supply contracts. On January 1, 2014, the transaction was completed with the transfer of the remaining assets sold (supply and transport). As part of these divestments, in October 2013 Repsol sold its stake in Bahia Bizkaia Electricidad (BBE) to BP. These transactions brought in proceeds approaching \$4,300 million (\$4,100 million for the sale of the assets to Shell and \$200 million for the sale of BBE to BP) and released Repsol from certain financial commitments and unconsolidated debt.

Stripping out the related debt and the associated credits, the equity value of the assets subject to the transaction came to \$4,400 million, with pre-tax gains for Repsol of \$3,500 million.

Along with the sale of assets, Repsol and Shell signed an agreement whereby the latter will supply liquefied natural gas to the Repsol regasification plant in the Canaport complex (Canada) for the next 10 years, for a total volume of approximately one million tons.

After officially completing the sale on September 30, 2012, Repsol reduced its net debt by \$3,300 million and significantly shored up its balance sheet. Repsol divestments were therefore over €5,000 million, exceeding the targets set in the Strategic Plan, which calls for divestments of between €4,000 million and €4,500 million from 2012 to 2016.



### New shareholder: Temasek

In March 2013, the Singapore-based investment company Temasek acquired Repsol treasury shares representing 5.04% of the company's capital. Under the terms of the agreement, Temasek acquired 64.7 million Repsol shares at €16.01 per share, entailing payment of €1,036 million to the company. Together with the shares it already owned, the deal brought Temasek's total stake in Repsol to 6.3%. Temasek, whose shareholding is valued at over €115,000 million, has chosen Repsol to increase its presence in the European energy industry.

The sale to Temasek is part of Repsol's aim to consolidate its shareholder structure, by bringing in an internationally-recognized investor to support the company in its long-term industrial project.

At the Annual General Meeting held on May 31, 2013, René Dahan was appointed external proprietary director of Repsol, in representation of Temasek.

The new director began his professional career at the Exxon refinery in Rotterdam. He also worked at Exxon's European headquarters, as the head of the company's natural gas business in Europe. Following a brief period at the Exxon offices in New York, Mr. Dahan was appointed CEO of Esso BV, the company subsidiary responsible for all upstream and downstream activity in Belgium, the Netherlands and Luxembourg. A few years later, he moved to New Jersey and in 1992 was appointed Chairman of Exxon Company International, overseeing all Exxon business outside North America. Subsequently, Mr. Dahan became a member of the board of directors and the management committee of Exxon in Dallas, as the head of the entire downstream and chemicals business worldwide. In 1999, he led the merger between Exxon and Mobil, and was appointed Executive Vice Chairman of ExxonMobil.



# Inauguration of the extension of the Bilbao refinery

On April 3, 2013, the Prince of Spain inaugurated the new Fuel Oil Reduction Unit (FRU) at the Petronor refinery in Múskiz (near Bilbao, Vizcaya), the largest industrial investment made in the Basque Country.

Following the extension, Petronor has a maximum processing capacity of 11 million tons of crude oil per year, one of the largest in the country. The refinery employs 928 workers and generates 6,200 indirect jobs. The extension led to the creation of 100 new direct jobs. The opening of the new FRU will reduce the refinery's fuel oil production and increase output of products with the highest market demand, such as propane, butane, gasoline and diesel. Total investment in the project, including the amount earmarked for environmental programs, is just over  $\leq 1,000$  million.

The extension came on the heels of enlargements to the Cartagena refinery, which entailed an investment of approximately €3,200 million. With these efforts, Repsol has shored up the quality of its Downstream assets and now leads its European competitors in terms of integrated refining and marketing margin. Conversion units in the refining system were used at a rate of 99% in 2013.



# Presentation of the 2013-2014 Sustainability Plans

In September 2013, Repsol presented its 2013-2014 Sustainability Plans, which place the company at the cutting edge of corporate responsibility practices. These plans draw on the results of a series of studies looking at stakeholder expectations, based on over 100 interviews with representatives of the company's stakeholders, such as customers, suppliers, non-profit organizations, universities, regulators and shareholders.

After identifying and analyzing the expectations of these groups, Repsol was able to commit to 574 specific short-term actions, grouped into seven programs embodying the basic pillars of corporate responsibility.

On average, 80% of the actions set forth the Sustainability Plans are linked to the variable pay system for Repsol employees, reflecting the commitment to sustainable development, both on the part of the company and its employees. The bulk of these actions aim to create or modify operating processes and to encourage appropriate conduct through information and training.

The methodology used to prepare Repsol's Sustainability Plans, which embody the company's integrated response to society's expectations, entailed a shift in thinking and a major innovation in corporate responsibility.

In addition to a corporate sustainability plan, Repsol has plans for Spain and Portugal, Bolivia, Brazil, Colombia, Ecuador, the United States, Peru and Venezuela, all of which take into account stakeholder expectations identified locally. In 2013, Repsol rolled out the Repsol Corporate Responsibility Model and approved the corresponding Sustainability Plans for four operations centers: the A Coruña and Cartagena refineries and the Puertollano and Tarragona industrial complexes.



### Advances in diversity and work-life balance

During 2013, the Repsol Diversity and Work-Life Balance Committee continued to promote the programs initiated in previous years: telecommuting, recruiting people with disabilities, flexible working hours, efficient time management and cultural diversity.

Telecommuting has become one of the most widely-adopted work-life balance measures at Repsol. In addition to the pilot telecommuting programs in Ecuador and Peru, various studies have been undertaken for introducing such arrangements in Trinidad and Tobago and Bolivia. At December 31, 2013, 1,222 people had adhered to the program worldwide, an increase of 18% compared to 2012.

Further actions were carried out to promote more flexible and efficient time management, based on careful planning and prioritization of tasks. Among other achievements, Repsol now offers flexible working hours worldwide, adapted to the practices and customs of each country According to a study published by the International Institute of Political Science, Repsol has been rated the top company in Spain in terms of work-life balance. The ARHOE Foundation (Association for the Rationalization of Spanish Working Hours) recognized Repsol as the company making the greatest contribution to promote more rational working hours, adapted to the needs of employees.

Repsol's integration plan for disabled persons, which places them in job positions throughout the organization, goes above and beyond the minimum requirements established in prevailing legislation In Spain, such employees represent 2.77% of the workforce; 22% of these professionals hold qualified technical positions.

Current efforts are focused on raising awareness in various countries, promoting a committed, fair model of social co-existence. In 2013, 32 vacancies were filled by people with disabilities. At December 31, 2013, a total of 654 differently-abled employees worked at Repsol, 19.5% more than in 2012.



# A further step towards our zero accident target

The target is ambitious: to achieve a zero accident rate in all of Repsol's activities. 2013 saw a further step toward this goal, with no workplace deaths being registered, either among the company's personnel or that of any contractor. In addition, the lost time injury frequency rate (number of accidents with loss of working days and total deaths for the year for every million hours worked) fell by more than 35% compared to 2012, meeting the target set and representing an accumulated decrease of 55% since 2011.

As a result of the high safety levels Repsol demands in its operations, accidents were down in 2013, as reflected in the overall accident rate. This goal is part of the annual targets set for Repsol employees.

One of the most notable projects in 2013 was the Safety and Environment Leadership and Culture Plan. Over the past two years, all of the company's leaders have received training in safety culture, with over 3,000 people attending one of the 120 courses held in 11 countries. This training was also offered to other groups, with around 1,000 middle managers taking part in these initiatives as well.



# Historic seasons in all competitions sponsored

The Repsol Honda team racer Marc Márquez was declared World Champion, becoming the youngest rider in history to achieve this distinction in the premier championship of motorcycle road racing. This new MotoGP title highlights Repsol's major backing for sports and athletics, both in top competition and at grassroots level. Repsol has supported Marc Márquez in his sporting career since he was 15 years old. This is also the case of Dani Pedrosa, who has been wearing the Repsol colors since he was 13 years old. Both riders embody values such as hard work, teamwork and humility, which form part of the company's DNA.

With this triumph, Repsol and Honda earned their tenth rider award, through the soundest and most successful of all World Championship alliances. In 2014, these two partners will celebrate 20 years' of experience among the world motorcycling elite. These premier competitions are the best test bench for the products Repsol develops at its Technology Center, which designs the gasoline used by the Repsol Honda team. The technological advances tested in these races are also applied to the products Repsol offers its customers.

Throughout its 45 years of involvement in motor sports, Repsol has also demonstrated its unwavering commitment to grassroots sports, by supporting young riders in their training phase, accompanying them in their World Championship debuts and following them during their sporting career. An example of this commitment is the sponsorship of CEV Repsol, the forerunner to the World Championship and one of the most prolific feeder series to the MotoGP class. This series first began in 2013.

Repsol also sponsors the Monlau Repsol School, which trains competition mechanics and engineers. One of the school's main sporting endeavors is the Moto3 team comprising the racers Álex Rins and Álex Márquez, both of which had outstanding 2013 seasons.

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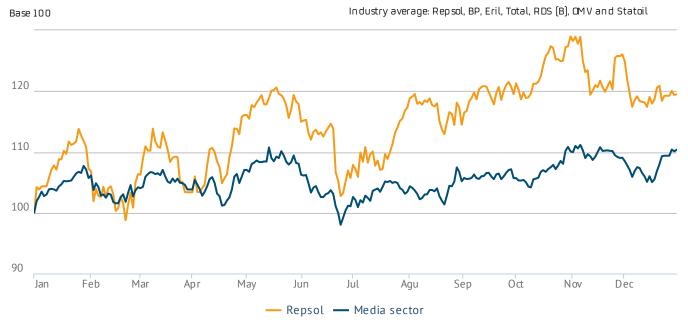


# Repsol shares



2013 was a positive year for the Spanish stock markets, with the lBEX 35 index ending the year up 21.4%. These gains were mainly underpinned by a change in investors' perception of the Spanish economy. The risk premium fell by 170 points during the year and Spanish bond yields decreased from 5.26% to 4.14%, demonstrating that the market sees political reform and stability as good signs for investing in Spanish companies.

Repsol share performance was in line with trends in the IBEX 35 (up 19.5%). In its industry, Repsol shares outperformed those of its European peers, whose shares saw average gains of 10.4% in the period.



## Stock market performance

### Shareholder returns

Repsol is committed to maintaining attractive returns for its shareholders, in line with those of previous years and in accordance with the performance of its businesses and operating results.

In 2012, Repsol launched its first-ever Repsol Flexible Dividend program, which allows shareholders to choose to receive payment, in full or in part, though bonus share issues or in cash by selling the bonus share rights either on the market or back to the company.

The €0.96 per share payment in 2013 reflects Repsol's irrevocable commitment to purchase bonus

share rights in the two scrip issues completed under the Repsol Flexible Dividend program in January and July 2013 ( $\in 0.473$  and  $\in 0.445$  gross per share, respectively), as well as the cash dividend at  $\in 0.04$  gross per share paid in June 2013. As a result, Repsol paid a total of  $\in 467$  million to shareholders in 2013 and delivered 46,293,180 new shares.

In January 2014, under the same program and in lieu of an interim dividend, the company also paid out  $\leq 232$  million in cash ( $\leq 0.477$  per share, gross) to those shareholders who opted to sell their bonus share rights, and delivered 22,044,113 million shares to those shareholders who opted to receive new shares.

Finally, under the Repsol Flexible Dividend program, the Board of Directors resolved to propose to the shareholders at the next Annual General Meeting, that the traditional final dividend for the year be replaced by a scrip issue against voluntary reserves (retained earnings), equivalent to payment of  $\leq 0.50$  per share.

MAIN STOCK MARKET INDICATORS		
	2012	2013
Market capitalization (€ million)(1)	19,263	23,861
Average share price for the year (€)	16.2	17.5
Maximum price (€)	24.1	19.8
Minimum price (€)	11	15.1
Closing price (2) (euros)	15.3	18.3
P/E (3)	9.3	122.1
Dividend yield(4) (%)	4.7	6
Equity per share (5)	21.48	21.29

(1) Year-end closing market price per share, times the number of shares in circulation.

(2) Year-end closing market price per share on the Spanish stock exchange electronic trading system.

(3) Year-end closing market price per share divided by earnings per share attributable to the parent company.

(4) Annual dividends per year divided by opening share price. Calculated on dividends paid.

(5) Equity divided by the average number of shares in circulation at year end.

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# Governing bodies



# Chairman and CEO

Antonio Brufau Niubó Chairman of the Delegate Committee

## First Vice Chairman

Isidro Fainé Casas External Proprietary Director Member of the Delegate Committee

## Second Vice Chairman

Manuel Manrique Cecilia External Proprietary Director Member of the Delegate Committee

### **Board members**

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

#### Artur Carulla Font

Independent External Director Member of the Delegate Committee Chair of the Nomination and Compensation Committee Lead Independent Director

#### Luis Carlos Croissier Batista

Independent External Director Member of the Audit and Control Committee Member of the Strategy, Investment and Corporate Social Responsibility Committee

#### René Dahan

External Proprietary Director Member of the Delegate Committee

#### Ángel Durández Adeva

Independent External Director Chairman of the Audit and Control Committee

#### Javier Echenique Landiríbar

Independent External Director Member of the Delegate Committee Member of the Audit and Control Committee

#### Mario Fernández Pelaz

Independent External Director Member of the Nomination and Compensation Committee

#### María Isabel Gabarró Miquel

Independent External Director Member of the Nomination and Compensation Committee Member of the Strategy, Investment and Corporate Social Responsibility Committee

#### José Manuel Loureda Mantiñán

External Proprietary Director Member of the Nomination and Compensation Committee Member of the Strategy, Investment and Corporate Social Responsibility Committee

#### Juan María Nin Génova

External Proprietary Director Member of the Nomination and Compensation Committee Chairman of the Strategy, Investment and Corporate Social Responsibility Committee

#### Pemex Internacional España, S.A.,

represented by Arturo F. Henríquez Autrey External Proprietary Director Member of the Delegate Committee Member of the Strategy, Investment and Corporate Social Responsibility Committee

#### Henri Philippe Reichstul

Independent External Director Member of the Delegate Committee

#### Luis Suárez de Lezo Mantilla

Executive Director General Counsel and Secretary to the Board of Directors Member of the Delegate Committee

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Report 2013



Antonio Brufau Niubó Chairman and CEO

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Josu Jon Imaz San Miguel Executive Director of the Industrial and Trading Unit

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

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

**Cristina Sanz Mendiola** Executive Director of People and Organization

**Pedro Fernández Frial** Executive Director of Strategy and Control

**Nemesio Fernández-Cuesta** Executive Director of Business Units

**Miguel Martínez San Martín** Executive Director of Finance and Corporate Development

Luis Cabra Dueñas Executive Director of Exploration and Production © Repsol 2000-2014 | www.repsol.com | Legal notice | Accessibility | Contact | Request this report



# Macroeconomic environment



In 2013, the growth rate of the global economy slowed to 3% year on year, mainly due to a slowdown in emerging economies. At the same time, the developed economies began to strengthen which, although not enough to offset the lower growth contribution from developing economies, led to monetary policy moves aimed at ending financial stimulus and boosting global financial stability.



In terms of regional growth, strong fiscal adjustments in the United States lowered growth by 1.9% year on year, although domestic demand remained strong. Emerging economies, on average, grew at a rate of 4.7%, well short of the 6.2% seen in 2011. In some cases, this slowdown was actually a reversion to reasonable levels following a period of growth beyond potential output. In other cases, population growth is creating bottlenecks in infrastructure, labor markets and investment, thus also contributing to the slowdown in many of these economies.

## Significant progress

In the eurozone, the adjustment policies rolled out have reduced major risks and stabilized financial conditions. Although growth in peripheral European nations was limited by tight credit restrictions and weak domestic demand, these countries saw significant advances in both competitiveness and exports. The eurozone as a whole returned to positive growth rates as from the second quarter of 2013.

During 2013, the Spanish economy experienced a marked change compared to the preceding two years. The easing of tensions in European financial markets, together with the acknowledgement by supranational institutions of the country's domestic efforts, has already helped to bolster confidence among the main economic players. While signs of stabilization are still only budding, corrections to the accumulated imbalances and the structural reforms adopted raise expectations

of further stabilization in economic activity. In this sense, the Spanish economy technically emerged from recession in the third quarter of 2013, with quarter-on-quarter growth of 0.1%.

## Energy sector

Fluctuations in oil prices throughout 2013 were related to the health of global finances and to geopolitical uncertainty. Along with these factors, in 2013, the oil market was greatly affected the entry of new oil production from unconventional formations in the US and Canada. Without the increase in supply generated in these North American countries, price fluctuations would have been even greater.

Oil market largely marked by entry of new oil production from unconventional formations in the United States and Canada.

The interaction of all these factors defined two cycles occurring during the year, in which oil prices rose and then subsequently declined. The first cycle saw a price increase during the first two months of the year, in response to positive economic data from the US, China and Germany, and in particular to the tension created in Algeria by the kidnapping by radical Islamists of staff at a gas facility. The downswing in this first cycle lasted from February to mid-April, with a climate of pessimism prevailing in the data and the economic outlook of key economies. The second cycle began its climb upward when the civil war in Syria escalated following the use of chemical weapons. This rise was bolstered by better economic outlooks and various geopolitical problems in Iraq and Libya, directly affecting oil supplies from these countries. The downswing in this second cycle, which began in mid-September, was mainly caused by the easing of geopolitical uncertainty, though still latent in Libya, and to a large extent by the doubts surrounding the possibility of the United States starting to taper the liquidity policy maintained for the past three years.



## International oil prices

USD/barrel

## Crude oil and gas prices

The average price of Brent crude stood at \$108.70 a barrel in 2013, while the WTI averaged \$98.05 per barrel in the same period. During the year, the spread between the two reference crudes went through two stages.

In the first stage, the spread narrowed from over \$20 in late January to \$5 in late June, affected by the improved oil refining and transportation infrastructure that has helped decongest the Cushing, Oklahoma (US) oil hub. In the second stage, the spread again widened to more than \$13 per barrel in December, in response to the aforementioned steady increase in the supply of US crude. In 2013, Henry Hub gas prices averaged \$3.65/MMBtu, representing an increase of over 30% on the previous year. Underlying market fundamentals are behind this surge, in particular higher demand due to a more intensive use of gas in industry and the residential sector in winter, along with a drop in supply. Despite the rise in the Henry Hub, the price remains low due to the boom in unconventional gas production (which now accounts for about half of total US gas output).

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# Results

In 2013, Repsol obtained recurring <u>CCS</u> net income of  $\leq$ 1,823 million, down 6.7% on the prior year. This profit, which excludes atypical results and considers the costs of crude oil and products at replacement value, reflects the day-to-day management of Repsol's business against a complex background (the conflict in Libya and the general economic downturn) and an increase in the company's key indicators (higher oil and gas output and reserves).



The 4% rise in oil and gas output was essentially due to the start-up of new key Upstream projects, which offset the production stoppages in Libya. This increase, together with the higher volumes of the LNG business, helped offset lower refining and chemical margins as a result of the slowdown in global growth and weak refining margins across all of Europe.

# Strategic projects

Net output in 2013 reached 346,000 boe/d. Three new strategic growth projects came on stream in the period: Sapinhoá, Brazil, in block BM-S-9, which started commercial production in January and reached total output of 30,000 bo/d throughout the year; Syskonsininskoye (SK), in Russia, where gas production reached 1.7 million cubic meters per day by year end; and phase II of the Margarita-Huacaya field in Bolivia, which boosted gas production to 15 million cubic meters per day. In addition, in February 2014, the company connected a second well to the Sapinhoá project, which will contribute a net output of more than 4,000 barrels per day to the Repsol Group.



These projects are in addition to those rolled out in 2012 in Spain (Lubina and Montanzo), the United States (Mississippian Lime), Russia (AROG) and Bolivia (phase I of Margarita) The remaining strategic projects continued to be developed, including the Carioca field in block BM-S-9 in Brazil, which secured its declaration of commercial viability during the year.

The contribution by growth projects, coupled with better performance from the Trinidad and Tobago fields, pushed up oil and gas output in 2013, despite the over three-month interruption of operations in Libya due to conflicts and security problems in the country.

In 2013, the proven reserve replacement ratio was 275%, one of the highest in the industry worldwide that year and Repsol's all-time high. At year end, proven reserves came to 1,515 million barrels of oil equivalent.

In 2013, Repsol maintained its investment expenditure in exploration projects and continued its track record of success, with nine finds in Brazil (BM-S-50), Alaska (North Slope), Algeria (SE Illizi), Russia (Karabahsky-2), Colombia and Libya. This boosted resources by more than 300 million barrels of oil equivalent during the year and helped the company attain the annual targets set in the 2012-2016 Strategic Plan.

To guarantee exploration activity in the long term, Repsol incorporated 65 exploration blocks into its mining holdings, with a total surface area of 64,183 km<sup>2</sup> (37,194 km<sup>2</sup> net for Repsol), mainly in the United States (44 blocks) and Norway (6 blocks).

## Leadership in Europe

In the Downstream business, Repsol once again demonstrated the high quality of its assets, even more so after the launch of major refining projects in Cartagena and Petronor. With EBITDA of €863 million, Repsol stands at the forefront of its European competitors in terms of integrated refining and marketing margin. Conversion units in the refining system were used at a rate of 99%. This success was achieved despite the continued fall in demand in Europe, particularly in Spain, which weakened refining and chemical margins as well as retail sales.



Gas Natural Fenosa's contribution to results was in line with the previous year. The lower earnings in the Spanish electricity business, affected by new tax measures and other regulations, were offset by higher wholesale gas margins and better results in Latin America.

Recurring net income at replacement cost (€1,823 million) translated into net income of €195 million at mean cost (MIFO). The difference is explained by the negative effect of €187 million associated with the valuation of crude oil and products at MIFO instead of at replacement cost (<u>CCS</u>) and the extraordinary write-downs associated with the YPF and YPF Gas agreement (€1,279 million) and the provisions made on certain North American assets

not included in the sale of the <u>LNG</u> business ( $\leq 1,105$  million), which were partially offset by the gains recorded in 2013 on the sale of <u>LNG</u> assets ( $\leq 1,263$  million).

The agreement reached between the Argentine government and Repsol values the expropriated 51% stake in YPF and YPF Gas at \$5,000 million. The agreement was approved by the Repsol Board of Directors and included on the agenda for ratification at the Annual General Meeting.

## Capital gains

In February 2013, Repsol entered into an agreement to sell Shell its stakes in liquefaction plants (Atlantic LNG and Perú LNG) as well as certain supply and transport assets. On December 31, 2013, the first phase of this sale was completed with the transfer of the interests in the liquefaction plants and the main LNG procurement and supply contracts. On January 1, 2014, the transaction was completed with the transfer of the remaining assets sold (supply and transport). In October, 2013, Repsol sold its stake in Bahia Bizkaia Electricidad (BBE) to BP.



These transactions brought in proceeds of around \$4,300 million and net gains of  $\leq 1,263$  million in 2013 and  $\leq 328$  million in January 2014. As a result of these sales and applying prudent financial criteria, Repsol wrote down the value of its remaining <u>LNG</u> assets, recording a total post-tax provision of  $\leq 1,105$  million.

At the 2013 year end, Repsol's net debt (stripping out Gas Natural Fenosa) stood at €5,358 million, down 27.9% year on year. Repsol also had a high liquidity level, at €9,282 million when excluding Gas Natural Fenosa and including committed available credit facilities.

Repsol group recurring ccs net income statement				
€ million	2012	2013	% Variat ion	
Upstream	2,208	1,757	(20.4)	
LNG	535	959	79.3	
Downstream	1,013	42	(95.8)	
Gas Natural Fenosa	920	889	(3.4)	
Corporate	(390)	(304)	22.1	
Operating profit	4,286	3,343	(22.0)	
Net finance expense	(857)	(814)	(5.0)	
Share of results of companies accounted for using the equity method - net of taxes	117	122	4.3	
Net income before tax	3,546	2,651	(25.2)	

Income tax	(1,581)	(1,096)	(30.7)
Net income for the year from continuing activities	1,965	1,555	(20.9)
Net income from continuing activities attributable to non-controlling interests	(75)	(38)	(49.3)
Net income from continuing activities attributable to the parent	1,890	1,517	(19.8)
Net income from discontinued operations attributable to the parent	170	(1,322)	
Total income attributable to the parent	2,060	195	(90.5)

(\*) The results and other measurements, figures and result indicators identified as "adjusted" have been prepared taking into consideration that the figures related to the <u>LNG</u> assets and businesses sold form part of the results of continuing activities.

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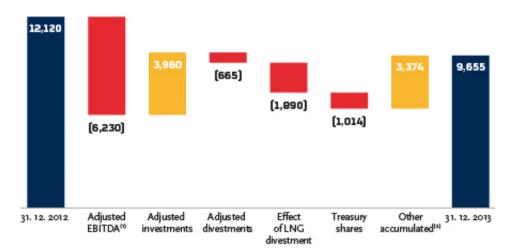


# Financial position

In 2013, Repsol continued its policy of financial prudence, which allowed it to tap markets and maintain a high credit rating while also funding the investment program, the preference shares buy-back plan and attractive shareholder remuneration, to name just a few.



At December 31, 2013, the Repsol Group's net financial debt stood at  $\notin$  9,655 million, compared to  $\notin$  12,120 million at the previous year end.



Change in net debt € million

(1) Represents operating profit adjusted for items that do not result in cash inflows or outflows from operations (depreciation and amortization, provision allowances and reversals, gains/losses from asset sales and other items).

(2) Basically includes the following items:  $\leq 1,279$  million in income tax payments,  $\leq 145$  million in payments relating to operating activities,  $\leq 528$  million in dividends and other shareholder remuneration, and  $\leq 902$  million in net interest.

Stripping out Gas Natural Fenosa (i.e. excluding the proportional consolidation of the figures relating to this company), the Repsol Group's net financial debt stood at  $\leq$ 5,358 million at December 31, 2013, down 27.9% compared to the 2012 year end. This decrease was mainly due to the sale of LNG assets.

# Financial prudence

Repsol holds sufficient available cash resources and other liquid financial instruments, including undrawn credit facilities, to settle its debt maturities for at least the coming five years. These resources cover 72% of the company's entire gross debt, including preference shares. When stripping out Gas Natural Fenosa, these same resources cover 78% of gross debt, including preference shares.

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# Repsol around the world





# Upstream

Operations by country







Proven reserves

+4%

Oil and gas production 275%

Proven reserve replacement ratio All-time record

Successful exploration campaign in 2013

38% Success rate Above industry average

Discoveries In Alaska, Algeria, Brazil, Colombia, Libya and Russia

The oil and gas exploration and production activity is Repsol's main growth driver. The company's exploration and production strategy is to increase both output and reserves, maintaining its intense exploration activity, geographical diversification, operating excellence and maximized return on assets. In just a few years, Repsol has become a world leader in exploration, with over 40 finds since 2008. To guarantee this activity in the long term, in 2013 Repsol incorporated 65 exploration blocks, mainly in the United States (44 blocks) and Norway (6 blocks), into its mining holdings.

#### Exploration

#### $\rightarrow$ Development $\rightarrow$ Production

New areas	Exploration	Evaluation	Onshore	Offshore	Gas	Crude oil
Acquisition of mining holdings	Geological and geophysics works and drilling of exploration wells	Definition of resources discover and determination of their commercia viability	for outputtir	stallations	Commercial oil and gas operation	
	$\rightarrow$	$\rightarrow$	$\rightarrow$		$\rightarrow$	$\rightarrow$
Mining holdings not developed at December 31:	Exploration wells in 2013:	Total proven reserves:	Development wells drilled in 2013:	Producti wells act Decemb	ive at da	il and gas net aily output:
223,363 Km²	23 completed 4 in progress	<b>1,515</b> ммьое Replacement ratio <b>275</b> %	576 gross	<b>2,80</b> gross		546 boe/d

The Repsol Upstream division encompasses oil and natural gas exploration and production, and manages its project portfolio in order to achieve profitable, diversified and sustainable growth while ensuring safety and environmental protection.

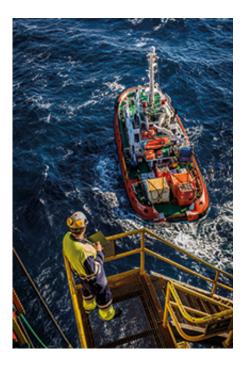
Operations established in 16 countries since 2005



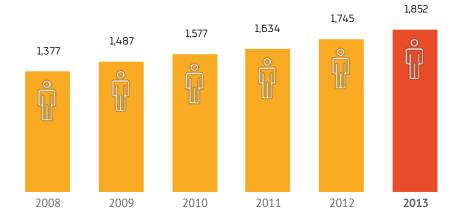
New countries
 Significant consolidation

## 2013 milestones

- Start of commercial exploitation at the Sapinhoá field (Brazil)
- Creation of the AROG joint venture between Alliance Oil (51%) and Repsol (49%), with operations in Russia
- Start of production in Syskonsyninskoye (Russia)
- Nine discoveries in Algeria, Alaska (United States), Brazil, Russia, Colombia and Libya
- Six new exploration licenses in Norway
- Launch of phase II of the Margarita-Huacaya project (Bolivia)
- Drilling in Brazil with the seventh-generation drillship Ocean Rig Mylos
- Entry into two new countries: Nicaragua and Romania
- Commissioning of a new gas well in Margarita-Huacaya (Bolivia)
- Application for declaration of commercial viability for the Carioca field (Brazil)



The best technical team



# The best equipment

#### Seventh-generation drillship

Able to drill in ultra-deep water (up to 3,700 meters)

- Ocean Rig Mylos, initially posted to Brazil
- Rowan Renaissance, initially posted to Namibia

	2012	2013
Proven reserves (MMboe)	1,294	1,515
Proven reserve-replacement ratio (%)	204	275
Oil and gas net daily output (Mboe/d)	332	346
Operating profit (€ million)	2,208	1,757
Investments (€ million)	2,423	2,317



Operating profit			
€ million	2012	2013	Variation (%)
North America and Brazil	380	205	(46.5)
North Africa	1,298	752	(42.06)
Rest of the world	530	800	50.94
TOTAL	2,208	1,757	(20.43)

At the 2013 year end, Repsol's Upstream division was involved in oil and gas exploration and production blocks in 31 different countries, either directly or through investees. The company was the operator in 25 of these projects.

	Fi	Find No find		Under evaluation		Total		In progress		
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Europe	-	-	1	4	-	-	1	4	-	-
Latin America	4	2	5	6	1	-	10	8	4	-
Brazil	1	1	1	4	1	-	3	5	4	-
Peru	1	-	1	-	-	-	2	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Other countries in South America	2	1	2	1	-	-	4	2	-	-
Central America	-	-	1	1	-	-	1	1	-	-
North America	-	3	1	1	2	-	3	4	-	-
Africa	1	2	1	3	2	-	4	5	1	2
Asia (1)	-	1	-	1	-	-	-	2	-	2
Oceania	-	-	-	-	-	-	-	-	-	-
Total	5	8	8	15	5	-	18	23	5	4

(1) One of the wells in Asia is a discovery well.

Finished development wells				
	Find	No find	Under evaluation	Total

	2012	2013	2012	2013	2012	2013	2012	2013
Europe	-	-	-	-	-	-	-	-
Latin America	75	95	5	6	4	6	84	107
Brazil	1	4	1	-	-	-	2	4
Peru	3	1	1	-	-	-	4	1
Trinidad and Tobago	4	5	-	-	1	2	5	7
Venezuela	20	29	1	-	1	1	22	30
Other countries in South America	47	56	2	6	2	3	51	65
Central América	-	-	-	-	-	-	-	-
North America	254	406	1	-	5	1	260	407
Africa	2	23	-	-	-	-	2	23
Asia	4	31	-	2	-	6	4	39
Oceania	-	-	-	-	-	-	-	-
Total	335	555	6	8	9	13	350	576

#### Output

In 2013, average output reached 346,000 barrels of oil equivalent per day, up 4% on 2012 (332,000 barrels of oil equivalent per day). The start-up of five of the ten major projects and fewer stoppages in Trinidad and Tobago offset the production downtime in Libya due to conflict in the country and the sale of 20% of block 16 in Ecuador. If Libya had operated normally, average output in 2013 would have been 8% higher than in 2012. Production in Libya resumed on January 4, 2014.



Net production of liquids and natural gas by geographical area									
		2012			2013				
	Liquids	Natural gas	Total	Liquids	Natural gas	Total			
	(MMb)	(Bcf)	(MMboe)	(MMb)	(Bcf)	(MMboe)			
Europa	1	2	1	2	1	3			
Latin America	24	372	90	24	395	94			
Brazil	2	(*)	2	3	(*)	3			
Peru	3	39	10	4	40	11			
Trinidad and Tobago	4	240	47	4	253	49			
Venezuela	5	48	13	5	47	13			
Other countries in South	10	45	18	8	54	18			

America						
North America	10	5	11	10	9	11
Africa	17	12	19	11	11	13
Asia	1	-	1	4	8	5
TOTAL NET OUTPUT	52	391	122	51	424	126

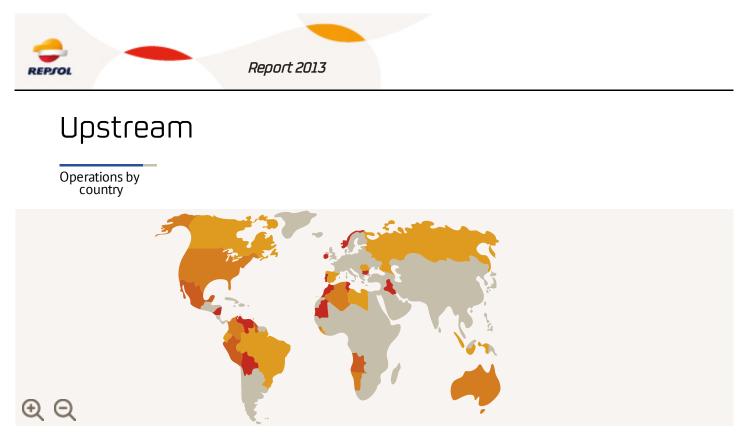
(\*) Output value, between 0 and 1

#### Reserves

At December 31, 2013, Repsol's proven reserves, estimated as per the US Securities and Exchange Commission's (SEC) conceptual framework for the oil and gas industry and in accordance with the criteria envisaged under the Petroleum Reserves Management System of the Society of Petroleum Engineers (PRMS-SPE), amounted to 1,515 MMboe, of which 422 MMboe (27.8%) comprise crude oil, condensates and liquefied gases, and the remaining 1,093 MMboe (72.2%) are natural gas.

In 2013, reserve trends were positive, with a total incorporation of 347 MMboe, mainly from the Cardón IV Project in Venezuela, incorporations in bpTT in Trinidad and Tobago and revised calculations in blocks 56 and 88 in Peru. In 2013, Repsol's proven reserves replacement ratio (measuring total additions of proven reserves over the period relative to period output) stood at 275% for crude oil, condensates, LPG and natural gas (87% for crude oil, condensates and LPG, and 401% for natural gas), outperforming the already excellent ratios recorded in 2012 (204%) and 2011 (162%). These new resources significantly bolster the company's future growth.

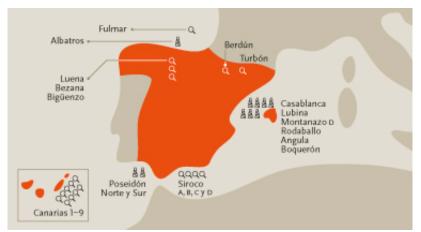
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# The Upstream division around the world

At December 31, 2013, the Upstream division held mining rights to 730 blocks, with a net surface area of 222,713 km<sup>2</sup>. Of these, 642 are exploration blocks with a net surface area of 212,596 km<sup>2</sup>. Repsol also participates in a major project involving unconventional resources at the Mississippian Lime play in the United States (net area: 1,530 km<sup>2</sup>). In 2013, Repsol completed 23 exploration wells, nine of which yielded finds and one of which is in test mode. At year end, four exploration wells were being drilled or were pending completion.

# Spain



- C Exploration block
- A Development/exploitation block

At December 31, 2013, Repsol held mining rights to 29 blocks in Spain: 19 for exploration, with a net surface area of 7,267 km<sup>2</sup>, and 10 blocks in development covering a net area of 332 km<sup>2</sup>.

Through its installations in Casablanca, Rodaballo and Boquerón (Mediterranean Sea) and

Poseidón (Bay of Cádiz), in 2013 Repsol produced a total of 2.3 MMb and 1.5 Bscf, representing a joint output of 2.5 MMboe (6,926 boe/d). Net proven oil reserves were estimated to total 3.9 MMboe at the 2013 year end.

#### 2013 milestones

• In 2013, production at the Lubina and Montanazo fields surpassed two million barrels of oil, both combined. Production in these fields, discovered by Repsol in 2009, began in October 2012. Reserves from the fields, located in the Spanish Mediterranean Sea, are channeled through the Casablanca platform and sent as crude oil through a 43-kilometer oil pipeline to the Repsol refinery in Tarragona. Lubina and Montanazo have increased production on the platform five-fold. Thanks to the activity of both deposits, the productive life of other fields operating through the Casablanca platform will be extended for at least another decade. New fields could potentially be developed as well.

In 2013, the Casablanca platform obtained Integrated Management System certification under ISO 9001, ISO 14001 and OHSAS 18001. Casablanca applies the highest industry standards of integrity and security for this type of facility.

Repsol is the operator in both blocks, with a stake of 68.67% in Montanazo and 100% in Lubina.

- In April 2013, the Spanish Ministry of Industry, Energy and Tourism approved the request submitted by Repsol in January to extend the Sirocco permit to search for gas in the seabed off the coast of Malaga. Repsol is the project operator, with 60%, while Gas Natural holds the remaining 40%. Works scheduled up to mid-2015 include drilling of an exploration well and the relevant production tests.
- In 2013, the government authorized Repsol to survey the seabed in the Canary Islands. Particularly, the Directorate-General of Energy and Mining Policy authorized Repsol to study the seabed off the coasts of Lanzarote and Fuerteventura. The results for the area, which includes the Canarias 1-9 blocks, will be incorporated into the Environmental Impact Assessment for the exploration wells. Repsol is the project operator with a 50% stake, in partnership with Woodside Energy Iberia (30%) and RWE Dea AG (20%).
- In view of the results of its two-year studies, Repsol presented a request to waive the Turbón permit. This block is located in the Ebro Basin in Aragón.

# Angola



Q Exploration block

At December 31, 2013, Repsol held mining rights to 15 blocks in Angola (including 12 with

service contracts), covering a net area of 3,897 km<sup>2</sup>.



#### 2013 milestones

• In April 2013, a new office was opened in Angola, one of the countries with the greatest potential for hydrocarbon exploration and production. Repsol operates in three exploration blocks (22, 35 and 37) officially included in the company's mining holdings in 2012. These contracts were signed with the state-owned company Sonangol in late 2011. Repsol is the operator of block 22, with a 30% holding, and has a 25% stake in block 35 (operated by Eni) and 20% of block 37 (operated by Conoco-Phillips).

Block 22 is located between two blocks in which deposits have been discovered (block 23 and block 21). Block 22 has similar characteristics to the Brazilian pre-salt layer and therefore has great potential for development. In 2013, the final seismic reports for the area were obtained. The first exploration well in the three blocks is slated for drilling in 2014. Repsol has chartered the seventh-generation ultra-deepwater drillship for the well, under a three-year contract with a possible two-year extension.

 In 2013, Repsol signed a collaboration agreement with Sonangol to use Repsol's cuttingedge exploration technology already successfully deployed in Brazil. This technology, developed for the Caleidoscopio project, makes it possible to obtain high-quality images beneath seabed salt layers, reducing uncertainty in exploring thousands of meters beneath the subsoil by minimizing distortion in images caused by ocean floor salt. Under the terms of the agreement, a replica of the Caleidoscopio supercomputer will be installed in Angola and the knowledge and tools of the Sherlock deepwater oil exploration project will be applied. This project draws on Repsol's vast knowledge of geology, geochemistry and highresolution analytical chemistry. The aim is to analyze the different elements of an oil system in order to reduce geological risk and increase the exploration success rate.

# Australia



Q Exploration block

At December 31, 2013, Repsol held mining rights to one exploration block in the country, with a net surface area of 12,548 km<sup>2</sup>.



# 2013 milestones

- In April 2013, the requisite environmental permits were secured to carry out a 3D seismic survey. Between May and July 2013, a total of 2,085 km<sup>2</sup> were surveyed. This data is currently being interpreted by Repsol.
- In August 2012, the Australian government awarded Repsol exploration license WA-480-P, after winning the bidding process carried out in April 2012. This offshore block, solely operated by Repsol, is at a depth of between 1,000 meters and 4,500 meters. The block is located about 280 kilometers from Port Hedland in the Pilbara region (northwestern Australia), in the northern Carnarvon Basin the most prolific in Australia. The exploration license, corresponding to a high-potential border area, bears out Repsol's strategy to grow in Organization for Economic Co-operation and Development (OECD) countries.

# Aruba



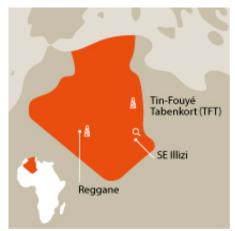
Q Exploration block

At December 31, 2013, Repsol owned mining rights to one exploration block in the country, with a net surface area of 14,360 km<sup>2</sup>.

#### 2013 milestones

- In February 2013, Repsol opened a permanent representation office in the capital city of Oranjestad. A production sharing agreement in the country was signed in December 2012, and the block was included in the company's official mining holdings in 2013. Water depths range between 50 meters and 4,000 meters, depending on the site. The contract foresees an exploration period of eight years, divided into four phases. Repsol is the operator, with a 100% interest in the project.
- In the first quarter of 2013, Repsol registered nearly 3,600 km of 2D seismic data. This data was fully processed by year end. Once the 2D survey data has been interpreted, a 3D seismic survey will be defined and registered in 2014.

# Algeria



- Q Exploration block
- Bevelopment/exploitation block

At the 2013 year end, Repsol held mining rights to three blocks in Algeria: one exploration block, with a net surface area of 2,162 km<sup>2</sup>, and two development blocks, with a net surface area of 998 km<sup>2</sup>.



Net output for the year was 0.9 MMb of liquids and 11 Bscf of natural gas, representing total net production equivalent to 2.9 MMboe (7,834 boe/d), originating especially from the TFT block (operated jointly with Sonatrach and Total) and, to a lesser extent, the Issaouane block operated by Repsol. Net proven reserves of liquids and natural gas at the end of the year were estimated to total 29.3 MMboe. In 2013, 3D seismic data was registered for a 784 km<sup>2</sup> area.

Repsol's activities in Algeria mainly entail operation of a production project (Tin-Fouyé Tabenkort), a large gas development undertaking considered a key part of the 2012-2016 Strategic Plan (Reggane), and efforts to make progress on the SE Illizi exploration project.

#### 2013 milestones

• In April 2013, a second gas discovery was made in the SE Illizi block in south-eastern Algeria. The new find came through the Tin Essameid Est-i (TDE-1) well. The find comes off the back of the success in the same block, at the Tihalatine South-i (TIHS-1) well in late 2012.

The TDE-1 well was drilled to a total depth of 1,512 meters. During the initial drilling tests of a 56 meter hydrocarbon column, a volume of 235,000 cubic meters/day of gas was obtained.

In 2013, Sonatrach was presented with the demarcation plan for the discoveries made in the first exploration period, as well as the start of the second exploration phase.

Repsol is the operator for the exploration phase of the SE Illizi block, with a 25.7% holding in the contract. The other partners are Enel SpA (13.5%) and GDF Suez (9.8%), while the remaining 51% stake is held by the Algerian state-owned company Sonatrach.

• In July 2013, the Front End Engineering Design (FEED) was completed for the surface facilities at the important Reggane development project. A call to tender was put out for the detailed engineering and construction contract for the gas treatment plant, the export pipeline and the collection system connecting the wells to the plant. Also in 2013, bids were sought for the drilling rigs. The first wells are slated for drilling in 2014.

In September 2013, a 3D seismic survey was started in the Reggane field, with further campaigns to come for the Azrafil SE and Kahlouche South fields.

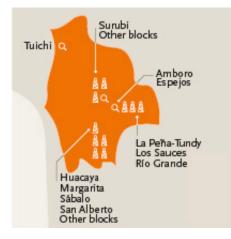
This gas project in the Algerian Sahara comprises the development of six fields (Reggane, Kahlouche, South Kahlouche, Sali, Tiouliline and Southeast Azrafil), all located in the Reggane Basin, about 1,500 kilometers southwest of Algiers.

Repsol holds a 29.25% stake in the project consortium, alongside the Algerian state-owned

company Sonatrach (40%), Germany's RWE Dea (19.5%), and Edison of Italy (11.25%).

• In September 2013, upon expiry of the 15-year operation period granted, the partners returned the Issaouane block to Sonatrach. Repsol operated three fields in the block: Tifernine, TIM and BEQ.

# Bolivia



- Q Exploration block
- A Development/exploitation block

At December 31, 2013, Repsol held mining rights to 29 blocks in Bolivia, located in the Beni, Pie de Monte, South Sub-Andean and North Sub-Andean basins. Four of the blocks are for exploration, with a net surface area of 6,703 km<sup>2</sup>, and 25 are in development, with a net area of 1,563 km<sup>2</sup>. Net output for the year was 2.7 MMb of oil, including condensates and liquid products separated from natural gas, and 54 Bscf of natural gas. Net total equivalent production was 12.3 MMboe (33,625 boe/d) and was fundamentally concentrated in the San Alberto and Sábalo fields (in partnership with Andina and the operator Petrobras).



2013 milestones



• On October 1, 2013, the Bolivian President Evo Morales and Repsol's CEO and Chairman Antonio Brufau inaugurated the enlargement of the gas processing plant, as part of the second phase of the Margarita-Huacaya project.

Margarita-Huacaya is located in the Tarija region in southern Bolivia. Thanks to the progress made on this project, the plant's capacity was increased to a gas output of 14 million cubic meters per day. The Margarita-Huacaya development plan is one of the key growth projects set out in the 2012-2016 Strategic Plan. As a reflection of Repsol's commitment to this project and to Bolivia, Repsol and its partners secured the gas output volume foreseen in the operation contract more than one year ahead of schedule.

The final phase of the site development plan calls for the drilling of four wells, two of which have already been completed, along with 2D and 3D seismic surveys. These steps will increase output even further.

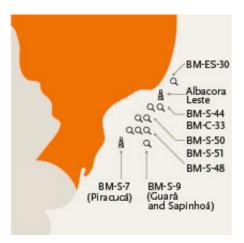
In December 2013, production began at the Margarita 6 well, with six million cubic meters of gas per day, making this the most productive well in Bolivia's history and in the entire Sub-Andean Basin. The well is the second of the four wells Repsol plans to drill during the second phase of the Margarita-Huacaya project. The well has outperformed all forecasts, both in terms of scheduling and production. The forecast output volume was achieved one year ahead of schedule and, with Margarita 6, total gas output for the site has increased to 15 million cubic meters/day.

In order to incorporate the new wells into the production system, 29 kilometers of gas pipelines were completed in 2013 and the Villamontes compressor station was enlarged.

The Caipipendi consortium, entrusted with the project, is operated by Repsol (37.5%), alongside partners BG (37.5%) and PAE E&P (25%).

The first phase of this sizeable development project went into production in May 2012. With the commissioning of the gas processing plant, along with the gas pipelines and fluid collection system, and the completion of wells, total gas output increased from 3 MMm<sup>3</sup>/d to 9 MMm<sup>3</sup>/d in 2012.

# Brazil



- Q Exploration block
- A Development/exploitation block

At the 2013 year end, Repsol held mining rights to seven blocks in Brazil: four exploration blocks (net surface area of 363 km<sup>2</sup>) and three development blocks (net surface area of 113 km<sup>2</sup>) located in the Santos, Espíritu Santo and Campos basins. Repsol is the operator of one of these blocks.



Net output for the year was 2.7 MMb of liquids and 0.3 Bscf of natural gas, representing total net production equivalent to 2.8 MMboe (7,606 boe/d) from the Sapinhoá and Albacora Leste blocks.

At December 31, 2013, net proven reserves of liquids and natural gas were estimated at 59.3 MMboe. During the year, five exploration surveys were carried out, two of which yielded finds.



All the promising results in Brazil since 2011 were obtained through the alliance signed in 2010 between Repsol (60%) and the Chinese company Sinopec (40%), which led to the creation of Repsol Sinopec Brasil - one of the largest private energy companies operating in Latin America. Repsol Sinopec Brasil is one of the leading exploration and production companies in Brazil, where it occupies a strategic position in the highest-potential sites of the Brazilian pre-salt area and carries out intense exploration activity in the hydrocarbon-rich Santos Basin, together with Petrobras and BG. The company has a significant and well-diversified asset portfolio in Brazil, including the Sapinhoá and Albacora Leste production fields as well as major discoveries made in recent years in the BM-S-9 and BM-C-33 blocks.

The major exploration discoveries made in recent years, coupled with the development projects currently underway and the agreement reached with Sinopec, all bolster the company's strategy in offshore Brazil (one of the areas offering the greatest upside in oil and gas reserves worldwide) and represent one of the key growth projects for the Upstream division.

#### 2013 milestones

In January 2013, commercial operation in the Sapinhoá megafield began with the commissioning of the first production well in the southern sector. The well, located in block BM-S-9, is in the pre-salt deep waters of the Santos Basin. Production on the second well began in mid-February 2014. Sapinhoá, whose discovery well in 2008 was named by the consultant HIS as one of the five largest finds worldwide that year, is one of Repsol's key growth projects. This high-quality crude is produced in the southern area of Sapinhoá, on a floating platform that produces, stores and transfers oil to another vessel, the Floating Production, Storage and Offloading (FPSO) platform Cidade de São Paulo, with capacity to process 120,000 barrels of crude and 5 million cubic meters of gas per day. As part of the complete development plan for the area, the platform will be connected to new production wells, reaching expected total crude output of 120,000 bo/d in 2014. During the second phase of development of the Sapinhoá field (northern area), the Cidade de Ilhabela FPSO platform will be installed, with a daily production capacity of 150,000 barrels of crude and 6 million cubic meters of gas. Repsol Sinopec Brasil holds a 25% stake in this project, in partnership with Petrobras (45% and operator) and BG (30%).

In 2013, extended well testing (EWT) was carried out in Sapinhoá North (block BM-S-9), which connects to the Cidade de Sao Vicente FPSO platform. The well, 310 kilometers from the coast, has a depth of 2,140 meters. The tests yielded very positive results, showing high-quality oil.



• In June 2013, an important discovery of high-quality oil was made through the Sagitario exploration well located in the deepwater BM-S-50 block in the Santos Basin (Brazilian pre-

salt layer). This well, the first drilled in the BM-S-50 block, is located 194 kilometers from the Sao Paulo coast, with a depth of 1,860 meters. IHS cited this well as one of the tenlargest discoveries worldwide in the first half of 2013. Repsol Sinopec Brasil holds a 20% stake in this block, operated by Petrobras.

This discovery firmly places Repsol Sinopec Brasil among the top companies operating in the Brazilian pre-salt area.

In late October 2013, the seventh-generation drillship Ocean Rig Mylos arrived at block 33, in the offshore Campos field, and began drilling in November. The rig, built at the South Korean Samsung Heavy Industries ship yard, is one of the most modern and safest in the world for drilling in depths of up to 3,700 meters. The ship is 228 meters long overall and has a beam of 42 meters. Repsol chartered the drillship in 2012 for a three-year period, with an optional two-year extension. Initially, the ship will be used for the block 33 evaluation plan, comprising two appraisals in the first phase plus production tests. In block 33, Repsol has made three major discoveries as operator: Pao de Adúcar (2012), Gávea (2011) and Seat (2010). The three deposits represent one of the largest discoveries made to date in the Campos Basin pre-salt area. In 2013, 2,585 km<sup>2</sup> of 3D seismic data was registered.

Block BM-C-33 is operated by Repsol Sinopec Brasil (35%), in partnership with Statoil (35%) and Petrobras (30%).

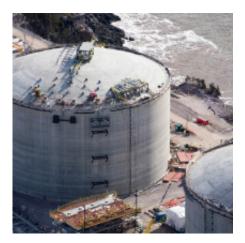
- In 2013, work was continued under the Carioca appraisal and design plan (block BM-S-9). TFR tests were carried out in North Carioca, while the SW Carioca exploration well was drilled. Results were very positive, as Carioca's estimated hydrocarbon column was considerably increased. These tests aimed to more accurately determine the potential and breadth of the Carioca area.
- In December 2013, the declaration of commercial viability for the Carioca field was submitted to the Brazilian authorities (ANP). This covers the northeast and southwest zones of the evaluation plan area. The southeast area was returned to ANP, including the Abaré, Abaré Oeste, Iguazú Norte and Iguazú Sur prospects.

# Canada



Q Exploration block

At December 31, 2013, Repsol held mining rights to eight exploration blocks in Canada, with a net surface area of 3,041 km<sup>2</sup>.



#### 2013 milestones

• In early 2013, Repsol was awarded a new offshore exploration block, in the NL12-02-Flemish Pass exploration round. The block (EL-1134) was awarded to the consortium formed by Husky (40%), Suncor (35%) and Repsol (25%). The offshore block, with a total surface of 2,089 km<sup>2</sup>, is located in the Southern Flemish Basin.

The addition of this new exploration block, which joins the seven existing ones, demonstrates Repsol's commitment to creating a significant portfolio of projects in offshore Canada, in line with its strategy of geographical diversification and growth in OECD countries.



# Colombia



C Exploration block

#### A Development/exploitation block

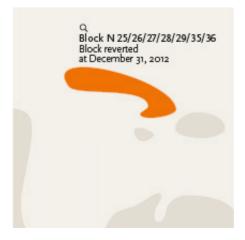
At the 2013 year end, Repsol held mining rights to eight blocks in Colombia: four exploration blocks, with a net surface area of 12,720 km<sup>2</sup>, and four blocks in development, with a net area of 151 km<sup>2</sup>. Net output during the year was 1.1 MMb (2,904 b/d) of oil. Net proven reserves at December 31, 2013 were estimated to total 3.7 MMb.



#### 2013 milestones

- In the exploration-phase onshore Cosecha block, in which Repsol holds a 25% stake (75% owned by the operator Oxy), oil was discovered in the REX-1 well in the first half of 2013. The block is located in the Llanos Basin.
- In the Tayrona offshore exploration block, in which Repsol holds a 30% stake, seismic surveying was completed with 2D data registered for 1,518 km. The environmental license was granted in May 2013.

# Cuba



#### C Exploration block

Tras los resultados negativos del sondeo Jagüey, terminado en el primer semestre de 2012, se procedió a cancelar el contrato de exploración en el área, una vez cumplidos los requisitos establecidos por las autoridades del país, por lo que Repsol no tenía participación en ningún bloque de exploración y producción en Cuba a 31 de diciembre de 2012.

# Ecuador



A Development/exploitation block

At the 2013 year end, Repsol had mining rights in Ecuador to two development blocks covered by a service agreement effective since 2012. The net surface area of these blocks is 479 km<sup>2</sup>. Net output during the year totaled 4.4 MMb (12,071 b/d) of oil, mostly originating from block 16. Net proven oil reserves at the end of the year were estimated at 11.6 MMb.



#### 2013 milestones

• Total accumulated output in the block 16 and Tivacuno, operated by Repsol, was 300 million barrels in the first quarter of 2013. Repsol has had a presence at these blocks since 2001 and 1992, respectively.

# United States



#### A Development/exploitation block

At December 31, 2013, Repsol held mining rights to 515 blocks in the Gulf of Mexico (Green Canyon, Alaminos Canyon, Atwater Valley, Garden Banks, Keathley Canyon, Mississippi Canyon and Walker Ridge) and in Alaska (in the North Slope, Beaufort Sea and Chukchy Sea basins). A total of 509 are exploration blocks, with a net surface area of 6,047 km<sup>2</sup>, while the other six are development blocks (39 km<sup>2</sup>). Repsol is also part of a major project involving unconventional resources in the Mississippian Lime play. Net output for the year was 11 MMboe (30,333 boe/d), while net proven reserves at year end were estimated to total 45.4 MMboe. In 2013, three exploration wells were finished, 27,094 km<sup>2</sup> of offshore 3D seismic data was acquired, and 823 km<sup>2</sup> of onshore 3D seismic data was registered.





# 2013 milestones

In April 2013, Repsol announced three oil discoveries at different depths, through the three wells drilled during the 2012-2013 Alaskan exploration campaign. The Qugruk 1 (Q-1) and Qugruk 6 (Q-6) wells revealed hydrocarbons at two levels and yielded promising results in the production tests. Hydrocarbons were detected at several levels in the Qugruk 3 (Q-3) well. The Q-1, Q-3 and Q-6 wells reach depths of 2,493 meters, 3,214 meters and 2,637 meters, respectively. Evaluation and exploration works continued during the 2013-2014 winter season (exploration activities can only be carried out during four months a year in this area, when the soil is frozen). With a 70% stake, Repsol is the operator in the consortium responsible for the discovery, in partnership with the US companies 70 & 48 LIC (22.5%), a subsidiary of Armstrong Oil and Gas, and GMT Exploration Company (7.5%).

The Alaska North Slope is an especially promising area for Repsol, as it has already proven to have rich oil deposits.



- In 2013, Repsol was officially awarded the 41 Alaskan blocks previously announced as the highest offer made in the NS-2012W and BS-2012W Alaska North Slope bidding rounds in November 2012.
- As part of exploration round 227 of March 2013, US authorities awarded two new exploration blocks to Repsol in the Gulf of Mexico. The offshore blocks are Green Canyon-GC 581, in which Repsol has a 40% stake, and Atwater Valley-AT 172, in which it holds a 100% interest.



- In 2013, intense drilling efforts continued in the non-conventional resource area of the Mississippian Lime play, with over 400 production wells completed during the year. Repsol participates in this area, located between the states of Kansas and Oklahoma, through an agreement with the US oil concern SandRidge Energy, confirmed in 2012.
- In the high-production deepwater Shenzi field in the Gulf of Mexico (28% stake), in 2013 the company completed drilling on two development wells and began drilling on a third. Currently, 16 wells are in production (14 through the Shenzi platform and two through the Marco Polo platform) and four injection wells have been drilled, including two in 2013.
- In the first half of 2013, drilling began on the second appraisal well at the Buckskin discovery, slated for completion in 2014.

Following the positive results of the first evaluation well in 2011, this second well will confirm the great resource potential of the reservoir, and the field development plan will be defined, with production slated to start in 2017 or 2018. Repsol, as operator of the project in its first exploration phase, made this important discovery in 2009 at a total depth of 9,000 meters, making it the deepest well operated by Repsol so far and one of the deepest drilled in the area.

Repsol's diversified portfolio of projects in the United States, comprising assets in highpotential production and exploration projects both onshore and offshore, positions the country as one of the major strategic growth areas for the company and bolsters its strategy of growth in OECD nations.

# Guyana



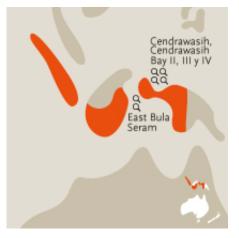
Q Exploration block

At the 2013 year end, Repsol held mining rights to an exploration block off the coast of Guyana, with a net surface area of 4,568 km<sup>2</sup>. During the year, 3,174 km<sup>2</sup> of 3D seismic data and 862 km of 2D seismic data were registered.

#### 2013 milestones

• In May 2013, Repsol signed a new production sharing agreement with the Guyana government for the exploration of the Kanuku offshore block. The contract is for an initial period of four years, with possible extensions up to 10 years. The 6,525 km<sup>2</sup> block is located off the coast of Guyana, approximately 160 kilometers from the mouth of the Berbice River.

# Indonesia



C Exploration block

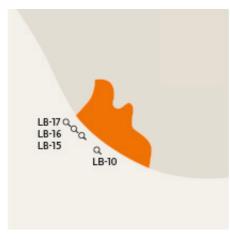
At the 2013 year end, Repsol had mining rights to six exploration blocks in Indonesia, with a net surface area of 13,289 km<sup>2</sup>. In 2013, 1,215 km<sup>2</sup> of offshore 3D seismic data were acquired.



# 2013 milestones

• In June 2013, the Indonesian authorities granted permission to Repsol to acquire a 30% stake in the Cendrawasih offshore exploration block, which covers a total surface area of nearly 5,000 km<sup>2</sup>. In addition to this new exploration block, Repsol already participates in five other blocks in Indonesian waters.

# Liberia



#### Q Exploration block

At December 31, 2013, Repsol held mining rights to two exploration blocks in Liberia (LB-10 and LB-15), with a net surface area of 959 km<sup>2</sup>.

#### 2013 milestones

- In June 2013, the partners in blocks LB-16 and LB-17 informed the Liberian authorities of their decision not to proceed with the second exploration phase.
- In 2013, the interpretation of drillable targets was completed at the LB-10 block, in which Repsol holds a 10% stake, and two were selected in order to begin drilling in 2014. The operator, Anadarko, has chartered a drillship for these wells. The rig is currently being built in South Korea and will arrive in Liberia in early 2014.

# Libya



- Q Exploration block
- A Development/exploitation block

At the 2013 year end, Repsol had mining rights to eight blocks in this North African country. Of these, six are exploration blocks covering a net area of 13,465 km<sup>2</sup>. Two blocks are in development and cover a net area of 1,566 km<sup>2</sup>. Net proven oil reserves at the end of the year were estimated to total 109.6 MMb.



# 2013 milestones

- In October 2013, Repsol announced a high quality very light (39° API) oil discovery in Libya's Murzuq Basin. The find was made in block NC-115, located in the Sahara Desert, 800 kilometers south of Tripoli. Production tests on the 1,842 meters-deep well (A1-129/02) revealed very promising flow rates. This is the third of eight wells to be drilled in the block, which covers a total of 4,398 km<sup>2</sup> and has shown excellent properties as a hydrocarbon reserve. In view of the success to date, Repsol will continue explorations in the area, which began in 2013 and are slated for completion in 2015. Repsol is the operator for the exploration area of the block, with a 40% stake. Its partners, the Australian company OMV and the French concern Total, each hold 30%.
- For more than 100 days in 2013, production in the NC-115 and NC-186 blocks was affected by problems not associated with the operation. Production was resumed in early January 2014, although it was once again affected as from late February 2014.

Iraq



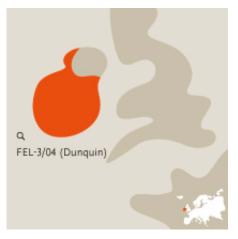
Q Exploration block

At the 2013 year end, Repsol had mining rights to two exploration blocks in Iraq, with a net surface area of 1,377 km<sup>2</sup>.

# 2013 milestones

- In 2013, the 2D seismic data acquired in the Piramagrun and Qala Dze exploration blocks in 2012 was processed and interpreted. Based on this data, the drilling targets were set. In the fourth quarter of 2013, drilling works began on one of the targets, with the Zewe 1 well in the Piramagrun block. The company expects to complete the second exploration well (Binari Serwan), located in the Qala Dze block, during the first half of 2014.
- In the fourth quarter of 2013, Maersk formally acquired 50% of Repsol's interest in the two blocks, leaving Repsol with a 50% stake in the area.

# Ireland



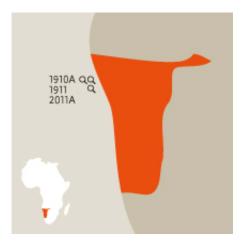
C Exploration block

At the 2013 close, Repsol held mining rights to an exploration area in Ireland (the Dunquin project), covering a net surface area of 324 km<sup>2</sup>.

# 2013 milestones

• In the second quarter of 2013, the Dunquin exploration well was drilled (with Exxon as the operator). In the third quarter, the well was declared commercially unviable. Repsol holds a 25% stake in this project.

# Namibia



Q Exploration block

At December 31, 2013, Repsol held mining rights to three exploration blocks in Namibia, with a net surface area of 5,121 km<sup>2</sup>.

# 2013 milestones

• In February 2013, the agreement signed in July 2012 became effective, under which Repsol acquired Arcadia Petroleum Ltd's 44% stake in exploration license 0010, corresponding to offshore blocks 1910a, 1911 and 2011A in Namibian waters. Repsol is the operator of the blocks, and partners with Arcadia Petroleum (26%) and Neptune (30%).

# Nicaragua



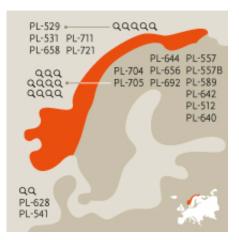
C Exploration block

At the 2013 year end, Repsol was pending official confirmation of mining rights to two exploration blocks covering a total net area of 1,558 km<sup>2</sup>.

# 2013 milestones

• In late 2013, Repsol formally secured a 20% stake in the Tyra and Isabel blocks, operated by Noble (80%). The operation was pending official confirmation at December 31, 2013. In late 2013, the Paraíso exploration well in the Tyra block was completed, with no find. The block is located in a high geological-risk border area.

# Norway



Q Exploration block

At December 31, 2013, Repsol held mining rights to 18 exploration blocks in Norway, with a net surface area of 3,520 km<sup>2</sup>. The company acts as operator in six of the blocks (PL-531, PL-541, PL-642, PL-692, PL-705 and PL-71). During the year, 1,592 km<sup>2</sup> of 3D seismic data was registered and 54,435 km<sup>2</sup> of 3D seismic data was acquired.

#### 2013 milestones

- In January 2013, Repsol formally secured a 20% stake under the PL-628 license, operated by Statoil in the North Sea.
- In the first quarter of the year, the Norwegian Petroleum Directorate announced that Repsol would be awarded a license in the Norwegian Sea (PL 692), acting as operator with a 40% stake. Repsol's partners in the venture are Edison (30%) and Skagen44 AS (30%). The license was granted for a seven-year period.
- In June 2013, the Norwegian Ministry of Petroleum and Energy announced that Repsol would be awarded four exploration licenses in round 22. Two of the licenses cover areas in the Norwegian Sea (PL704: Repsol 30% and PL705: Repsol 40% and operator) while the remaining two are in the Barents Sea (PL711: Repsol 40% and PL721: Repsol 20%).
- During the first half of the year, Repsol gave up two licenses: PL-356 (operated by Det Norske) in the North Sea, and PL-530 (operated by Gaz de France Suez) in the Barents Sea.
- In the fourth quarter, the stake in license PL541 was diluted by 15%, in favor of Explora Petroleum. Repsol still holds a 35% interest and operational control of the area.
- In January 2014, Repsol was notified that it had obtained three licenses in round APA 2013 (Awards in Predefined Areas): PL-658B (Barents Sea), PL-750 (Norwegian Sea) and PL-763 (Norwegian Sea), and would be operator under one of the licenses.

# Bulgaria



Q Exploration block

At December 31, 2013, Repsol held mining rights to one exploration block with a net surface area of 4,266 km<sup>2</sup>. During 2013, 7,368 km<sup>2</sup> of 3D seismic data and 3,088 km of 2D seismic data were registered.

# 2013 milestones

• In 2013, the award of the Han Asparuh offshore exploration block, located in the Black Sea, was officially confirmed. In August 2012, the Bulgarian authorities had awarded the block to a consortium formed by Repsol (30%), Total (40% and operator) and OMV (30%). The block, with a total area of 14,220 km<sup>2</sup>, is located in the western sub-basin of the Black Sea, at a depth of between 200 meters and 2,000 meters. This is a geologically complex boundary area with high prospectivity. The block is located 25 kilometers south of major gas deposits discovered in Romanian waters by ExxonMobil and OMV in 2012.

# Morocco



C Exploration block

At the end of 2013, Repsol held mining rights to two exploration blocks located in the Gharb (offshore) and Bechar (onshore) basins, which cover a net area of 35,264 km<sup>2</sup>.

# 2013 milestones

• In mid-2013, Repsol applied to the Moroccan authorities for an exploration license for the Gharb offshore block. The request was filed in view of the good results obtained in the geological and economic appraisal performed under the evaluation license Repsol held with the National Hydrocarbons and Mines Office (ONHYM) for 2010-2011 and during the extension covering 2011-2012. The new exploration contract is only pending official

signing by the country's authorities.

• In 2013, the company completed the shallow well drilling campaign launched in 2012 under the Hauts-Plateaux and Boudenib evaluation licenses in order to obtain surface samples. These samples are currently being analyzed to determine the shale gas potential in both blocks. Repsol secured these two evaluation licenses from the ONHYM in 2011.

# Mauritania



Q Exploration block

At December 31, 2013, Repsol held mining rights in this African country to one exploration block (TA-10), covering a net area of 10,115 km<sup>2</sup> and located in the Taoudenni Basin. Repsol holds a 70% stake in this block and is the operator, while the remaining 30% is held by RWE Dea.

# 2013 milestones

• In late 2013, drilling began in the Ouguiya-1 exploration well.

# Mexico

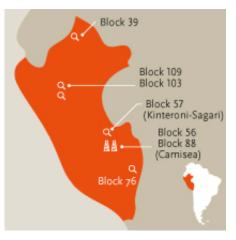
Bevelopment/exploitation block

In 2013, Repsol operated the Burgos Basin Reynosa-Monterrey block in the north of the country, through a multi-service contract. At the 2013 year end, production was underway in nearly 40 wells, although the results were not included in Repsol's books as they are attributable to the state-owned company Pemex. As per Pemex instructions, work during 2013 focused primarily on maintenance services.

The service agreement held with Pemex expired on January 8, 2014 and the facilities were

handed over. The contract was awarded in 2003 during the first international bidding process called by the Mexican state-owned company for the development and production of gas fields in the country. Repsol began this operation in March 2004.

#### Peru



- C Exploration block
- A Development/exploitation block

At December 31, 2013, Repsol held mining rights to seven blocks in Peru: five for exploration, with a net surface area of 15,789 km<sup>2</sup> and two in development, with a net surface area of 202 km<sup>2</sup>. In 2013, net oil and gas output in Peru was 10.9 MMboe (29,902 boe/d), originating from blocks 56 and 88 (Camisea reservoir). Net crude output was 3.7 MMb, including condensates and liquid products, while natural gas totaled 40.5 Bscf.



Net proven reserves of crude oil and gas were estimated to be 332.8 MMboe at the end of the year.

In 2013, the supply of natural gas from the Camisea field to the Peru LNG liquefaction plant continued normally. Repsol has a 10% interest in Camisea's blocks 56 and 88. Production from the Camisea field is intended for the local market and to supply Peru LNG. The Cashiriari and San Martín fields in these blocks are in production.



#### 2013 milestones

• In mid-2013, the Peruvian Ministry of Energy and Mines announced that extension work would resume on the Camisea pipeline, which will increase its capacity from 1,230 MMscf/d to 1,540 MMscf/d. The pipeline is operated by Transportadora de Gas del Perú (TGP), in which Repsol held a 10% stake at December 31, 2013. The Ministry estimates that these works will be completed in the first half of 2015.



- Production was near ready at the Kinteroni field in block 57, pending only the settlement of certain commercial matters. The development plan, launched in mid-2010 and completed in 2012, entailed drilling, completion, and testing of production wells and the construction of surface facilities and the pipeline system to the Malvinas plant. The Kinteroni field is located in central-eastern Peru, east of the Andes, in the Ucayali-Madre de Dios Basin. Repsol discovered the Kinteroni deposits in January 2008, as one of the largest discoveries in the world that year.
- In late January 2014, an agreement was signed with Enagás for the sale of 10% of Repsol's holding in the Transportadora de Gas del Perú (TGP) gas pipeline. Completion of the pipeline is subject to compliance with certain conditions precedent, which are likely to be met in the first half of 2014. TGP is entrusted with the transport of natural gas and liquids from the Camisea production field to the Peru LNG liquefaction plant in Pampa Melchorita and to the city of Lima. This operation is part of targeted divestments of non-strategic assets as outlined in Repsol's 2012-2016 Strategic Plan.

# Russia



- Q Exploration block
- A Development/exploitation block

At the 2013 year end, Repsol held mining rights to 13 exploration blocks in Russia, with a net surface area of 8,615 km<sup>2</sup> and 16 production blocks covering a net area of 1,017 km<sup>2</sup>.



During 2013, 1,010 km<sup>2</sup> of 3D seismic data were registered.

Net output for the year was 3.9 MMb of liquids and 8.1 Bscf of natural gas, with net equivalent production of 5.3 MMboe (14,591 boe/d). Net reserves stood at 39.4 MMboe at the 2013 year end.

#### 2013 milestones

• In January 2013, Repsol contributed the company's assets in Eurotek to the AR Oil and Gaz BV (AROG) joint venture, including two major gas fields: Syskonsyninskoye (SK), which entered production in late February 2013, and Yuzhno-Khadyryakhinskoye (YK), which is in the final appraisal phase before entering development. The AROG joint venture between Alliance Oil (51%) and Repsol (49%) was formally arranged in late January 2013.

In August 2012, Repsol and Alliance Oil completed the first phase of the hydrocarbons exploration and production project, with Alliance Oil transferring assets to the AROG joint venture and Repsol purchasing shares. The agreement, signed in December 2011, will allow AROG to serve as a growth platform for both companies in the Russian Federation, the world's largest producer of gas and oil. In August 2012, Alliance Oil contributed its subsidiary Saneco, which runs exploration and production activities in the Samara region (Volga-Urals Basin), with proven and probable reserves in 11 oil fields already in production. Repsol acquired shares in the company and subscribed new shares, bringing its stake to 49%. In the third quarter of 2012, Repsol recognized production and reserves from this

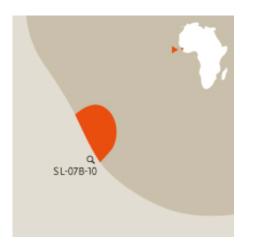
project on its books. In December 2012, Alliance also incorporated the assets of its subsidiary Tatnefteodatcha (TNO) in the AROG venture. These assets are located in the Russian region of Tatarstan (Volga-Urals Basin) and comprise two oil fields with their respective exploration and production licenses.

The venture combines Alliance Oil's knowledge and access to exploration and production opportunities in Russia with Repsol's financial and technical capacities, thus forging a long-term alliance for exploration and production activities. Under the agreement, the partners will also jointly seek out new expansion opportunities by acquiring oil and gas assets in Russia.



- In February 2013, gas production began at the Syskonsyninskoye (SK) field, in the Khanty-Mansiysk region of the Siberian steppe. The full development plan for the field foresees a total of 11 production wells, all of which are slated to enter production throughout 2014. This field is the first production project carried out by Repsol and Alliance Oil since the creation of their joint venture for oil and gas exploration and production in Russia.
- In mid-2013, there was a discovery at the Gabi 3 exploration well in the Karabashsky-2 block in Siberia, where Repsol is the operator with a 100% interest. The well is to a depth of 1,350 meters. 2013 also saw the completion of the Gabi 1 well in the Karabashsky-1 block (100% Repsol as operator) with very good results, which will be confirmed with the production tests to be performed in 2014.
- In 2013, two new exploration blocks in Siberia (Karabashsky-3 and Karabashsky-9), in which Repsol holds a 100% stake and is the operator, were included in the company's total mining holdings.
- Repsol sold a 3.47% interest in Alliance Oil.

# Sierra Leone



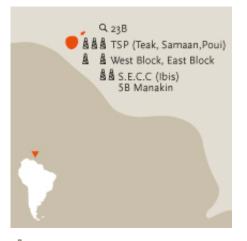
#### Q Exploration block

At the end of 2013, Repsol had mining rights to one offshore exploration block in Sierra Leone, with a net surface area of 1,273 km<sup>2</sup>. The company has a 25% interest in the SL-07B-10 block, which originates from the retained areas of the former SL-6 and SL-7 blocks awarded in January 2003. The depth of the water in the block varies between 100 meters and 3,800 meters.



At the date of this report, Repsol has duly complied with all exploration commitments undertaken before the national authorities in this exploration phase.

# Trinidad and Tobago



Bevelopment/exploitation block

At the end of 2013, Repsol had mining rights in Trinidad and Tobago to seven offshore development blocks (net surface area of 2,363 km<sup>2</sup>), including 30% of the offshore

exploration and production assets of the company bpTT in Trinidad and Tobago through the stake held in BPRY. Net output for the year was 4.2 MMb of liquids and 253.4 Bscf of natural gas, equivalent to net production of 49.3 MMboe (135,046 boe/d). Net proven reserves of oil and natural gas were estimated to be 325.3 MMboe at December 31, 2013. Repsol also has a 40% stake in an exploration block with a net area of 1,030 km<sup>2</sup>.



#### 2013 milestones

- In November 2013, the exploration contract for block 23B was signed. Repsol holds a 40% stake in this new deepwater exploration block, with BHP (operator) holding the remaining 60%. In 2014, 3D seismic data will be collected to confirm the blocks' potential.
- In 2013, bpTT continued to drill development wells in the Savonette and Immortelle fields. This company, in which Repsol has a 30% stake, operates an extensive offshore area supplying gas to the liquefaction trains at the Atlantic LNG plant.
- In the TSP block, progress was made during 2013 in preparing the drilling campaign to be carried out in 2014 (between six and eight development wells). Repsol is the operator of the TSP block, holding a 70% interest.

# Venezuela



- Q Exploration block
- Bevelopment/exploitation block

At December 31, 2013, Repsol held mining rights to eight development blocks in Venezuela, with a net area of 853 km<sup>2</sup>. Net output for the year was 4.9 MMb of oil and liquids separated from natural gas, and 46.7 Bscf of natural gas, which equate to 13.3 MMboe (36,355 boe/d), mainly originating from the Quiriquire, Barúa Motatán, Mene Grande and Yucal Placer blocks.

Net proven reserves of crude oil and natural gas were estimated to be 454 MMboe at year end.



#### 2013 milestones

In 2013, the Cardón IV consortium (Repsol 32.5%, ENI 32.5% and PDVSA 35%) continued to advance in its development plan for the key Perla field project in the Cardón IV block (Gulf of Venezuela). The project has been divided into three phases, depending on the volume of non-associated natural gas that will be produced (150 MMscf/d, 450 MMscf/d and 800 MMscf/d). In addition, a final phase to reach 1,200 MMscf/d is planned. The first phase (150 MMscf/d) is expected to come on stream in late 2014. The Venezuelan authorities approved the declaration of commercial viability and the field development plan in August 2012.

The development plan sets out a series of tasks, both onshore and offshore, most notably the re-entry of wells already drilled during the exploration phase and the drilling of new wells, the construction and installation of offshore platforms, the laying of production pipelines, the construction of the onshore gas processing and treatment plant and the pipeline from the gas treatment plant to the point of delivery to PDVSA Gas. As required by the Ministry of Energy and Mining, a number of social contributions are also envisaged in order to foster the development of local communities in the area.

In 2013, the detailed engineering work for the onshore processing plant was performed, the contract to supply equipment for the plant was awarded and the construction contract was signed. In addition, the Engineering, Procurement and Construction (EPC) contract was awarded for the construction and assembly of the offshore facilities, work progressed on the installation of the production pipeline (sea-to-coast), the drilling rig contract was awarded, the earthmoving works were performed and the detailed engineering work was undertaken for the condensate tanks.

• In 2013, development work progressed in the Carabobo heavy oil project, another key growth project in Venezuela, in which Repsol has an 11% stake. In addition, the seismic data campaign continued, approval was given to commission a processing plant with capacity for 30,000 bo/d for accelerated early production along with the future installation of two new 30,000 bo/d plants, and the Front End Engineering Design (FEED) contract was awarded for the permanent upstream facilities.

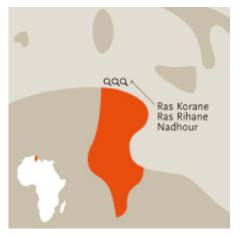
In late December 2012, start of production was announced at the first well envisaged under the accelerated development plan for the Carabobo field. Early production is slated to start around 2016, reaching a forecast production plateau of 400,000 bo/d in 2019 following start-up of the upgrader. This upgrader, with a processing capacity of 200,000 bo/d, will increase the quality of the crude to 32° API.

The Venezuelan government awarded the Carabobo project to a consortium of international companies headed by Repsol in February 2010. This important project, undertaken jointly with PDVSA, involves developing the heavy crude oil reserves in the Carabobo 1 Norte and Carabobo 1 Centro areas located in the Orinoco Petroleum Belt.

This area is home to one of the largest reserves of undeveloped oil in the world. Production will reach 400,000 bo/d over a 40-year period. Part of the heavy crude oil obtained from the project will be sent to Repsol's Spanish refineries, allowing the company to profit from its investment in advanced deep conversion techniques at the refineries.

 In the first half of the year, Repsol opened a new office in Venezuela. This office, located in the city of Maracaibo, will provide support for the company's activities in western Venezuela. This includes support for the Petroquiriquire public-private venture ("mixed company"), which operates the Barúa Motatán and Mene Grande fields and in which Repsol holds a 40% stake.

# Tunisia



Q Exploration block

At December 31, 2013, Repsol held mining rights to three offshore exploration blocks in Tunisia. These blocks, acquired in 2011, have a net surface area of 7,560 km<sup>2</sup>. Repsol is the operator, with a 50% interest.

# 2013 milestones

- In the first half of 2013, 2D seismic data was collected for the three offshore blocks (2,586 km). Data processing was completed during the last quarter of the year.
- In mid-2013, a request was submitted to the Tunisian authorities to extend the exploration period in the three blocks in order to fully evaluate the area's potential.

# Portugal



Q Exploration block

At the end of 2013, Repsol held mining rights to six exploration blocks, with a net surface area of 13,653 km<sup>2</sup>.



## 2013 milestones

- In the third quarter of 2013, Repsol formally acquired Petrobras' 50% stake in the Mexilhão, Ameijoa, Ostra and Camarão offshore blocks. In 2012, Repsol had acquired Partex's 15% stake in these blocks, located in Peniche. As a result of these transactions, Repsol increased its stake to 65% and has taken over the operation of the blocks.
- In the Algarve blocks (Lagosta and Lagostim), the 3D seismic data registered in 2012 was further processed during 2013. The result of this work will be ready in 2014, at which time the location of the first exploration well will be defined. The Lagosta and Lagostim blocks, in which Repsol holds a 90% stake, are located between 15 kilometers and 100 kilometers off the coast, at a depth of between 500 meters and 1,500 meters. The Portuguese company Partex holds the remaining 10% interest in the project.

## Romania



Q Exploration block

At December 31, 2013, Repsol held mining rights to four exploration blocks in Romania, with a net surface area of 3,304 km<sup>2</sup>. During the year, 5.974 km<sup>2</sup> of 3D seismic data and 11,891 km of 2D seismic data were acquired.

## 2013 milestones

 In March 2013, Repsol announced that it had signed an agreement with the Romanian subsidiary of Austrian oil company OMV (OMV Petrom), to jointly explore the deeper levels (2,500 meters to 3,000 meters) of four blocks in Romania. The blocks are located in the Carpathian Flysch fold and thrust belts. Repsol holds a 49% stake in this project, in which OMV Petrom is the operator. Repsol's exploration experience in fold and thrust belts helped secure this arrangement.

There is a high potential in onshore and offshore exploration in the Romanian Black Sea. Thanks to Repsol's newly-acquired foothold in this country, it will be able to explore underneath traditional oil fields, in a high oil and gas potential area within the European Union.



# Downstream

Refining Marketing LPG Chemical Non-fossil fuel energy initiatives



In 2013, Repsol continued to boast one of the best integrated refining and marketing margins in Europe. Conversion units in the refining system were used at a rate of 99%. This success was achieved despite the continued fall in demand in Europe, particularly in Spain, which weakened refining and chemical margins as well as retail sales.

Following the commissioning in late 2011 and early 2012 of two major projects in the Cartagena and Petronor refineries, respectively, the refining business' efforts primarily focus on optimizing the production system and enhancing efficiency.

### Downstream business

- **Refining:** production of fuel and other petroleum-derived products.
- Marketing: marketing and sale of the company's products.
- **Trading and transporte:** supply of crude oil and products to the refining system, and the trading of crude oil and own products outside the system.
- **Chemicals:** production and marketing of a wide variety of products.
- LPG: production, distribution and retailing of butane and propane.
- **New Energies:** identification of opportunities, support for projects and performance of initiatives in areas such as biotechnology, e-mobility and generation of renewable energies.

### Key events in 2013

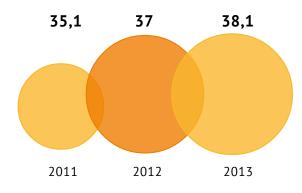
- Inauguration of a new Fuel-oil Reduction Unit at the Petronor refinery.
- Opening of a commercial office in Singapore.
- Technology transfer agreement with the Chinese company Jilin Shenhua, for the construction of a polymeric and flexible polyol plant in China.
- Record lubricant sales.

Storage and transport	$\rightarrow$ Indu	ustrial activity	$\rightarrow$	Sales	
Crude oil	Oil products	Chemicals	LPG	Chemicals	Marketing
Trading and transport of crude and products to refineries for processing	Refining and transformation of crude oil into oil products	Preparation of a wide range of petrochemical products	Processing and distribution of LPG	Distribution and sale of petrochemical products produced	Distribution and sale of oil products obtained
	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$
A		UL C			



Processed crude oil Million tons

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#### Downstream key figures

	2012	2013
Refining capacity (Mbo/d)	998	998
Conversion rate in Spain (%)	63	63
Refining margin in Spain (\$/b)	5.3	3.3
Service stations (controlled + licensed)	4,549	4,604
Oil product sales (Mt)	42,744	43,177
LPG sales (Mt)	2,537	2,464
Petrochemical product sales (Mt)	2,308	2,337
Investments (€ million)	666	656



## Downstream

Refining Marketing LPG Chemical Non-fossil fuel energy initiatives

# Refining

The Repsol Group owns and operates five refineries in Spain (Cartagena, A Coruña, Petronor, Puertollano and Tarragona), with a combined distillation capacity of 896,000 bo/d (including the stake in Asfaltos Españoles). Installed capacity at La Pampilla refinery (Peru), in which Repsol holds a 51.03% stake and is the operator, is 102,000 bo/d.

As in previous years, 2013 was marked by the international economic crisis. Demand for petroleum products declined across OECD countries, affecting the refining business, especially in Europe, where refining margins remained low. The weak demand and excess capacity in European refining was compounded by increased exports of oil products from the United States (especially middle distillates). The US was able to export more products in view of their high refinery usage rates, spurred by low crude prices and energy costs derived from the use of unconventional resources. As such, refining margins in Europe were pushed down even further.

For this reason, a number of refineries were closed in 2013. This sector restructuring is expected to continue over the coming years, with less advanced and less competitive refineries continuing to close across Europe.

These closures will bring supply into line with demand and will foreseeably allow margins to rally, especially at refineries geared towards producing medium distillates and with capacity to process heavy crude oil products, as is the case of Repsol.

In 2013, the refining margin stood at \$3.30 per barrel in Spain, down on the 2012 figure (\$5.30 per barrel). In Peru, the annual refining margin came in at \$0.80 per barrel, in comparison to the \$3.90 per barrel seen in 2012.

In this context, the Repsol refineries managed by the Downstream division processed 38.1 million tons of crude oil, representing an increase of 3% on 2012, due in part to the greater capacity at the Cartagena refinery. On average, 78% of refining capacity in Spain was employed, higher than the 74% recorded in the preceding year. In contrast, refining use was down in Peru, from 70% in 2012 to 60% in 2013.

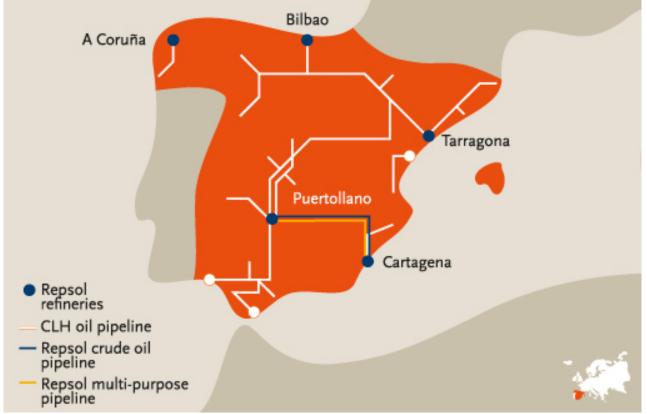
A wide range of energy efficiency measures are underway, as this is deemed the most important front for optimizing operating costs, maintaining and boosting the business' competitiveness, managing markets and market access logistics, and relating with the business environment. These initiatives are underpinned by appropriate human resources management and an active policy of safety, environmental protection and innovation.

In 2013, progress was made in the construction phase of a new production plant for nextgeneration lubricants, a joint facility with the Korean company SKL. This new plant is slated to come on stream in the second half of 2014. The plant, adjacent to the Cartagena refinery, will require an estimated investment of €250 million. The Tarragona and Cartagena refineries will provide the raw materials for the plant. The base oils produced are needed in the manufacture of advanced lubricants, and considerably reduce both

#### emissions and consumption.

#### Repsol Refineries in Spain





#### Origin of crude oil processed

	2012	2013
Middle East	17%	14%
North Africa	13%	13%
West Africa	6%	7%
Latin America	40%	38%
Europe	24%	28%
TOTAL	100%	100%



#### Refining capacity <sup>(1)</sup>

	Primary distillation	Conversion ratio (2)	Lubricants
	(Mbo/d)	(%)	(Mt/y)
Spain			
Cartagena	220	76	155
A Coruña	120	66	-
Puertollano	150	66	110
Tarragona	186	44	-
Bilbao	220	63	-
TOTAL REPSOL (SPAIN)	896	63	265
Peru			
La Pampilla	102	24	-
TOTAL REPSOL	998	59	265

(1) Information shown in accordance with Repsol Group's consolidation policy: all refineries listed are fully consolidated in the group's financial statements. The reported capacity in Tarragona includes the shareholding in ASESA.

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

Production		
Thousand tons	2012	2013
Refinery intake <sup>(1)</sup>		
Crude oil	36,960	38,074
Other refinery intake	8,213	7,312
TOTAL	45,173	45,386
Refining production		
Intermediate distillates	21,863	22,299
Gasoline	7,165	7,587
Fuel oil	4,474	3,555
LPG	961	929
Asphalts(2)	970	1,080
Lubricants	184	232
Other (except petrochemicals)	5,827	6,059
Total	41,444	41,741

(1) Information shown in accordance with Repsol Group's consolidation policy: all refineries cited are fully

consolidated in the group's financial statements.

(2) Includes 50% of the asphalt production of Asfaltos Españoles S.A. (ASESA), in which Repsol and Cepsa each hold a 50% interest. Repsol markets 50% of ASESA's products.



## Downstream

Refining Marketing LPG Chemical Non-fossil fuel energy initiatives

## Marketing

Repsol sells its range of products through an extensive network of service stations. The marketing activity also includes other sales channels and the sale of a wide range of products, such as lubricants, bitumen, coke, and derivatives.



Marketing sales amounted to 21,379 thousand tons in 2013, in line with the prior year. The drop in domestic consumption, more moderate than in previous years and spurred by shrinking demand, was offset by international growth and new business opportunities.

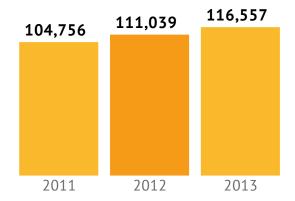
In particular, a number of new product marketing lines were successfully launched abroad, while gasoline and diesel market shares held steady in Spain and Repsol improved its position in Portugal.

Despite the complex environment, by carefully managing sales margins and credit risk, Repsol was able to secure positive results in both the service stations channel and direct sales to end consumers.

At the 2013 year end, Repsol had a network of 4,604 service stations in countries where the Downstream division operates. In Spain, the network comprised 3,615 points of sale, 69.5% of which had a strong concessionary link to the network, while 26% were company-operated. Repsol also has service stations in Portugal (433), Italy (354) and Peru (202).

Service stations	
Spain	3,615
Portugal	433
Peru	354
Italy	202
TOTAL	4,604

Lubricants sales



The company maintains its policy of building partnerships with market leaders such as the department store El Corte Inglés, with joint promotional campaigns offering discounts on purchases at both Repsol service stations and the department store. Repsol has also strengthened its strategic alliance with Burger King.

In line with Repsol's policy of monitoring changing market trends, the company has piloted a business model entailing more automated features at points of sale. In 2013, 26 points of sale featuring this new business model were opened under the Campsa Express brand.

In 2013, Repsol consolidated its position as an international producer and marketer of green fuel-grade coke. Over 50% of Repsol's sales of this product were to foreign markets, reaching a total of 20 countries mainly in Europe and North Africa.

Over 60% of sales of lubricants and specialties are made in the international market, reaching over 90 countries through more than 60 international lubricant distributors. In September 2013, Repsol opened a new commercial office in Singapore, further strengthening its international presence. In addition, a third-generation base lubricant plant was built in Cartagena.



# Downstream

Refining Marketing LPG Chemical Non-fossil fuel energy initiatives



## Liquefied Petroleum Gas - LPG

Repsol is one of the leading retail distributors of <u>LPG</u> in the world, ranking first in Spain and Peru and maintaining top positions in Portugal and Ecuador. In 2013, the company operated in four different European and Latin American countries.

<u>LPG</u> sales totaled 2,464 Mt in 2013. Total sales in Spain increased 0.7% year on year, primarily due to higher sales to the petrochemical industry, offsetting the decline in retail demand.

LPG sales		
Thousand tons	2012	2013
Spain	1,271	1,281
Rest of Europe	143	131
Peru	622	665
Ecuador	374	386
Rest of Latin America	127	-
Total	2,537	2,464

In Spain, Repsol distributes bottled, bulk and piped LPG through the collective distribution and AutoGas networks, with over 5 million active customers. Bottled LPG sales accounted for over 50% of total retail LPG sales in Spain in 2013, through a network of 222 distribution agencies.

In Spain, prices continue to be regulated for piped <u>LPG</u> and bottles between 8 kg and 20 kg, excluding bottled mixtures for using <u>LPG</u> as fuel.

In Portugal, Repsol distributes bottled, piped and bulk <u>LPG</u> and AutoGas to end customers, while also supplying other operators. Sales reached 131,344 tons in 2013, making the company the third-largest operator and bringing the market share to over 20%.

In Latin America, Repsol sells bottled, bulk, piped and automotive LPG in the household,

commercial and industrial markets of Peru and Ecuador, with sales totaling 1,051 Mt.

AutoGas (LPG for vehicles) is the most widely-used alternative fuel in the world, in over 21 million vehicles (eight million in Europe). Although it has yet to make a meaningful impact on the Spanish market, sales grew by 30% in 2013, revealing increased demand for this affordable fuel that also helps improve urban air quality. The industry forecasts that, within five years, roughly 200,000 vehicles will be running on AutoGas in Spain. Repsol, fully aware of the growing interest in this alternative fuel, equipped 476 points of sale with AutoGas pumps by the 2013 year end, of which 228 are in Spain. In addition, 297 supply points are in place on customer premises.



# Downstream

Refining Marketing LPG Chemical Non-fossil fuel energy initiatives



## Chemicals

The Chemicals division produces and markets a wide variety of products in over 90 countries and leads the market on the Iberian Peninsula. Its activities range from basic petrochemicals to derivatives.

Production is concentrated at three petrochemical complexes located in Puertollano (Spain), Tarragona (Spain) and Sines (Portugal), where there is a high level of integration between basic and derivatives, as well as with refining activities in the case of the Spanish facilities. Repsol also has a number of subsidiary and affiliate companies, through which the company produces polypropylene compounds, chemical specialties and synthetic rubber at special plants. In particular, synthetic rubber is produced through Dynasol, a 50% partnership with the Mexican KUO group, with plants in Mexico and Spain. A new plant is under construction in China, through the local partner Shanxi Northern Xing'an Chemical Industry.

Stagnant demand and uncertainty regarding economic growth affected the division's results for 2013, particularly through the adverse impact of the scheduled multiyear maintenance shutdown at the Tarragona facilities performed this year, as well as certain write-downs made in the accounts. Nevertheless, sales to third parties amounted to 2.3 million tons, 1.3% higher than in 2012.

In view of the current climate, in 2013, Repsol drove further forward with the decisive measures rolled out in recent years to cut costs, adjust production and restructure assets.

With respect to product development, technology acquisitions were approved in the polyethylene line in order to produce metallocene grade in Tarragona. In the polypropylene line, a new range of random copolymers was launched on the market, further setting Repsol's product offer apart from that of the competition.

In 2013, Repsol signed a technology transfer agreement with the Chinese holding Jilin Shenhua Group for the construction of a flexible polyol plant (185,000 t/year) and two polymer polyol plants (24,000 t/year each) in China. This agreement confirms Repsol's leading position in this process.

Investments in the year were mainly earmarked to improve and optimize existing assets, enhance efficiency, reduce costs, differentiate products, and improve quality, safety, and environmental standards.



## Downstream

Refining Marketing LPG Chemical Non-fossil fuel energy initiatives

## New energies

The New Energies business unit was created by the Repsol Group in 2010 to promote and generate returns from initiatives envisaging a future where energies are more diversified.



The unit aims to identify new opportunities, support projects and carry out initiatives in fields such as biotechnology and renewable energies applied to transport, as well as in other areas that could unlock synergies with Repsol's current businesses and the geographic regions in which it operates.

In 2013, Repsol continued to develop the electric mobility business through IBIL and IBILEK. IBIL has already created approximately 300 electric vehicle recharging stations serving both the public and private sectors. Development has begun on fast recharging infrastructure at the Repsol Group's service stations.

Investments in new energies



In January 2013, Repsol acquired a holding in the Dutch company Tocardo, dedicated to developing power generation technology using river and ocean currents. At year end, Repsol held a 20.34% stake in the investee.

In March 2013, Repsol acquired a 33.6% interest in Principle Power Inc. (PPI) through the delivery of its shares in WindPlus (all except one). PPI is the owner of the technology implemented by WindPlus in its offshore floating wind turbine prototype.

In December 2013, Repsol acquired a 5.2% stake in Graphenea, which develops industrial graphene applications. The interest was acquired through the INNVIERTE program.

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

Within the framework of this deal, Repsol reached an agreement with EDP Renováveis for the joint development of two of these wind farms, namely the 1,500-MW Moray Firth wind farm and the 905-MW Inch Cape facility. Following the operation, Repsol holds stakes of 33% and 51% in these facilities, respectively. The company also holds a 25% interest in the Beatrice wind farm, with Scottish and Southern Renewables owning the remaining 75%. As a result of the deal, Repsol holds rights to develop, construct and operate 1,190 MW of installed capacity in the United Kingdom.

IBIL has approximately 300 electric vehicle recharging stations serving both the public and private sectors

During 2013, Repsol executed the investment plan for these three projects as scheduled and earmarked the resources needed to ensure their development. Major milestones in that regard included the presentation of all the information needed to apply for official approval of the Beatrice, Moray Firth and Inch Cape wind farm projects, expected to be granted in the first quarter 2014. During the project development stage, to be completed between 2014 and 2015, the necessary studies will be conducted and steps taken to secure construction and operating permits for the facilities, with commissioning expected to take place as from 2018. These projects will allow Repsol to apply its considerable technological expertise in offshore operations, coupled with its experience in large-scale engineering projects.



## Gas Natural Fenosa



Repsol's 30% interest in Gas Natural Fenosa generated operating income of  $\in$ 889 million in 2013, down on the  $\in$ 920 million contributed in 2012. The lower earnings in the Spanish electricity business, affected by new tax measures and other regulations, were offset by higher wholesale gas margins and better results in Latin America.



Key indicators for the Gas Natural Fenosa Group are shown below, although Repsol only has a 30% interest in these figures.

## Gas distribution in Europe

In Spain, this business includes the compensated gas distribution activity, TPA (third-party network access services) and secondary transport, as well as non-compensated distribution activities. In Italy, the business also includes gas sales at the regulated tariff.



Sales from the regulated gas business in Spain amounted to 191,189 GWh in 2013, down 2.3% on the prior year. Gas Natural Fenosa continues to expand its distribution network and the number of supply points in Spain. The volume of first-time subscribers increased by 5.2% compared to the previous year. The distribution network grew by 1,137 kilometers, bringing natural gas to 36 new municipalities.

The gas distribution activity in Italy amounted to 3,786 GWh, up 3.8% year on year, while sales to the retail market rose 5.2% to 2,992 GWh. The distribution network grew to 6,958 kilometers, gaining 73 kilometers in the past 12 months. The distribution business now boasts 455,000 supply points, representing an increase of 1.3% over the previous year.

## Electricity distribution in Europe

Electricity supply points in Spain kept steady with 2012 levels, at 3,772,000. Electricity effectively supplied decreased 3% from 2012 to 2013, to 32,766 GWh, mainly because of more clement weather conditions.



Electricity delivered in Moldova climbed by 0.6%, while the number of supply points rose 1.2% in the year, to 846,080 points. Sales from the electricity distribution business stood at 2,541 GWh, which represents a 0.6% increase in comparison with the prior year.

KEY INDICATORS(1)			
€ million	2012	2013	Variation (%)
Gas distribution in Europe	199	204	2.5
Electricity distribution in Europe	125	117	(6.4)
Gas	277	249	(10.1)
Electricity	84	50	(40.5)

Latin America	252	270	7.1
Other activities	(17)	(1)	94.1
Operating profit	920	889	(3.4)
Investments	432	444	2.8

### Gas

*Infrastructure*. The gas transportation activity carried out in Morocco through the companies EMPL and Metragaz represented a total volume of 122,804 GWh, up 5.5% on the previous year. Of this figure, 84,781 GWh were transported for Gas Natural Fenosa through the company Sagane, while 38,023 GWh were earmarked for Portugal and Morocco, representing growth of 6.7%.

In January 2013, Gas Natural signed an agreement to purchase the Algerian state-owned Sonatrach's 10% stake in Medgaz. In July 2013, Gas Natural acquired an additional 4.5% holding from Gaz de France International. In 2013, Gas Natural Fenosa transported an equivalent of 4,889 GWh through the Medgaz pipeline.

Supply and marketing. In a scenario of weak demand, natural gas sales in the Spanish market stood at 229,419 GWh, down 3.8% on the previous year. This decrease reflected lower sales to Gas Natural Fenosa end customers (-6.3%), mainly due to the lower consumption of combined cycle plants, partially offset by higher third-party supply (+3.6%). Sales in the international gas market totaled 94,512 GWh, an increase of 8.9% on 2012..

*Unión Fenosa Gas.* Gas supplied to the Spanish market stood at 24,228 GWh, representing a year-on-year drop of 13%.

### Electricity

For the third year in a row, electricity demand in Spain and Portugal fell, ending the year at 246,204 GWh (-2.2%).

Gas Natural Fenosa power generation throughout the Iberian Peninsula amounted to 33,785 GWh in 2013. Of this amount, 30,744 GWh came from ordinary system generation, and 3,041 GWh from renewables/CHP generation.

Sales from the electricity marketing business in Spain came in at 32,941 GWh.

## Latin America

*Gas distribution*. This business distributes gas in Argentina, Brazil, Colombia and Mexico. Sales from gas activity in Latin America (gas sales and third-party network access services) totaled 229,833 GWh, up 9.3% on 2012..

In 2013, there were 6,321,000 gas distribution supply points. Year-on-year growth rates remained high, with an increase of 231,000 supply points, primarily in Colombia (115,000 new points).

The gas distribution network added 1,720 kilometers, reaching 69,054 kilometers at December 31, 2013 (2.6% growth). Significant contributions came from the expansion of the network in Mexico (+674 kilometers)..

*Electricity distribution*. This division distributes electricity in regulated markets in Colombia, Nicaragua (until its sale on February 11, 2013) and Panama. Electricity distribution sales in Latin America stood at 16,443 GWh, down 9%. The decrease is because in 2012 sales made by distributors in Nicaragua totaled 2,752 GWh, while the 2013 figure, reflecting one month only, was 239 GWh. Stripping out the operations in Nicaragua in both periods, sales grew 5.8%, driven by the growth in demand in both Colombia and Panama. The number of supply points reached 2,395,000.

*Electricity generation in Latin America*. This business groups together power generation assets in Mexico, Puerto Rico, Panama and the Dominican Republic. Power generated in Latin America stood at 19,414 GWh in 2013, higher than the previous year, mainly driven by Mexico and Puerto Rico.

(1) Reflects Repsol's 30% holding in Gas Natural Fenosa.



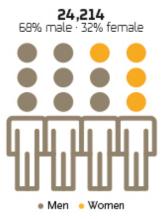
# People

Attracting talent Training Diversity and work-life balance

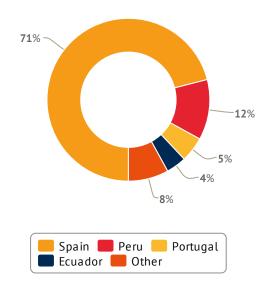


Repsol believes that its main competitive advantage lies with the people making up the company. As such, there is true strategic value in managing employees and the various teams. Repsol's multidisciplined, skilled and committed professionals set it apart from others in its field.

At December 31, 2013, the Repsol Group had a workforce of 30,296 employees. Of this figure, a total of 24,214 employees worked at companies directly managed by Repsol. All the information presented in this section refers to these employees. The managed workforce increased by 219 people from 2012 to 2013.



Geographical distribution of workforce By country

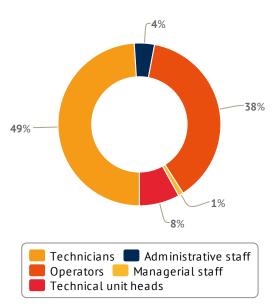


#### Attracting talent

Repsol uses different means to recruit, motivate and engage talented individuals, helping them to develop personally and professionally, and offering a good working environment, internal promotion opportunities and job mobility.

#### Workforce structure

By profession al group



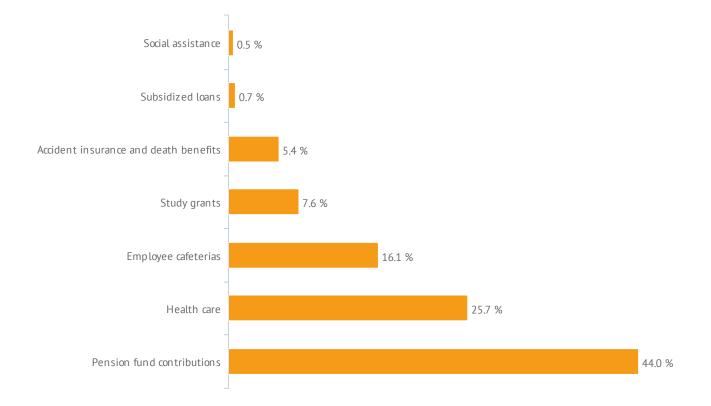
To recruit this talent, in 2013 the company took part in over 20 forums and job fairs, and gave talks and presentations at a number of schools, colleges, universities and associations. The company also increased its presence on social networks.

Repsol has several tools to retain talent and manage its employees, including compensation, training, internal and international mobility, development and performance assessment.

Remuneration is an important element when attracting and retaining the most desirable professionals for company. The compensation system is designed to reward individuals at competitive market rates that are appropriate for an organization like Repsol. The system also aims to deepen employees' commitment to achieving Repsol's strategic objectives and operating targets.

In 2013, total spend on employee benefits for the managed workforce was €93.9 million, compared to €88.3 million in 2012.

#### Breakdown by type of employee benefit



In 2012, the variable remuneration system was rolled out for employees included under collective bargaining agreements in Spain, linked to the achievement of the common goals of each organizational unit. Common goals were defined for employees under the collective bargaining agreement in 47 different units, covering all our activities in Spain, with Repsol completing the collective negotiation of the Sixth Framework Agreement and the specific covenants for each company. The first payment under this plan was made in Spain in 2013.

In 2013, new benefits were added to the flexible remuneration scheme for personnel excluded from the collective agreement, such as childcare, computer equipment, extended health coverage and additional pension plan contributions.



# People

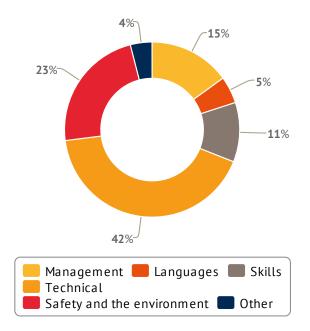
Attracting talent **Training** Diversity and work-life balance

# Training

Repsol values, promotes and facilitates employee training as a key driver behind the personal and professional development of all staff.

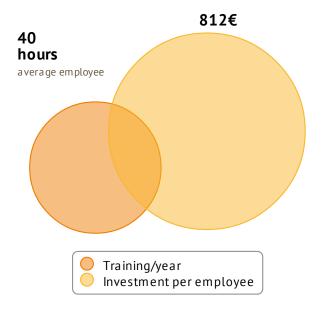
In 2013, the Leadership in Safety and Environment program, which trains all Repsol managers overseeing other employees to be safety and environment leaders, neared completion, with a total of 1,389 people attending the program. This initiative was also bolstered through an additional leadership program for area managers and maintenance managers in industrial centers. In 2013, everybody working in Repsol, managers and non-managers alike, from both corporate and business areas, attended at least one training activity in this area.

#### Employee training



#### **Employee training**

	2012	2013
Training activities	9,007	10,989
Investment in training (€ million)	19	20
Investment per employee (€)	792	812
Hours of training per year	1,008,973	978,751
Average hours per year per employee	42	40
Average hours per year per employee	75%	78.2%
Attendances	94,068	107,014
People	18,122	18,939
People	18,122	18,939





# People

Attracting talent Training Diversity and work-life balance

## Diversity and work-life balance

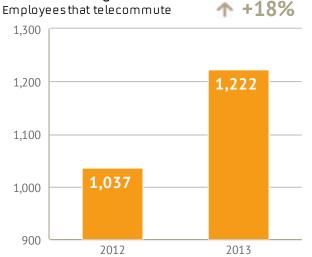
In 2013, Repsol's Diversity and Work-Life Balance Committee continued to promote the programs launched in earlier years: telecommuting, recruiting people with disabilities, flexible working hours, efficient time management and cultural diversity.



Telecommuting has become one of Repsol's most widely-adopted measures towards furthering a flexible working environment.

In addition to the pilot telecommuting programs in Ecuador and Peru, various studies have been undertaken for introducing such arrangements in Trinidad and Tobago and Bolivia.

#### Telecommuting



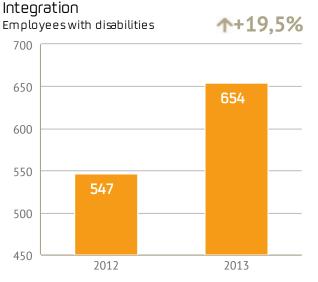
Further actions were carried out to promote more flexible and efficient time management, based on careful planning and prioritization of tasks. Among other achievements, Repsol now offers flexible working hours worldwide, adapted to the practices and customs of each country.

According to a study published by the International Institute of Political Science, Repsol has been rated the top company in Spain in terms of work-life balance. The ARHOE Foundation (Association for the Rationalization of Spanish Working Hours) recognized Repsol as the company making the greatest contribution to promote more rational working hours, adapted to the needs of employees.

Repsol's integration plan for disabled persons, which places them in job positions throughout the organization, goes above and beyond the minimum requirements established in prevailing legislation. In Spain, such employees represent 2.77% of all directly-hired staff (according to regulatory calculation criteria); 22% of these professionals hold qualified technical positions.

Current efforts are focused on raising awareness in various countries, promoting a committed, fair model of social co-existence. In 2013, 32 vacancies were filled by people with disabilities.

Through its managed companies, Repsol is active in almost 40 countries. Over 1,000 Repsol employees work outside their home countries. The value contributed by this multicultural environment is increasingly apparent throughout the company.



# Equality

Repsol continues to increase the percentage of women in all groups and businesses. The Equality Board meets every two months to review the prevailing situation and trends in the main gender indicators.

Repsol also promotes initiatives to convert the knowledge of senior staff into a shared asset, encouraging the transfer of knowledge acquired by people with greater experience to our new employees. This approach will ensure the success of the company in both the short and long term.

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# Safety

Safety The environment Sustainable energy and climate change

## Safety and the environment



Repsol is deeply committed to keeping a clear focus on safety and the environment when managing its activities. The company's safety and environmental principles are defined in the Health, Safety and Environment Policy.

The Executive Committee establishes the company's safety and environment strategic objectives and lines of action, which in turn provide a framework for designing the targets and action plans of all business units. In addition, among other duties, the Board of Directors' Audit and Control Committee oversees and steers the company's safety and environmental policy, guidelines and objectives.

The objectives and plans set out the actions required in order to continually improve management, as well as investments and associated expenses, and adaptations to meet new regulatory requirements. These new regulations include the following:

- European Union Directive 2013/30/EU on safety of offshore oil and gas operations, which requires companies to assess potential risks, determine the measures to be adopted, and design an emergency response plan prior to beginning exploration or production in operations anywhere in the world (not only within the European Union). Repsol has a comprehensive emergency response program that focuses strongly on preventive measures and covers the safety requirements stipulated by this directive.
- Update of the Best Available Techniques Reference Document (BREF) addressing refining of mineral oil and gas, large combustion plants, the large volume organic chemical industry, and common waste water and waste gas treatment/management systems in the chemical sector. These documents establish the Best Available Techniques (BAT) and associated emissions and water discharge levels. In compliance with Industrial Emissions Directive 2010/75/EU, these limits, which until now were voluntary, have become binding with integrated pollution prevention and control authorizations. All BREF documents that address Repsol's activities are expected to be approved between 2014 and 2015.

- Phase III of CO<sub>2</sub> emissions trading regulated by Directive 2009/29/EC on the European Community greenhouse gas emission allowance trading scheme, which establishes a target global reduction of 20% by 2010 compared to 1990 levels. This third phase began in 2013 in view of the need for allowance auctions. In order to boost trading prices, on February 6, 2014 the European Parliament approved the Commission's backloading proposal (temporary hold-back of 900 million allowances).
- Start of the process of transposing the EU Energy Efficiency Directive (2012/27/EU)
  promoting a Europe-wide target of 20% primary energy savings by 2020. The directive
  establishes a system of energy efficiency obligations requiring energy distributors to
  work with customers in order to secure annual savings in consumption equivalent to 1.5%
  of energy sales. The regulation also mandates that large enterprises are required to
  conduct energy audits and encourages implementation of energy management systems.
- Definition of article 7a of Fuel Quality Directive (2009/30/EC), which introduces a mechanism for monitoring and reducing greenhouse gas emissions, in an attempt to monitor, report and reduce fuel emissions throughout their life cycle.

Repsol's safety and environmental management system comprises a regulations framework with specific procedures, technical guidelines and management tools applicable throughout the company's activities and installations. The system is continuously updated to take into account the sector's best practices. The safety management system is based on the <u>OHSAS</u> 18001 standard, while the environmental management system is in compliance with ISO 14001. Repsol also encourages its centers to gradually adopt these standards as well. Information on certified centers as well as on the audits carried out can be found using the certificates search function at www.repsol.com or by consulting the Corporate Responsibility Report.

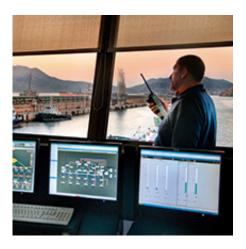


# Safety

Safety The environment Sustainable energy and climate change

# Safety

Repsol's goal is to avoid any accidents whatsoever while carrying out its activities. As a result of the high safety levels Repsol requires in its operations, accidents are on a decline, as reflected in the overall accident rate. In 2013, no deaths were reported and the lost time injury frequency rate decreased more than 35% compared to the prior year, thereby meeting the annual target and representing an accumulated fall of 55% since 2011. This goal is part of the annual targets set for Repsol employees earning variable remuneration, and part of the performance assessment for the remaining personnel.



In addition to efforts to ensure the safety of people working at Repsol facilities, the company has a robust system for managing the risks associated with industrial processes and assets. In that regard, Repsol analyzes risks throughout the entire life cycle of its assets, applying the highest international standards at the designing stage and implementing strict operation and maintenance procedures.

As such, Repsol addresses those safety challenges identified in the company's Strategic Plan and arising in its operations in increasingly complex and sensitive environments.

One of the most notable projects in 2013 was the Safety and Environment Leadership and Culture Plan. Over the past two years, all Repsol leaders have received training in safety culture, with over 3,000 people attending one of the 120 courses held in 11 countries. This training was also offered to other groups, with around 1,000 middle managers taking part in these initiatives as well. As Repsol believes that safety culture forms part of the company's value proposal, it has spent years working on projects that ensure a strong position in this area.

SAFET Y <sup>(1)</sup>		
	2012	2013
Lost time injury frequency rate (2)	0.91	0.59
Lost time injury frequency rate (own employees)	1.00	0.60

Lost time injury frequency rate (contractors' employees)

(1) *Repsol's corporate guidelines establish the criteria and methodology for recording accidents, as well as certain indicators for handling accidents.* 

(2) Number of lost-time accidents and fatal accidents accumulated during the year, per million hours worked.



# Safety

Safety The environment Sustainable energy and climate change

## Environment

Once again, Repsol's main environmental efforts focus on improving the environmental quality of its products, minimizing air emissions, increasing energy efficiency, optimizing water consumption, reducing the contaminating component of waste and improving spill prevention systems. The best industry practices available and technological innovations are applied in these efforts. In addition, the company has worked to identify, evaluate and correct possible past cases of pollution or contamination.



Major milestones in 2013 included the implementation of a comprehensive program to prepare for, prevent, respond to and recover from major accidents in exploration and production operations: the Global Critical Management Program. This program establishes the following lines of action:

- Adaptation of internal standards to international best practices.
- Creation of a group of experts in emergency management (Global Critical Management Group) and establishment of functions and roles for a new multidisciplinary group set up to deal with emergency response (Global Critical Response Group)
- Establishment of emergency response facilities and centers located in Madrid, Houston, Lima and Rio de Janeiro.

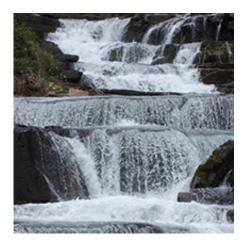


# Safety

Safety The environment Sustainable energy and climate change

## Sustainable energy and climate change

Repsol is committed to building a better future through smart energy initiatives, offering the best energy solutions to society and the planet. This means using a wide variety of energy sources and optimizing their use through energy management systems to achieve excellent energy performance. This commitment is reflected in Repsol's updated Corporate Global Carbon Strategy for 2012-2020, which aims to achieve the company's vision of a more diversified and less carbon-intensive energy supply. The Carbon Strategy's end goal is to devise a common framework that harmonizes existing initiatives and detects synergies through an integrated focus.



To that end, Repsol established a strategic goal of reducing CO<sub>2</sub> emissions by 2.5 million tons during the 2006-2013 period. As this objective was met one year ahead of schedule, during 2013 the company began defining a new long-term plan to further boost energy efficiency and reduce CO<sub>2</sub> emissions.

As a result of this work, a new strategic target was established to reduce CO<sup>2</sup> eq emissions by 1.9 million tons, through a new plan covering 2014-2020. The new plan combines efforts to reduce energy intensity with lower emissions goals. In addition, in 2013, Repsol maintained its commitment to continuous improvement and to reducing greenhouse gas emissions, while promoting energy efficiency actions that cut CO<sup>2</sup> eq emissions by more than 350 Mt.

One of the main strategic objectives in respect of energy is the implementation of Energy Management Systems (EMS) in Repsol's facilities. This would ensure that the necessary systems and processes are in place to improve energy performance (including energy efficiency and energy consumption), thereby underlining the company's commitment to supplying energy in the most sustainable way possible. By striving for excellence in energy management through these EMS, the company's energy policy and vision are truly embodied in its actions, and it can more readily monitor its goals and objectives in the short, medium and long term, as part of a process of continuous improvement. The EMS also systematize procedures and best practices, going beyond the scope of common energy standards and mainstreaming their use in Repsol in advance of regulatory implementation deadlines.

Repsol's Energy Management Systems are implemented in accordance with ISO 50001. During 2013, even more facilities continued to secure certifications, including the refineries in Tarragona, Cartagena and La Pampilla (Peru), the Puertollano Chemical plant and the Upstream assets comprising block 16 (Ecuador).

Repsol's strategic objective is to reduce CO<sub>2</sub> eq emissions by 1.9 million tons between 2014 and 2020.

Repsol strives for excellence in its greenhouse gas inventories by consistently broadening their scope and improving their quality and transparency. Accordingly, each year an external company is called in to verify that the company's <u>GHG</u> inventories meet the highest inventory quality and accuracy standards. In 2013, progress was made in CO<sup>2</sup> emissions inventories, with more than 92% of these emissions verified according to international standard ISO 14064.

In addition, Repsol continues to lead the energy sector in the Climate Disclosure Leadership Index (CDLI), issued by the Climate Disclosure Project, the most prestigious international index in matters of climate change.

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# Technology

R+D programmes



Through research and innovation, fostering talent and collaborating with networked groups of scientific excellence, in Spain and abroad, Repsol seeks to develop solutions to address current and future energy challenges.



The Repsol Technology Center is the scientific and technological hub for the company's R&D investments..

In 2013, Repsol invested €83 million in R&D activities carried out directly at its Technology Center in Móstoles (Spain), and a further €6 million in projects undertaken within the company's different business units (€77 million and €6 million, respectively, in 2012). Repsol maintains an active policy of collaborating with technology centers, public and private universities and companies in Spain and abroad. Investment earmarked for these types of agreements topped €23 million. Repsol participates in R&D financing projects run by different government authorities. During 2013, the Repsol Technology Center participated in 12 projects backed by the Spanish government and in nine EU projects (14 in Spain and six in Europe in 2012), as well as in an international cooperation project with Chile.

During 2013, Repsol received a loan from the European Investment Bank (EIB) to finance R&D activities at the Technology Center for the next four years. This loan covers almost half of the budget for the four-year period and is a milestone in public backing for the

Center, especially bearing in mind that it was the first time Repsol had requested funding for such activities. The support also represents an endorsement of the quality of Repsol's R&D activities. The loan will be used to fund numerous actions within the extensive research, development and innovation investment program, covering, among other aspects, improvements in energy efficiency and the oil refining processes, and development and production of petrochemical derivatives. R&D programs also seek to develop systems and products in the fields of renewable energy generation, bioenergy and transport solutions.

R&D management indicators	2012	2013
Contracts	151	122
External R&D (€ million)	20	23
R&D investments (€ million)	83	89



In early 2013, the technology hubs in Houston and Brazil became fully operational. The two new hubs, placed in locations of strategic interest and in highly innovative technological environments, employ a model that is integrated with Repsol's Technology Center in Madrid. As such, new innovation ecosystems are tapped and the company works closely in projects of particular interest.



# Technology

R+D programmes

## Programs

**Upstream.** In 2013, a significant number of strategic R&D projects were rolled out, in line with the objectives foreseen in Repsol's 2011-2015 Strategic Plan for Exploration and Production Technology..



Among the key technological areas, projects are underway to better understand subsoil by developing simulation tools and studying rocks and fluids in deposits. Over time, this will reduce the cost of oil and gas exploration. Projects are also in place to gain more data on the characteristics of fluids during their extraction and transport, which also ensures correct flow. Other strategic projects seek to optimize hydrocarbon reservoirs that are subject to uncertainty. This includes the development of data-collection technologies based on algorithms developed in-house to optimize the decision-making process, simulations and appraisals.

Technologies are also being developed in respect of non-conventional hydrocarbons, from extra heavy crude oil to shale gas/oil.

Lastly, Repsol and one of its partners have developed a technology to monitor and automatically detect even small amounts of hydrocarbons in water bodies, under any atmospheric or light conditions. This groundbreaking project, developed at the Repsol Technology Center, runs on advanced interpretation software that can function automatically. The research phase has been successfully completed, and the technology has been set up at the Casablanca platform, off the coast of Tarragona. The project is a clear example of Repsol's commitment to the environment.

**Downstream.** In the area of oil refining and its derivative products (gasoline and diesel, <u>LPG</u>, asphalt, lubricants, waxes, etc.), technological knowledge is applied to optimize the operation of refineries, to develop new processes and products, and to enhance product quality, with particular attention to advances in energy efficiency and environmental issues. Examples of developments in this area include: technologies aimed at improving energy efficiency in refineries; adaptation of fuels to new motor requirements and to forthcoming legislation; work to make the entire product portfolio unique from a

technological standpoint; developing more environmentally-friendly lubricants (formulated using regenerated raw materials and biodegradable oils) that are also more efficient in terms of consumption and emissions, thereby enhancing motor performance; processes facilitating the development of new products for manufacturing tires in more demanding and competitive markets; and asphalts adapted to meet particular needs, from road safety to environmental concerns. Lastly, innovative LPG vehicle applications were proposed in order to encourage use of LPG as an alternative fuel.



In 2013, the drop in fuel demand in Spain and, to a lesser degree, in Europe, a result of both the economic downturn and the development of more efficient motors, made it necessary to bring greater flexibility to processes and to consider manufacturing alternative products, while optimizing the unique features of products in order to ensure the competitiveness of the businesses. New projects in that regard primarily focus on energy efficiency, development of new fuels and biofuels, and the ability to process increasingly heavier crude. This situation also requires Repsol to streamline and extend the international scope of its research activities, and to place a strong focus on selling its products in new markets.

In 2013, Repsol revised its technology strategy in order to provide the necessary support for measures aiming to enhance the competitiveness of the Chemicals business.

Among the most salient projects in 2013 were the sale of proprietary technology for manufacturing polyols to the Chinese company Jilin Shenhua, the launch of a project to differentiate and reduce production costs using CO<sup>2</sup> as a raw material in manufacturing polymers, and the development of Propylene Oxide/Styrene Monomer (PO/SM) technology to reduce raw material consumption or to develop unique products. Repsol continues to develop higher-performing products, such as new polymeric polyols for the automotive industry, polypropylene grades with enhanced properties for the food packaging industry and polyethylene-based materials with enhanced mechanical and insulation properties for use in energy transmission cables, as well as more resistant and more easily-processed tubing.

**New energies.** Repsol's work toward the energy technology of the future is grounded in four main research areas: generation of renewable energies, bioenergy, CO<sub>2</sub> technologies and e-mobility.



Initiatives underway in the area of renewable energies include investments in highlytechnological companies and the signing of collaboration agreements with different organizations. In addition, by developing simulation tools, Repsol is better able to assess the potential of different generation technology families. In particular, floating offshore wind energy presents the greatest technological upside. Accordingly, Repsol, in collaboration with a number of partners, built a full-scale prototype off the Portuguese coast. Data obtained from the prototype was monitored and evaluated, and actions were designed to optimize the technology.

Within the area of bioenergy, new challenges have been identified, along with barriers and opportunities for microalgae. A new phase has been launched, focusing on staying abreast of the latest in technology and looking for disruptive innovations in the direct manufacture of biofuel. The overriding objectives are to actively monitor progress to determine whether new technologies can address the challenges and uncertainties identified and to search for potential alliances with different entities and organizations. In addition, through the stake held in the company NEOL, a particular type of microorganism has been selected for obtaining biofuels and the process has been patented. The project aims not only to design an integrated progress, but to do so at a competitive price, below that of using a fossil fuel.

Lastly, in order to develop new processes addressing the major challenge of transforming CO<sub>2</sub> into added-value products, work continued in the Transforma CO<sub>2</sub> project, which aims to make use of CO<sub>2</sub> as a raw material, beyond simple geological capture. This project is carried out in collaboration with a number of universities, companies and technological centers.



# Corporate responsibility



Repsol is shoring up its business strategy by searching for better energy solutions that contribute to sustainable development. This is possible thanks to a forward-looking vision that treats corporate responsibility as a key attribute.

Through its corporate responsibility model, Repsol responds to the current and future needs of all its stakeholders. Each and every day, Repsol strives to proactively identify and understand stakeholder expectations at global and local levels, both in countries and in operational centers.

Throughout 2013, Repsol completed implementation of its corporate responsibility coordination system, through the creation of Corporate Responsibility Committees in the main countries in which it operates. These committees join those already existing in Spain and Portugal, Bolivia, Ecuador and Peru. Each committee has approved and published its corresponding 2013-2014 Sustainability Plan, in which it defines the actions to be undertaken to bring the company's ethical, social and environmental performance in line with the expectations of its stakeholders.

During the year, the Corporate Responsibility Coordination System was formally rolled out in the main industrial complexes, which approved their first sustainability plans. By having a model that integrates the corporate accountability expectations of stakeholders into the company's decision-making process, Repsol is able to work towards consistently generating long-term value. This effort has been internationally recognized, through Repsol's long-standing presence in the Dow Jones and FT SE4Good sustainability indices. Repsol once again received the "Gold Class" company rating in the SAM Sustainability Yearbook 2013, which recognizes companies with the best sustainability performance.

#### Main commitments made



Repsol has been actively committed to the United Nations Global Compact since 2003. This initiative promotes the implementation, in both company activities and business strategy, of ten basic principles in the areas of human rights, labor law, the environment and the fight against corruption.

Repsol is a founding member of the Extractive Industries Transparency Initiative (EITI), which seeks to promote transparency in the revenues host governments receive from extractive industries. Repsol believes that this global initiative is best placed to contribute positively to economic growth in these countries, through the proper management of the profits generated by the exploitation of their resources.

### Corporate responsibility model

In 2013, the Corporate Responsibility Coordination System was applied at country level in Repsol. As a result, Corporate Responsibility Committees have been set up in Brazil, Colombia, the US and Venezuela. These committees have approved their first sustainability plans for 2013-2014.

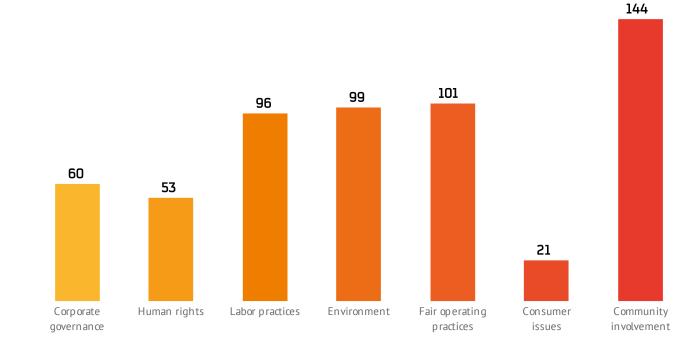


The new plans come in addition to the Corporate Sustainability Plan and the national plans for Spain and Portugal, Bolivia, Ecuador and Peru, approved for 2013-2014 during the course of the year. The initiatives contained in these plans were based mainly on the results of the respective expectations studies carried out in 2012.

During the year, the Corporate Responsibility Coordination System was rolled out at operatingcenter level as well, particularly at the industrial complexes in A Coruña, Cartagena, Puertollano and Tarragona. As a result, the first sustainability plans for these four operating centers for 2014 were approved.

Overall, Repsol has publically committed to 574 actions aimed at maximizing the positive influence of its activities and minimizing any potential adverse effects. 85% of the actions foreseen in the sustainability plans are linked to the variable remuneration of Repsol employees.

2013-2014 National Sustainability Plans Related actions: 574



### Specific commitments

Repsol's Sustainability Plans are living documents, updated on a yearly basis. They have enormous potential to transform the company, driving it to progressively adapt to continual change and social concerns.

The actions set out in the plans are largely aimed at creating or modifying operational processes and promoting appropriate conduct through information and training. This includes:

Modifying exploration and production processes to further mainstream respect for human rights into operations

Training Repsol Sinopec Brazil executives and managers in ethical, human rights and environmental issues

Strengthening the human rights requirements already set in Repsol through adoption of a specific human rights policy, applicable worldwide

Disseminating the UN framework on Business and Human Rights among E&P suppliers and contractors in Ecuador

Encouraging partners in joint operations to develop detailed and stringent decommissioning plans that ensure the regeneration of exploited areas

Incorporating ethical, social and environmental factors relating to Repsol's Corporate Responsibility standards in relations with partners in the non-controlled investee Cardón IV in Venezuela

Including employee expectations in Repsol's global action lines for personnel management, in response to the climate study carried out

#### Meeting expectations

Repsol employs different channels and approaches for maintaining fluid and constructive dialogue with its stakeholders. By becoming aware of their expectations in the ethical, social and environmental realms, the company is able to incorporate innovative approaches into its management systems. As such, Repsol is able to generate long-term value. These efforts are

carried out systematically, applying in-house methodology to identify expectations at three levels: corporate, country and operating center.

Repsol reviews its own performance in respect of these expectations and adopts any improvements necessary.

### Human rights

Repsol approved its Policy of Respect for Human Rights in July 2013, following the specific recommendations set out in the United Nations Protect, Respect and Remedy framework and its Guiding Principles on Business and Human Rights.

This policy covers Repsol's human rights commitments for all activities with all stakeholders, including employees, local communities, customers, shareholders and other business contacts, and indicates what is expected in these activities.

This policy has been approved at the highest level in the company. In January 2014, Repsol's Chairman and CEO sent a personal message to all employees on this very subject.

### Recognition

Repsol has been acknowledged for its corporate responsibility performance. This highlights the company's firm commitment to the ethical, environmental and social values that make up the corporate culture and that define Repsol's contribution to sustainable development.

Repsol is included in several international corporate responsibility rankings, including the Dow Jones Sustainability Indices, which it has led on two occasions. The company has also formed part of the FTSE4Good sustainability index since 2003. This index recognizes companies with the best track record in environmental, social and governance issues. In 2013, Repsol was also recognized as one of the most responsible Spanish brands in its sector.



## Conversion chart

Oil,	gas	and	electricity	
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			Liters	Barrels	Cubic meters	Тое	Cubic meters	Cubic feet	KWh
Oil	1 barrel(1)	b	158,98	1	0,16	0,14	162,60	5.615	1,7x106
	1 cubic meter(1)	m <sup>3</sup>	1.000	6,29	1	0,86	1.033	36.481	10.691,5
	1 ton of oil equivalent(1)	toe	1.160,49	7,30	1,16	1	1.187	41.911	12.407,4
Gas	1 cubic meter	m <sup>3</sup>	0,98	0,01	0,001	0,001	1	35,32	10,35
	1,000 cubic feet = 1.04x106 Btu	ft3	27,64	0,18	0,027	0,024	28,317	1.000	293,1
Electricity	1 megawatt hour	MWh	93,53	0,69	0,10	0,08	96,62	3.412,14	1.000

#### Length

		Meter	Inch	Foot	Yard
Meter	m	1	39,37	3.281	1,093
Inch	in	0,025	1	0,083	0,028
Foot	ft	0,305	12	1	0,333
Yard	yd	0,914	36	3	1

#### Mass

		Kilogram	Pound	Ton
Kilogram	kg	1	2,2046	0,001
Pound	lb	0,4536	1	0,00045
Ton	t	1.000	22,046	1
_	t	,	22,046	1

#### Volume

		Cubic feet	Barrel	Liter	Cubic meter
Cubic feet	ft3	1	0,1781	28,32	0,0283
Barrel	b	5.615	1	158,98	0,1590
Liter	l	0,0353	0,0063	1	0,001
Cubic meter	<b>m</b> <sup>3</sup>	35,3147	6,2898	1.000	1

(1) Reference measurement:  $32.35^{\circ}$  <u>API</u> and relative density of 0.8636

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