INTERIM CONSOLIDATED MANAGEMENT REPORT

For the first half of 2017

REPSOL, S.A. and Investees comprising the Repsol Group

Translation of a report originally issued in Spanish.
In the event of a discrepancy, the Spanish language version prevails.

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1. MAIN EVENTS OF THE PERIOD

During the first half of 2017, Repsol[1] has progressed with the **implementation of the 2016-2020 Strategic Plan**[2] and its **transformation process**, seeking to become a more efficient, flexible and innovative company. Evidence of this is its **ability to achieve results** in this period, even in the current environment of persistently low crude oil and gas prices: the **net income** amounted to 1,056 million euros (a 65% increase over the same period of the previous year), the **free cash flow** generated has risen to 943 million euros (up 22% on the previous year) and **net debt** has fallen to 7,477 million euros (compared to 11,709 million euros in the same period of the previous year). Moreover, this notable financial performance was accompanied by important discoveries in the *Upstream* business.

RESULTS[3]

Million euros	1H 2017	1H 2016	Variation
Upstream	339	63	276
Downstream	929	934	(5)
Corporation and other	(142)	(80)	(62)
Adjusted Net Income	**1,126**	**917**	**209**
Inventory Effect	(60)	2	(62)
Special Items	(10)	(280)	270
Net Income	**1,056**	**639**	**417**

The ***Upstream*** results show a significant improvement over the first half of 2016 (up 437%), driven by the increase in the realization prices for oil and gas and the reduction in recurring operational costs, together with the contribution of the production in Libya and Brazil.

In ***Downstream***, the solid results continued in the same line as in the first half of 2016, demonstrating the quality of our industrial assets and the competitive advantages of our integrated business model.

The decline in the results of ***Corporation and others*** is attributable mainly to the reduced contribution of Gas Natural Fenosa (GNF), due to the sale of 10% of its interest in September 2016, partly offset by the reduction in the Corporation's costs.

As a consequence of the foregoing, **adjusted net income** amounted to 1,126 million euros, 23% up on the 2016 figure.

The *inventory effect*, which reflects the impact of the variation in inventory prices, was negative due to the decline in crude oil prices over the period.

The *special items* in the period are not significant, whereas in 2016 they included workforce restructuring costs and provisions.

In short, the Group's **net income** rose to a profit of 1,056 million euros in the first half of 2017, compared to 639 million euros in 2016.

[1] Henceforth, the names "Repsol," "Repsol Group" or "the company" are used interchangeably to refer to the company group consisting of Repsol, S.A. and its subsidiaries, associates and joint arrangements.
[2] The 2016-2020 Strategic Plan was published in October 2015.
[3] All the information presented throughout this section, unless expressly stated to the contrary, was prepared in accordance with the *reporting* model, which is described in Note 2.6 "*Segment reporting*" in the interim condensed consolidated financial statements for the first half of 2017. Some of the financial indicators used in this document are classified as Alternative Performance Measures (APM) in accordance with the Guidelines of the European Securities Markets Authority (ESMA). See Appendix I, "*Alternative Performance Measures"*, which includes the reconciliation between the adjusted figures and those corresponding to IFRS-EU financial information.

EBITDA amounted to 3,108 million euros, an increase of 29% over the first half of 2016, driven by a substantial improvement in the results of the *Upstream* operations.

Free cash flow in the first half was 943 million euros (22% up on the same period of 2016). The main reason was the improved cash flow generated by the business and the discipline in investments.

At the end of the half-year, **net debt** was 7,477 million euros, a significant reduction on the position at June 30, 2016 (11,709 million euros) and December 31, 2016 (8,144 million euros).

OTHER EVENTS DURING THE PERIOD

During the first half, there were **two important discoveries**, in the Alaska North Slope with the *Horseshoe-1* and *Horseshoe-1A* drillings, the biggest conventional hydrocarbon find in the US in the last thirty years, and in Trinidad and Tobago with the *Savannah* and *Macadamia* drillings, Repsol's largest gas discovery in the last five years.

The company has maintained its **stockholder remuneration scheme** and in January and July it carried out two scrip issues through which the "Repsol flexible dividend” program is implemented, guaranteeing shareholders 0.76 euros per share (0.43 paid in July).

The **stock market performance** of the Repsol share price (a fall of 0.9%) was better than that of the European Oil & Gas sector, which experienced an average fall of 6%; this reflected the negative influence of the fall in the price of crude oil.

The Group has maintained its **credit rating** and the leading credit agencies have improved the outlook, with S&P updating it to “positive” and Moody´s and Fitch to “stable”.

Also worthy of note was the issuance of a **green bond**[1], the first for the company and for the Oil & Gas sector, in the amount of 500 million euros.

The Annual General Meeting, held on May 19, 2017, approved the **appointment of three new independent external directors**, which will improve the Board's diversity in terms of expertise and gender.

Lastly, it should be noted that Repsol has maintained its **commitment to safety and the environment**. With regard to employee accidents, the Total Frequency Rate (TFR)[2] decreased compared to 2016. With regard to the environment, improvement actions were carried out in the period at our facilities which, in addition to reducing energy consumption, reduced CO_2 emissions by 75,200 tons.

[1] The bond is initially constituted by 312 eligible projects that meet the requirements established by the *Green Bond Principles* (of the International Capital Market Association) and fall mainly into the category of “Energy efficiency”; they were or are being executed in our refineries and chemical plants in Spain and Portugal.

[2] The TFR is an indicator that broadens the definition of accident rate, as it measures the consequences of personal harm and includes other accidents with lesser consequences. Hence, Repsol considers the TFR the most appropriate indicator for evaluating accident rate targets.

MAIN FIGURES AND INDICATORS OF THE PERIOD

Financial indicators [1]	1H 2017	1H 2016
Results		
EBITDA	3,108	2,417
Adjusted net income	1,126	917
Net income	1,056	639
Earnings per share (€/share)	0.68	0.41
Capital employed	37,660	40,531
ROACE (%)[2]	6.5	5.3
Financial overview		
Free cash flow	943	775
Debt interest / EBITDA (%)	5.9	9.3
Net debt (ND)	7,477	11,709
ND / EBITDA (x times) [3]	1.20	2.42
ND / Capital employed (%)	19.9	28.9
Shareholder remuneration		
Shareholder remuneration (€/share) [4]	0,335	0,466

Stock market indicators [1]	1H 2017	1H 2016
End-period share price (€)	13.40	11.41
Period average share price (€)	14.28	10.26
Market capitalization at period-end	20,052	16,451

Non-financial indicators	1H 2017	1H 2016
People		
Staff [5]	27,273	29,341
New employees [6]	1,476	1,308
Safety and environment		
Accident frequency rate [7]	0.72	0.69
Total accident frequency rate [8]	1.34	1.46
CO_2 emission reduction$_2$ (kt)	75	145

Macroeconomic environment	1H 2017	1H 2016
Brent ($/bbl) average	51.7	39.8
WTI ($/bbl) average	50.0	39.8
Henry Hub ($/MBtu) average	3.3	2.0
Algonquin ($/MBtu) average	3.7	2.9
Exchange rate ($/€) average	1.08	1.12

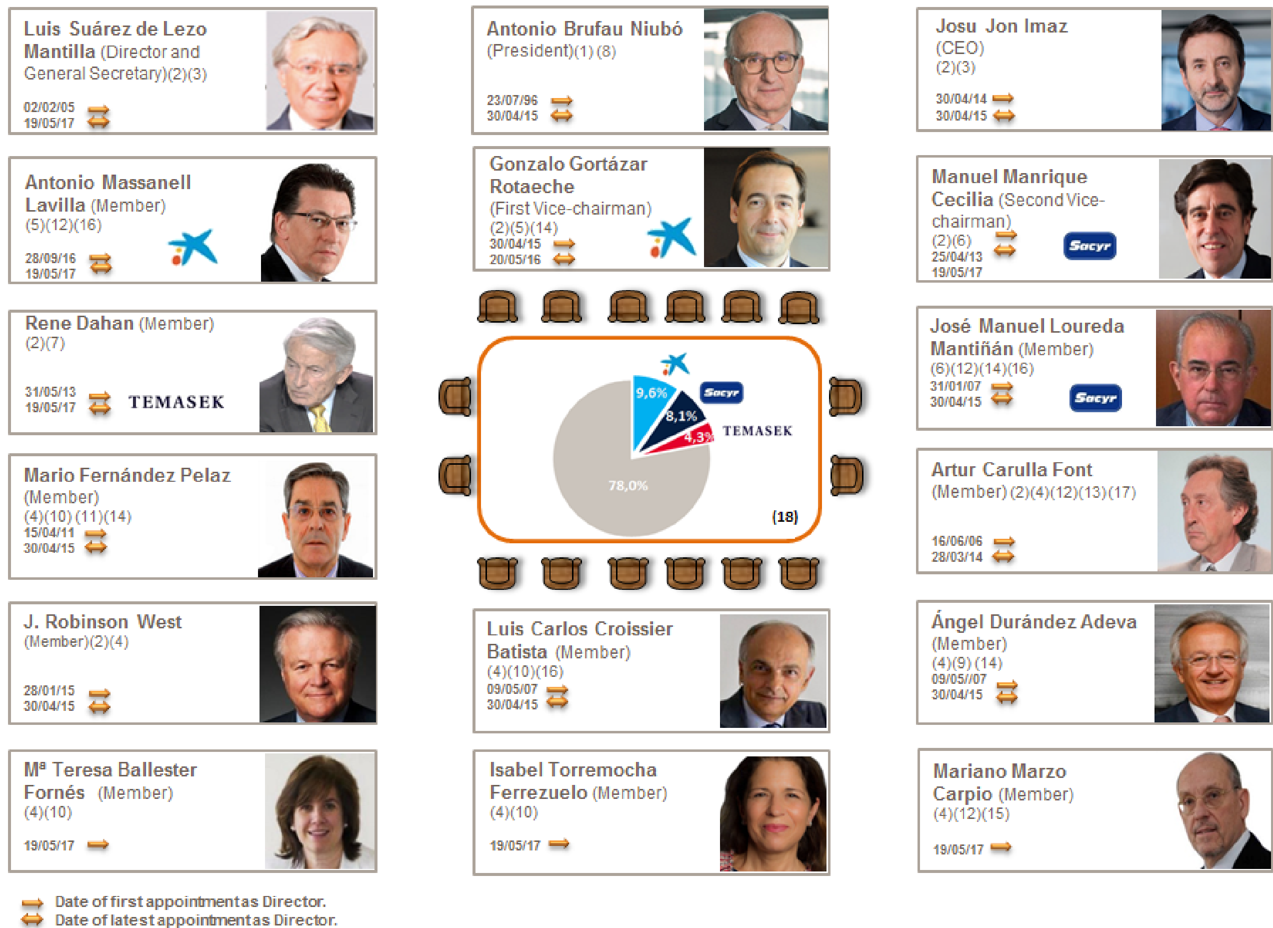
Our business performance [1]	1H 2017	1H 2016
Upstream		
Net production of liquids (kbbl/d)	256	251
Net production of gas (kboe/d)	429	454
Net daily liquid production (kboe/d)	685	705
Average crude oil realization price ($/bbl)	46.7	35.1
Average gas realization price ($/kscf)	2.9	2.3
EBITDA	1,666	933
Adjusted net income	339	63
Net investments	921	1,281
Downstream		
Refining capacity (kbbl/d)	1,013	998
Conversion ratio in Spain (%)	63	63
Refining margin indicator Spain ($/bbl)	6.6	6.4
Gas stations (no.)	4,712	4,724
Oil product sales (kt)	25,071	22,051
Petrochemical product sales (kt)	1,407	1,477
LPG sales (kt)	750	1,052
Gas sales in North America (TBtu)	266	221
EBITDA	1,518	1,585
Adjusted net income	929	934
Net investments	245	(258)

[1] In millions of euros, where applicable.
[2] The ROACE for the first half of 2017 has been annualized by extrapolating the data for the period.
[3] The EBITDA for this indicator has been annualized by extrapolating the data for the period.
[4] Fixed price guaranteed by Repsol for the freely allocated rights awarded under the "*Repsol Flexible Dividend*" program (see Note 4.3)
[5] Includes direct and indirect employees.
[6] Only fixed or temporary employees with no prior working relationship with the company are considered to be new hires. The % of new hires that are permanent in the first half of 2017 and 2016 amounts to 36% and 44%, respectively.
[7] Overall Lost Time Injury Frequency Rate with sick leave (number of days lost and fatal accidents recorded over the year, per million work hours). The 2016 figure is annual.
[8] Total Recordable Incident Rate (TRIR): number of accidents without lost days, with lost days and fatal accidents over the year, per million work hours. The 2016 figure is annual.

2. CORPORATE GOVERNANCE

On May 19, 2017, Repsol's General Shareholders' Meeting approved the **reelection** as Directors of Mr. Rene Dahan, Mr. Manuel Manrique Cecilia and Mr. Luis Suárez de Lezo Mantilla, the **ratification and reelection** as Director of Mr. Antonio Massanell Lavilla, together with the **appointment** as independent **Directors** of Ms. María Teresa Ballester Fornés, Ms. Isabel Torremocha Ferrezuelo and Mr. Mariano Marzo Carpio, all for the statutory term of 4 years.

The current composition of the Board of Directors is as follows:



Note: Additional information about Board members may be found at www.repsol.es/es

(1) Chairman of the Delegate Committee.
(2) Member of the Delegate Committee.
(3) Executive Director.
(4) Independent Non-Executive Director.
(5) External Proprietary Director proposed by Caixabank, S.A.
(6) External Proprietary Director proposed by Sacyr, S.A.
(7) External Proprietary Director proposed by Temasek.
(8) External Director
(9) Chairman of the Audit and Control Committee.
(10) Member of the Audit and Control Committee.
(11) Chairman of the Appointments Committee.
(12) Member of the Nomination Committee.
(13) Chairman of the Remuneration Committee.
(14) Member of the Remuneration Committee.
(15) Chairwoman of the Sustainability Committee.
(16) Member of the Sustainability Committee.
(17) Coordinating Director.
(18) Percentage of share capital according to the latest information available at the date of this document. Information provided by Compañía de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A.U. (Iberclear), and the information submitted by the stockholders to the Company and to the National Securities Market Commission (CNMV for its abbreviation in Spanish).

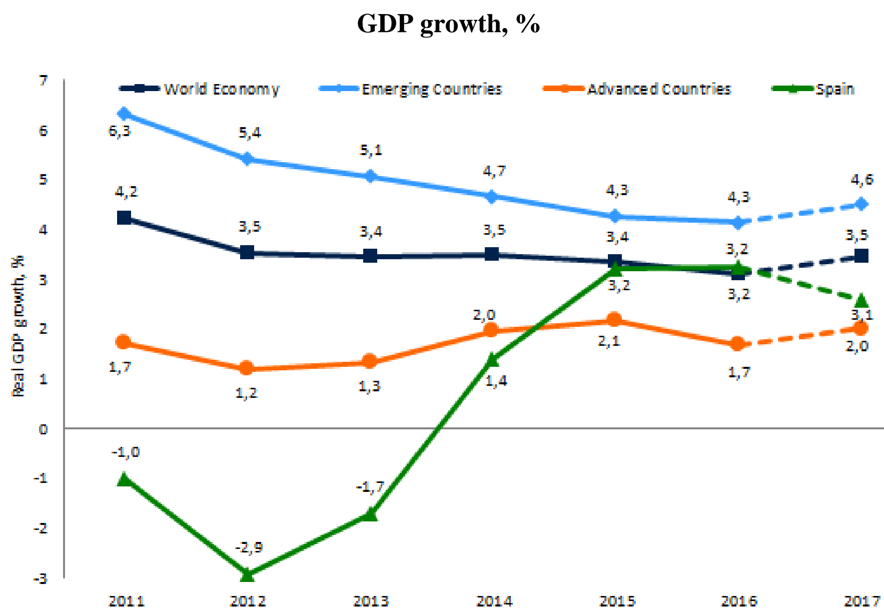
3. MACROECONOMIC ENVIRONMENT

RECENT ECONOMIC TRENDS

Though the **global economy** grew by a modest 3.2% in 2016 as a whole, 0.2 percentage points less than in 2015, output growth accelerated during the year. This favorable trend has been consolidated during 2017, which has contributed to the reduction of risk in the short term and to the improvement of the outlook. The IMF (in its July 2017 WEO) forecasts that global growth would accelerate to 3.5% in 2017, driven by both the advanced economies and emerging markets.

Growth in the **advanced economies** is projected to rise from 1.7% in 2016 to 2.0% in 2017, due to an improvement in domestic demand, with the deleveraging of the private sector now well advanced and with fiscal policy becoming, in general, more expansive. Meanwhile, emerging markets, after five years of slowdown, are expected to see growth pick up from 4.3% in 2016 to 4.6% in 2017. This is due to increased dynamism in China, some recovery in commodity prices and the resumption of capital inflows.

GDP growth, %



Source: IMF (July 2017 WEO) and Repsol Research Unit.

By regions, growth in the **Eurozone** is surprising on the upside, supported by the quantitative easing program of the European Central Bank (ECB), looser fiscal policies, and the improvement in competitiveness. After continuing to recover in 2016, with growth of 1.7%, in the first quarter of 2017 it grew at over 2% on an annualized basis. In **Spain,** not only does the economy remain dynamic (with YoY growth of 3.0% in the first quarter of 2017), but the composition of growth appears healthy. Despite the strength of domestic demand, the current account balance remains positive, with the strength of exports pointing to improved competitiveness. As a result, the IMF's July forecast of 3.1% growth in 2017 is now well below the latest revised figures from the European Commission.

Meanwhile, in the **US** growth moderated to 1.6% in 2016 and, though some of the explanatory factors seem transitory, the figures for the first quarter of 2017 again disappointed (1.4% annualized quarterly growth). Growth of 2.1% is forecast for 2017, on the basis of the strength of private consumption, but the prospect of growth being boosted by increased fiscal stimuli that would boost growth is receding.

In this regard, the divergence between the leading central banks has been less than expected, providing support for increased risk appetite and looser financial conditions, which has favored the upturn in global growth. In the US, the Federal Reserve (FED) has continued to tighten monetary policy, but very

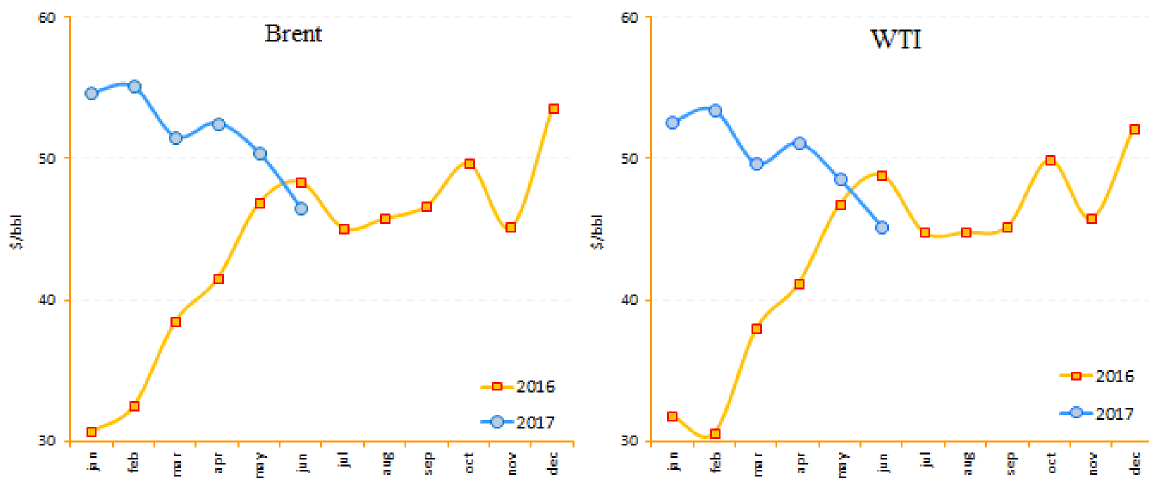
gradually, while the ECB maintains its quantitative easing measures as inflation remains below target, despite the pickup in growth.

DEVELOPMENTS IN THE ENERGY SECTOR

Crude oil - Brent

In the first half of 2017, Brent and WTI prices have followed a predominantly downward trajectory, recording averages of US$51.7/bbl and US$50.0/bbl respectively. Following the agreement by the OPEC countries at the end of last year to cut production, which was seconded by 11 non-OPEC countries (Russia, Mexico, Kazakhstan, Azerbaijan, Oman, Malaysia, Equatorial Guinea, South Sudan, Sudan, Bahrain and Brunei), the Brent oil price rose in January and February, surpassing US$55/bbl at one point. After that, market sentiment reversed, with prices correcting by around ten dollars. The factors behind the bearish trend of recent months include the following: i) the uncertainty arising in the market with regard to compliance with the cuts agreed; ii) the increased production by OPEC countries not subject to the agreement on cuts, such as Nigeria and Libya; and iii) the increase in US production.

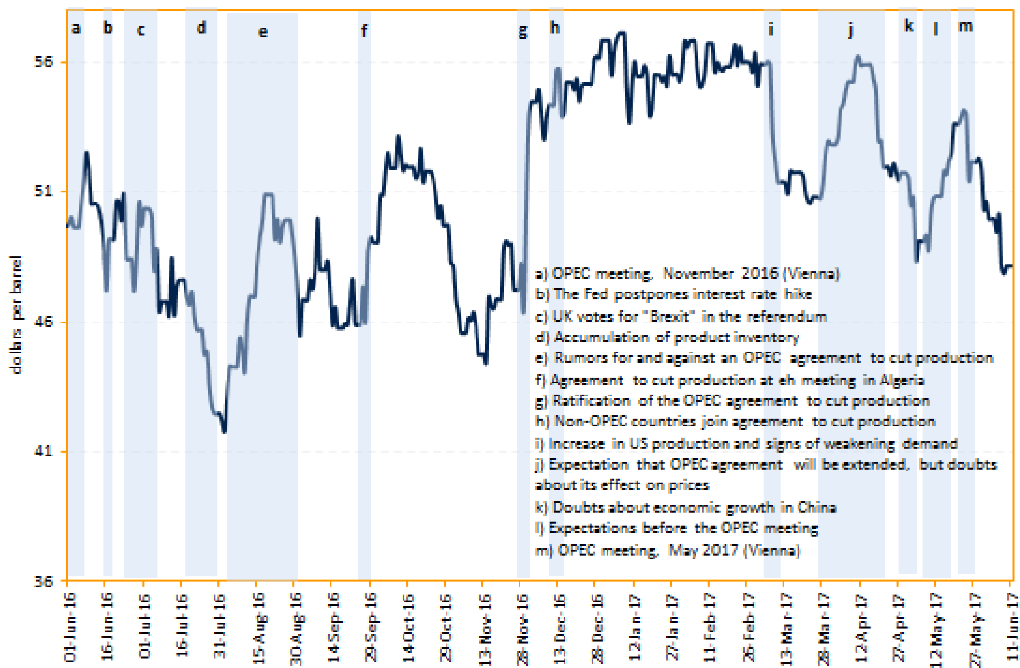
Recent trends in Brent and WTI prices



Source: *Bloomberg* and Repsol Research Unit

Despite the market's pessimism, the International Energy Agency (IEA), in its June monthly report on the oil market, indicates that the balance of supply and demand is thought to have moved into deficit (demand exceeding supply) since the second quarter of this year, and in the year as a whole inventories are expected to fall by an average of over half a million barrels per day, with a positive effect on prices.

Key milestones in Brent oil price movements in the first half of 2017



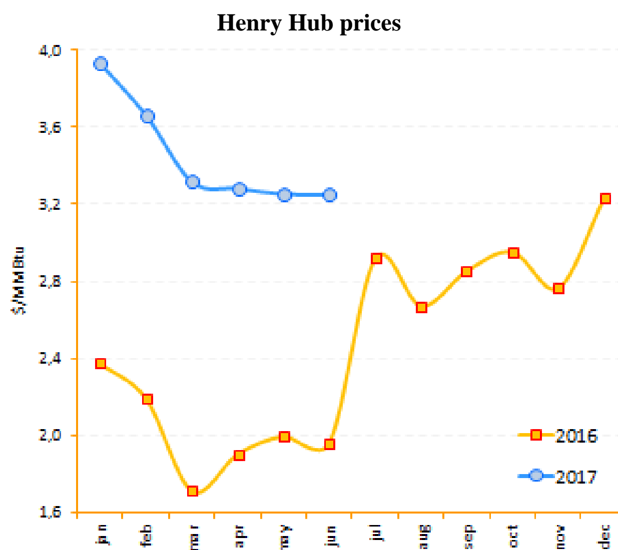
Source: *Bloomberg* and Repsol Research Unit

Natural Gas - Henry Hub (HH)

With regard to US natural gas, the average HH one-month futures price in the first half of 2017 was US$3.3/MBtu, an increase of 61% over the average price in the same half of 2016.

With estimated quarterly production remaining below the levels of the previous year, the cold spells at the beginning of the year and the expectations of increased exports drove the recovery in prices. Nevertheless, since January prices have declined in the face of prospects for increased production and warmer weather.

Henry Hub prices



Source: *NYMEX* and Repsol Research Unit.

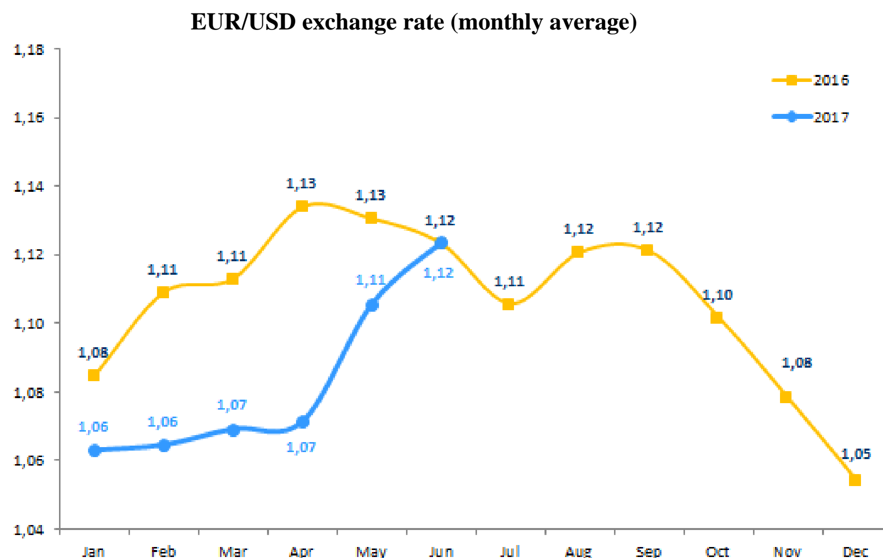
EXCHANGE RATE TRENDS

The first part of 2017 was characterized by the progressive weakness of the US dollar after the rally seen at the end of 2016. The FED's decision to raise rates in December and the election of Mr. Trump as US president in November were the main factors behind the dollar's strength in the latter part of last year. The markets thought that the new president's electoral promises would provide support for the dollar inasmuch as they would result in an expansionary fiscal policy, a tightening of monetary policy and a deregulation of US financial markets.

On the other hand, the fact that the ECB and the Bank of Japan (BOJ) continued with their balance sheet expansion programs, with interest rates at historical lows, exerted downward pressure on the euro and yen. Meanwhile, a year weighted with highly significant elections in Holland, France and Germany, together with a number of anti-EU parties bursting onto the scene, gave rise to a high level of political risk which predominated even over economic fundamentals.

During the first part of this year, some of the factors that had favored the strength of the dollar against the euro have weakened. Doubts have arisen about the capacity of the Trump administration to carry out its electoral promises - especially the fiscal expansion - and in Europe political risk has diminished following the victories of pro-EU parties. Moreover, while economic growth in Europe shows clear signs of strength, in the first quarter US growth was below the forecasts, meaning that the normalization of interest rates is expect to proceed more slowly than anticipated.

EUR/USD exchange rate (monthly average)



Source: *Bloomberg* and Repsol Research Unit

Emerging markets have seen their currencies appreciate in the first half of 2017, benefitting from a recovery in commodity prices and increased capital inflows. In addition, some currencies, such as the Mexican peso, have reversed their earlier depreciation as President Trump's administration adopts a less aggressive tone with regard to protectionist policies.

4. RESULTS, FINANCIAL OVERVIEW AND STOCKHOLDER REMUNERATION

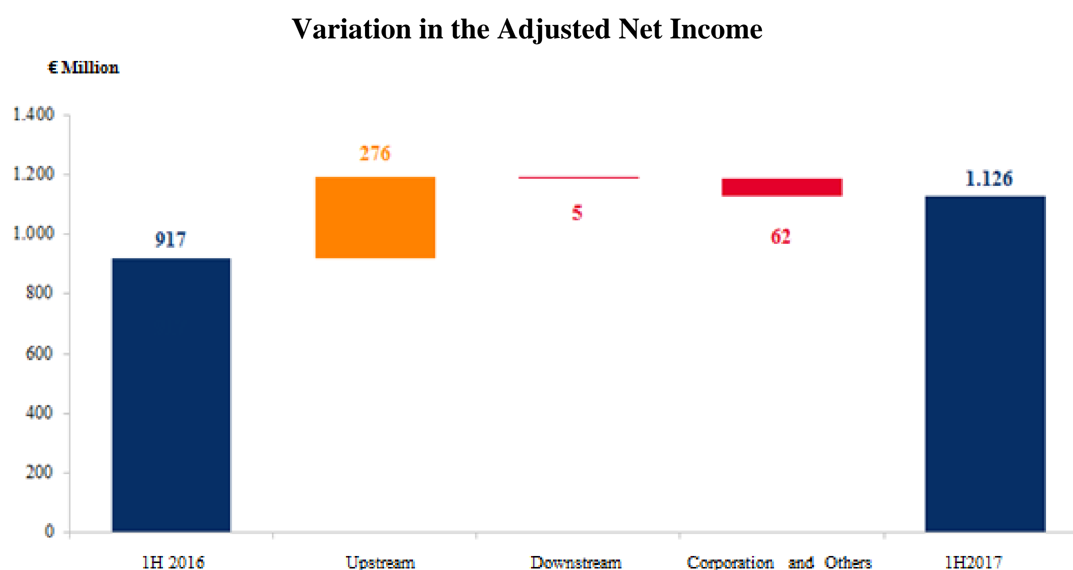
4.1. RESULTS AND CASH FLOW

Million euros	**1H 2017**	**1H 2016**	**Δ**
Upstream	339	63	438%
Downstream	929	934	(1)%
Corporation and other	(142)	(80)	(78)%
Adjusted Net Income	**1,126**	**917**	**23%**
Inventory effect	(60)	2	-
Special Items	(10)	(280)	(96)%
Net income	**1,056**	**639**	**65%**

NOTE: For further information on the results by business segment, see Note 3 "*Segment results*" in the Interim financial statements for the first half of 2017.

The results for the first half of 2017, compared to the same period in the previous year, are occurring in a more favorable **environment** marked by higher prices for oil and, above all, for gas (a 30% increase in Brent prices and a 61% increase in the Henry Hub), solid indicators in refining margins (around US$6.6/bbl) and the petrochemicals business, and the appreciation of the dollar against the euro.

Adjusted Net Income for the half-year rose to 1,126 million euros, an increase of 23% over the same period in 2016. Notable factors were the improved results in *Upstream*, due to the increase in realization prices, efforts to increase efficiency and the contribution of Libya, and the maintenance of the solid results in *Downstream*.



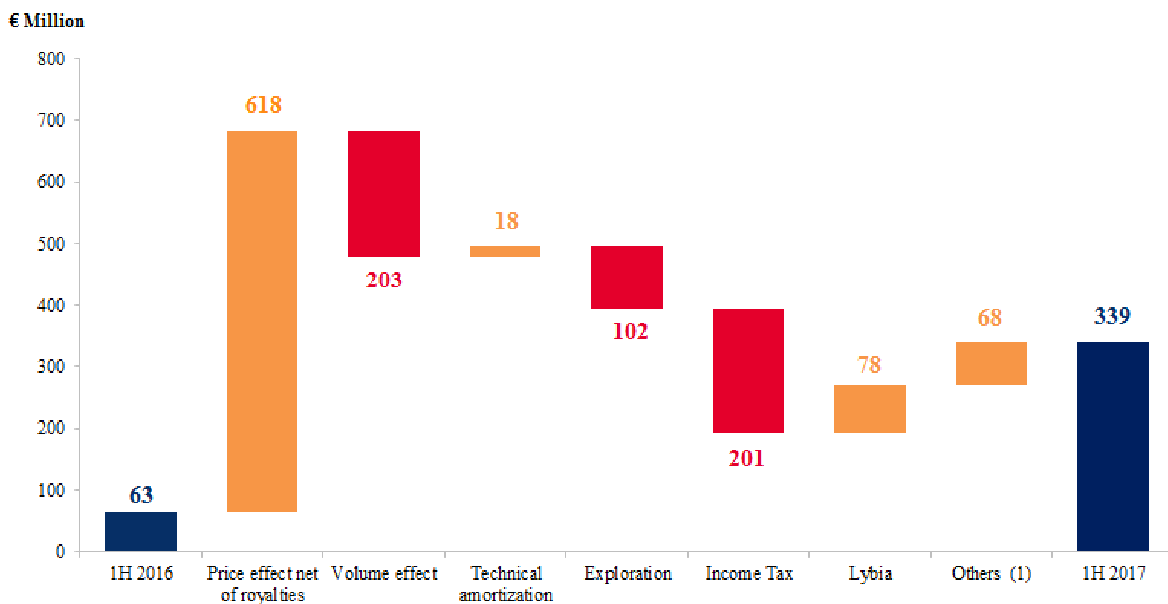
Upstream

Average **production** in the half-year was 685 Kboe/d, 3% down on the same period the previous year. The natural decline in the United States and the exhaustion and cease of activity of fields in Norway, the loss of production from assets sold in Indonesia and the fall in Brazilian demand for exports from Bolivia have been largely offset by the resumption of production in Libya and the inauguration of new wells in Sapinhoá and Lapa in Brazil.

With regard to **exploration**, drilling was completed for seven exploration wells and three delineation/appraisal wells. Five of them were declared positive (three exploration and two appraisal wells) and five negative (four exploration and one appraisal wells). The discoveries in Alaska (*Horseshoe-1* and *Horseshoe-1A*) and in Trinidad and Tobago (*Savannah* and *Macadamia*) are notable for their potential.

The **Adjusted Net Income** of *Upstream* stood at 339 million euros, much higher than the same period of the previous year (63 million euros). This significant improvement was driven fundamentally by the recovery in oil and gas realization prices, the contribution from Libya, which resumed production in December 2016, and from Brazil and by the reduction in recurring operating costs. These increases in income were partly offset by higher taxes , the fall in volumes sold and increased exploration expenses.

Variation in the adjusted net income of Upstream 1H 2017 vs. 1H 2016



(1) Includes general administrative costs, exchange rate effect and others.

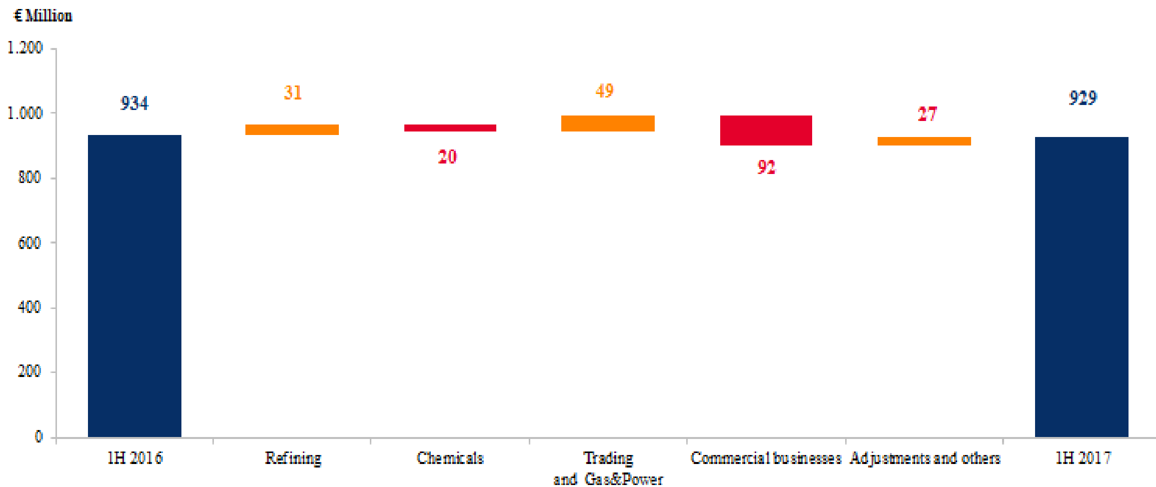
Upstream **EBITDA** amounted to 1,666 million euros, a 79% increase on the same period of the previous year.

Net investment in exploration in the period was 921 million euros, a 28% decline on the same period in 2016.

Downstream

Adjusted net income was 929 million euros in the first half of 2017, in line with the same period of 2016.

Variation in the adjusted net income of Downstream 1H 2017 vs. 1H 2016



The variation in the adjusted net income was due mainly to:

- The solid results in Refining were maintained in a more favorable international environment (higher margin of US$6.6/bbl as opposed to US$6.4/bbl in 1H2016 and a stronger US dollar: 1.08 €/$ vs. 1.12 €/$ in 1H2016), increased distillation in the plants and the increase in sales, which offset the effects of the multi-year maintenance downtimes in the industrial complexes of Bilbao and Cartagena, and increased amortization.

- In Chemicals, where the high international margins of the previous year were maintained, results were affected by lower sales in the period due to operational incidents at the plants. This effect was offset by the greater contribution to the result from cogeneration plants and associate companies.

- The improved results in Trading operations and the recovery in the Gas & Power business in North America, driven by the increase in volumes sold and lower costs.

- In Commercial Businesses, the improvement in the results of Marketing in Spain (sales up 2%, improvement in non-oil activity, reduction in fixed costs) and Portugal. However, the results of the LPG business were reduced, in comparison with the previous year, by lower margins on regulated bottled LPG, the indemnities resulting from applying the maximum price formula for the sale of bottled LPG 2009-2010 registered in 2016, and the income from the disposal of businesses (piped gas in Spain and the Peru and Ecuador LPG businesses).

Downstream's **EBITDA** stood at 1,518 million euros (compared to 1,585 million euros in the same period of 2016).

Downstream's **net investments** were 245 million euros (compared to a negative 258 million euros in the first half of 2016, when major divestments were made). Gross investment declined by 15% compared to the same period of 2016, with the main investments being those related to the improvement of energy efficiency and safety and environment, together with the multi-year downtimes in the Spain refineries and the refurbishing of the gasolines block in the La Pampilla refinery in Peru.

Corporation and other

The results (a loss of 142 million euros) were below those for the first half of 2016 (80 million euro loss). The reductions in corporate costs in Madrid and Calgary and lower debt interest payments were insufficient to compensate for the reduced contribution of Gas Natural Fenosa (following the reduction of the holding in 2016 and the worse performance by the electric power activity in Spain) and the comparative effect on the financial results of the gains achieved in 2016 on the repurchase of the ROGCI bonds.

The **Inventory Effect** is negative at 60 million euros, due to the decline in prices during the half-year.

In **Special Items**, which stood at -10 million euros, notable aspects were i) workforce restructuring costs, due to the downsizing of the executive team and the workforce reductions in the countries of the *Upstream* segment, ii) the impairment of exploration assets, and iii) the impact of legal, fiscal and environmental provisions.

	Upstream		Downstream		Corporation		TOTAL	
Million euros	**1H 2017**	**1H 2016**	**1H 2017**	**1H 2016**	**1H 2017**	**1H 2016**	**1H 2017**	**1H 2016**
Divestments	9	(10)	12	260	2	-	23	250
Workforce restructuring	(8)	(54)	(4)	(130)	(24)	(162)	(36)	(346)
Impairment	(26)	(8)	-	(2)	-	-	(26)	(10)
Provisions and others	36	(138)	14	(20)	(21)	(16)	29	(174)
TOTAL	**11**	**(210)**	**22**	**108**	**(43)**	**(178)**	**(10)**	**(280)**

Net Income for the first half, as a result of all of the above, was 1,056 million euros, 65% up on the same period of 2016.

EBITDA for the period, at 3,108 million euros, rose 29% over the previous period, driven basically by the notable performance of *Upstream*.

Below we present the main financial **profitability** indicators for the first half of 2017 and 2016:

Profitability indicators	**1H 2017**	**1H 2016**
Return on average capital employed (ROACE) (%)	6.5	5.3
Earnings per share (€/share)	0.68	0.41

Free cash flow in the first half of 2017 stood at 943 million euros, compared to 775 million euros in the same period of 2016. The significant improvement in EBITDA and the fall in investment were partly offset by higher tax payments and the absence of major divestments in the period.

	1H 2017	1H 2016
EBITDA	**3,108**	**2,417**
Changes in working capital	(387)	(731)
Dividends received	140	303
Income tax receipts / (payments)	(380)	119
Other receipts/(payments) from operating activities	(306)	(336)
I. CASH FLOW FROM OPERATING ACTIVITIES	**2,175**	**1,772**
Payments on investments	(1,264)	(1,657)
Receipts from disinvestments	32	660
II. CASH FLOW FROM INVESTMENT ACTIVITIES	**(1,232)**	**(997)**
FREE CASH FLOW (I + II)	**943**	**775**
Payments for dividends and remuneration of other equity instruments	(143)	(271)
Net interest	(345)	(398)
Treasury stock	(183)	(49)
CASH GENERATED IN THE PERIOD	**272**	**57**

4.2. FINANCIAL OVERVIEW

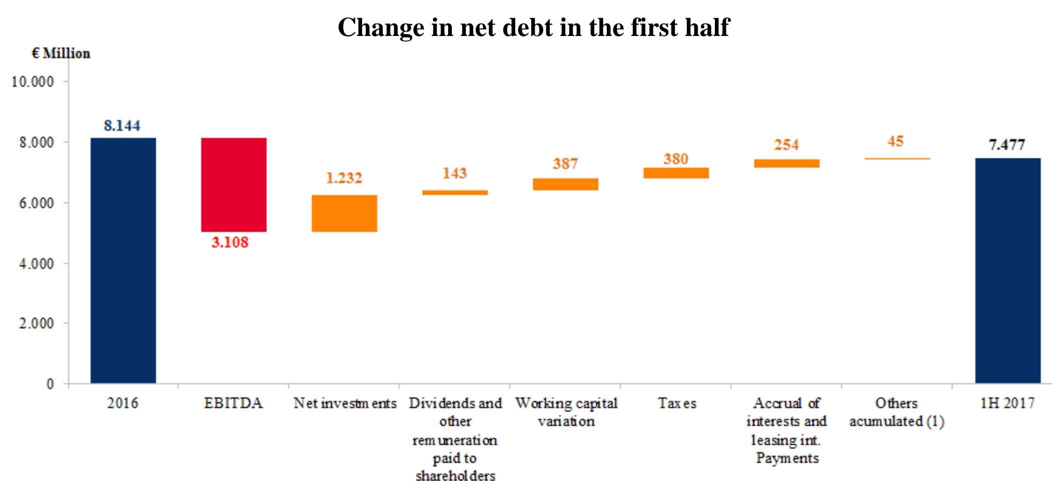
During the first half of 2017, in accordance with the Group's commitment to strengthening its financial structure following the acquisition of ROGCI, it has continued with the various measures that have enabled it to reduce its borrowing and maintain its pre-acquisition credit rating; moreover, the leading credit agencies have improved the outlook, with S&P updating it from "negative" to "positive" and Moody´s and Fitch from "negative" to "stable".

In line with its policy of financial prudence and its commitment to maintaining a high degree of liquidity, the funds held in cash by the Group at the end of the half-year and available credit lines amply exceed the maturities of its short-term debt.

Indebtedness

The **net debt** at June 30, 2017 was 7,477 million euros, significantly inferior to that at the same date last year (11,709 million euros), due to the improvement in the cash flow generated by the businesses over the period (driven mainly by the Upstream segment), discipline in investments and the lower costs of borrowing. During the half-year, net debt was reduced by 667 million euros:

Change in net debt in the first half



(1) Mainly includes treasury stock transactions and the effect of the exchange rate.

Main funding operations

- In February 2017, a bond issued by Repsol International Finance, B.V. (RIF) was repaid at maturity; the nominal amount was 886 million euros with a fixed annual coupon of 4.75%.
- In May 2017, RIF issued a bond guaranteed by Repsol S.A., in the amount of 500 million euros, maturing in 2022 and carrying a fixed annual coupon of 0.50%. This represents the first issue of a "green bond"[1] by the Repsol Group, the funds of which are dedicated to refinancing and financing projects that seek to prevent greenhouse gas emissions as part of refining and chemical activities in Spain and Portugal.
- On June 9, ROGCI announced the launch of a Consent solicitation addressed to holders of its US dollar bonds, with the aim of modifying certain terms and conditions of these issues with the aim of: (i) replacing ROGCI's reporting obligations with Repsol's periodic financial information; and (ii) eliminating the merger covenant in order to optimize the Group's operating and financial flexibility. ROGCI has also offered investors the option of repurchasing their bonds.

  This transaction was preceded by Repsol, S.A.'s guaranteeing ROGCI's payment obligations as part of these issues; this guarantee shall remain in force until it expires or is cancelled.

  ROGCI has received sufficient consents to amend the conditions of the issues in the terms proposed and has repurchased bonds in the amount of 87 million dollars.

Debt maturities

The **maturity dates for gross debt** at June 30, 2017 are as follows:

Gross debt (1) (2) (Million euros)	Total
Maturity 2017	2,820
Maturity 2018	1,956
Maturity 2019	1,740
Maturity 2020	1,903
Maturity 2021	1,312
Maturity 2022 and thereafter	3,079
TOTAL	**12,810**

Maturities of bonds(1) outstanding at June 30 2017				
FY	Currency	Nominal	%	Maturity
2017	£	250 (4)	6.63	dec-17
2018	€	750 (3)	4.38	feb-18
	€	600	Eur. 3M+p.b.	jul-18
2019	€	1,000 (3)	4.88	feb-19
	$	360 (4)	7.75	jun-19
	€	100	0.125	jul-19
2020	€	1,200 (3)	2.63	may-20
	€	600 (3)	2.13	dec-20
2021 and thereafter	$	237 (4)	3.75	feb-21
	€	1,000 (3)	3.63	oct-21
	€	500 (3)	0.50	may-22
	€	500 (3)	2.25	dec-26
	$	50 (4)	7.25	oct-27
	€	100 (3)	5.38	jan-31
	$	88 (4)	5.75	may-35
	$	102 (4)	5.85	feb-37
	$	115 (4)	6.25	feb-38
	$	57 (4)	5.50	may-42
	€	1,000 (5)	4.50	mar-75

(1) Does not include the perpetual subordinated bond issued by Repsol International Finance, B.V (RIF) on March 25, 2015 in the amount of 1,000 million euros.
(2) Includes exchange rate derivatives and interest.
(3) Issues of RIF under the *Euro 10,000,000,000 Guaranteed Euro Medium Term Note Program* (EMTNs) guaranteed by Repsol, S.A.
(4) Issues placed through ROGCI under the scope of the *Universal Shelf Prospectus* program in the United States and the *Medium-Term Note Shelf Prospectus* program in Canada. These issues are subject to the request for consent and repurchase option mentioned in this section and have been guaranteed by Repsol, S.A.
(5) Subordinated bond maturing at 60 years issued by RIF and guaranteed by Repsol, S.A. Coupon scheduled for reset on March 25, 2025 and March 25, 2045.

[1] For further information, consult the Green Bond Framework published at www.repsol.energy/es/.

Additionally, Repsol International Finance, B.V. (RIF), holds a Euro Commercial Paper (ECP) Program, with a limit of 2,000 million euros; the outstanding balance at June 30, 2017 was 1,953 million euros.

Financial prudence

Group liquidity, including committed and undrawn credit facilities, stood at 7,756 million euros at June 30, 2017, which is enough to cover its short-term debt maturities by a factor of 1.91. Repsol had undrawn credit lines amounting to 2,814 and 4,214 million euros at June 30, 2017 and 2016, respectively.

INDICATORS OF FINANCIAL POSITION	**06/30/2017**	**06/30/2016**
Net financial debt (Million euros)	7,477	11,709
Net financial debt / EBITDA (x times)	1.20	2.42
Net financial debt / Total capital employed (%)	19.9	28.9
Liquidity / Gross short-term debt (x times)	1.91	1.8
Debt interest / EBITDA (%)	5.9	9.3

Credit rating

At present, the credit ratings assigned to Repsol, S.A. and ROGCI by the ratings agencies are as follows:

	STANDARD & POOR'S		**MOODY'S**		**FITCH RATINGS**	
TERM	**Repsol, S.A.**	**ROGCI**	**Repsol, S.A.**	**ROGCI**	**Repsol, S.A.**	**ROGCI**
Long-term	BBB-	BBB-	Baa2	Baa2	BBB	BBB-
Short-term	A-3	A-3	P-2	P-3	F-3	F-3
Outlook	positive	positive	stable	stable	stable	stable
Last date of change	03/03/2017	03/03/2017	06/22/2017	06/22/2016	05/16/2017	05/16/2017

Treasury shares and own equity investments

In the first half of 2017, no significant transactions involving treasury shares or own equity investments were performed. For further information, see Note 4.5 "*Treasury shares and own equity investments*" in the Interim Condensed Consolidated Financial Statements for the first half of 2017.

4.3. SHAREHOLDER REMUNERATION

The remuneration received by shareholders in the first half of 2017 under the "*Repsol Flexible Dividend*" program includes the amount of the irrevocable commitment to purchase bonus share rights assumed by Repsol in the bonus share capital increase concluded in January 2017 (€0.335 gross per right). In the first half of 2017, Repsol paid out a gross total of 99 million euros to shareholders and distributed 30,760,751 new shares, worth 392 million euros, to those shareholders opting to take their dividend in the form of new company shares.

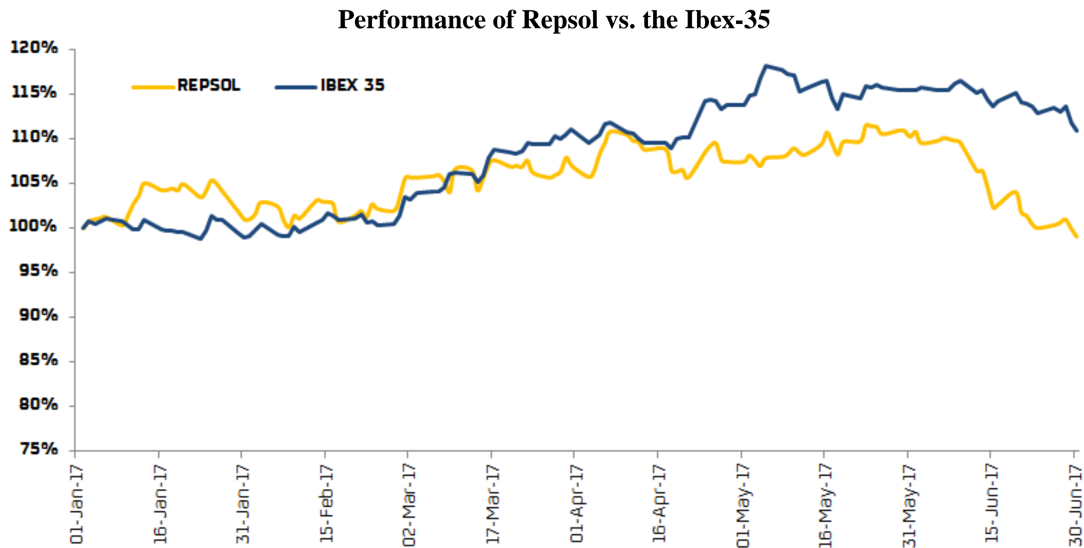
In addition, in July 2017, under the "*Repsol Flexible Dividend*" program, replacing what would have been the final dividend from 2016 profits, Repsol paid out 189 million euros in cash (€0.426 gross per right) to those shareholders opting to sell their bonus share rights back to the Company and delivered 30,991,202 shares, worth 449 million euros, to those opting to take their dividend in the form of new company shares.

For additional information on the total remuneration received by shareholders and the aforementioned capital increases issued under the "*Repsol Flexible Dividend*" program, see Note 4.5 "*Share capital*" of the Interim Condensed Consolidated Financial Statements for the first half of 2017.

Share price

The first half of 2017 ended on a positive note for the leading European indexes and, in particular, for the **Ibex 35** as a result of the region's more stable economic situation. After maintaining a rising trend throughout the period, reaching yearly highs at the beginning of May, the Ibex-35 ended the period up 11%, recovering more than a thousand points.

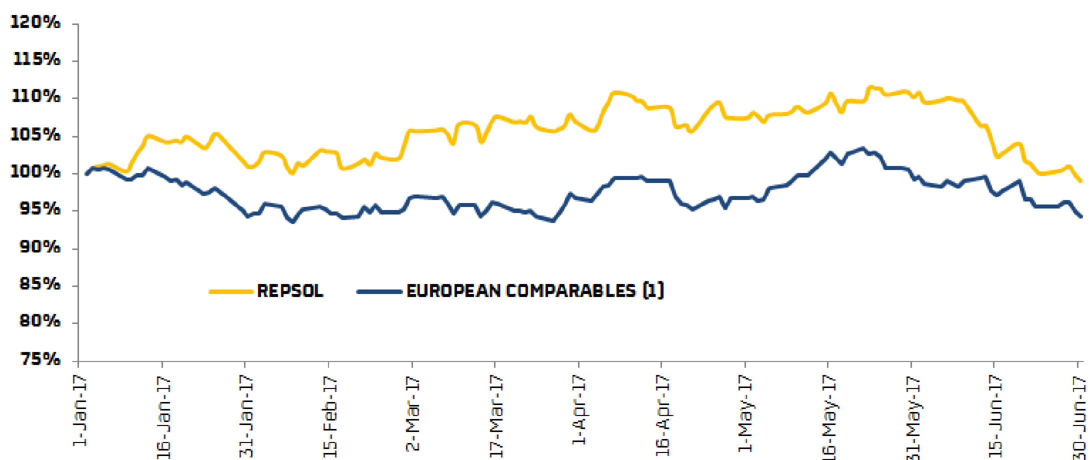
Performance of Repsol vs. the Ibex-35



Source: Bloomberg

Repsol ended the first half with a slight decline of 0.9%. Like the rest of the **European oil sector**, which fell an average 6%, Repsol was negatively affected by the progressive fall in oil prices over the period.

Performance of Repsol vs. the European oil sector

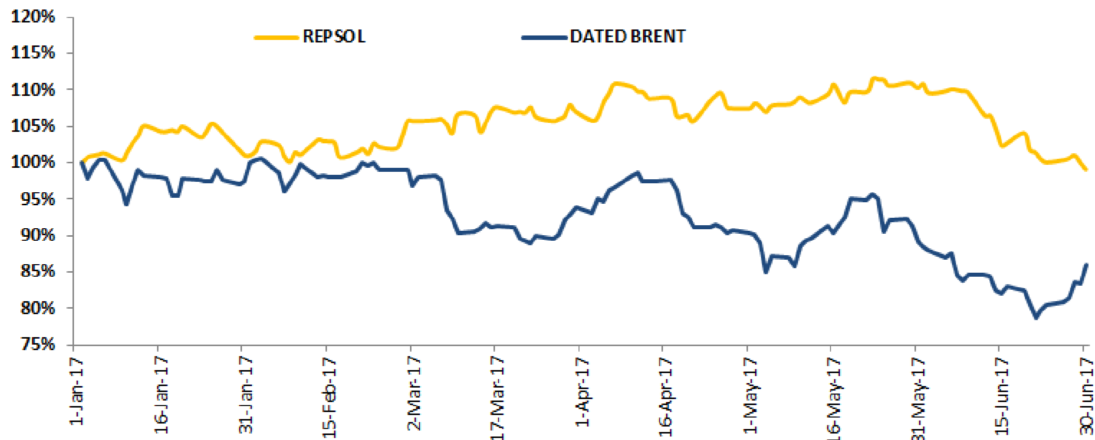


Source: Bloomberg

(1) European companies in the sector included: BP, Shell, Total, Eni, Statoil, Galp and OMV.

Brent began the year above US$56/bbl, but the increase in OPEC and US shale production brought its price down to US$48/bbl by the end of the first half, a decline of 14%.

Performance of Repsol vs. Brent



Source: Bloomberg

The Group's main stock market indicators in the first half of 2017 and 2016 are detailed below:

MAIN STOCK MARKET INDICATORS	1H 2017	1H 2016
Shareholder remuneration (€/share) [(1)]	0.335	0.466
Share price at period-end [(2)] (€)	13.40	11.41
Period average share price (€)	14.28	10.26
Maximum price (€)	15.09	11.94
Minimum price (€)	13.40	8.02
Number of shares outstanding at year-end (million)	1,496	1,442
Market capitalization at end of the year (€million) [(3)]	20,052	16,451
Book value per share [(4)]	20.01	19.84

[(1)] For each period, shareholder remuneration includes the dividends paid and the fixed price guaranteed by Repsol for the bonus share rights awarded under the "*Repsol Flexible Dividend*" program.
[(2)] Share price at year-end in the continuous market of the Spanish stock exchanges.
[(3)] Closing market price per share, times the number of outstanding shares.
[(4)] Equity attributed to the Parent / Number of shares outstanding at period-end.

5. OUR BUSINESS PERFORMANCE

5.1. UPSTREAM

Figures, indicators and investments

	1H 2017	1H 2016
Net production of liquids (kbbl/d)	256	251
Net production of gas (kboe/d)	429	454
Total net production of hydrocarbons (kboe/d)	685	705
Average crude oil realization price ($/bbl)	46.7	35.1
Average gas realization price ($/kscf)	2.9	2.3
Bonds, dry wells, and general and administration expenses [1]	141	65
Net investments [2]	**921**	**1,281**

[1] Only costs directly assigned to exploration projects.

[2] Gross investments for the period broken down by geographical area as follows:
- Development investments (82% of total investments): Trinidad and Tobago (22%), US (19%), UK (9%), Canada (9%), Algeria (8%), Brazil (7%), Bolivia (5%) and Peru (4%).
- Exploration investments (17% of total investments): Colombia (22%), Trinidad and Tobago (12%), Vietnam (9%), Bolivia (9%), Norway (8%), Algeria (6%), Guyana (5%), Russia (5%) and Peru (4%).

Results

€ Million	1H 2017	1H 2016	Var. %
Operating income	503	(79)	737%
Income tax	(176)	137	(228%)
Investees and non-controlling interests	12	5	140%
Adjusted net income [1]	**339**	**63**	**438%**
Special items	11	(210)	(105%)
Net income	**350**	**(147)**	**338%**
Effective tax rate (%)	35	(173)	-
EBITDA	**1,666**	**933**	**79%**

[1] Detail of Adjusted Net Income by geographical area:

Geographical area	1H 2017	1H 2016	Var.
Europe, Africa and Brazil	141	58	143%
Latin America - Caribbean	159	172	(8%)
North America	(25)	(114)	78%
Asia and Russia	74	19	284%
Exploration and other	(10)	(72)	88%
Adjusted Net Income	**339**	**63**	**438%**

Main events of the first half of 2017

- **Exploration campaign:** in the first half of 2017, the drilling of 7 exploration wells and 3 *appraisal* wells was concluded, 5 with positive results (3 exploration wells and 2 *appraisal* wells) and 5 negative (all exploration except one *appraisal* well). At June 30, 2 exploratory wells were still ongoing. In addition, one exploration drilling in Romania was suspended.
- On January 4, 2017, **production resumed in the I/R field in Libya** (field shared between blocks NC-186 and NC-115) and, on May 9, in NC-186. On December 20, 2016, production was reestablished in El Sharara in block NC115 (fields A, M and H). Average production in the first half of 2017 amounted to 177 Kboe/d gross (251 Kboe/d gross in June), representing a net Repsol production of 21.5 kboe/d in the first half (29.8 kboe/d in June)
- On January 19, ***appraisal* drilling PTJ-X5 in Bolivia** in the Patajú block (48.33% Repsol) ended with a negative result.
- On January 31, the **Mashira drilling 57-18-6X in block 57 in Peru** (53.84% Repsol) ended with a negative result.
- On March 9, 2017, the **discovery in Alaska** was announced, with the **Horseshoe-1 and Horseshoe-1A** drillings which confirm that the Nanushuk formation has one of the highest potentials of the prolific Alaska *North Slope* zone. This discovery extends the Nanushuk formation by over 32 km with respect to the finds made until now. Total contingent resources are estimated at around 1,200 million recoverable barrels of light crude. The delineation works are currently in progress which will allow the development plan to be designed, with production expected to begin in 2022. Repsol has a 25% stake in this discovery; Armstrong is the operating company.
- On April 6, **drilling P-8 ended; this is situated in the Russian Karabashsky-1 block** (100% stake), and was declared negative.
- In the first quarter of 2017, the **second production well in the Lapa field** came on stream. This well in block BM-S-9 is located in the deep waters of Brazil. The third well is expected to come on stream during the second half of 2017.
- On April 16, **appraisal *drilling* PTJ-WX1 in Bolivia** in the Patujú block (Repsol 48.33%) ended with a positive result.

- On April 17, the *Field Development Plan* (FDP) of the project for the **development and start of production of the offshore Ca Rong Do (CRD) discovery** in Vietnam block 07/03 was approved. Subsequently, on April 26, Repsol and its partners in the project signed the Final Investment Decision (FID), launching the development phase of the project which is forecast to begin production in late 2019.
- On May 1, **drilling ended at Stordal-1**, in Norwegian block PL705 (Repsol 40%) with a negative result.
- On May 29, drilling ended at **Siluro 1B**, in Colombia block RC-11 (Repsol 50%) with a negative result.
- On May 12, the **start of production in the Shaw field in the MAR area** was announced (Montrose and Arbroath platforms) in the UK North Sea. This field is operated by Repsol Sinopec Resources UK in the framework of the MAR area development plan. This project includes the development of two new fields (Shaw and Cayley), for which a new production platform (BLP), connected to the Montrose Alpha platform, has been installed. The Cayley field came on stream in June 2017.
- On May 29, an agreement was announced to acquire a 60% stake and the status of operating **company in the Ioannina and Aitoloakarnania onshore exploration blocks in western Greece**, with a total extension of 8,547 km^2; they form part of the Hellinide fold belt and are related to the recent important discoveries in Albania (the Shell Shpirag discoveries). The current operator, Energean, will retain a 40% non-operating stake in the two blocks. The agreement is subject to approval by the Greek government and ratification of the Aitoloakarnania concession agreement between Energean and the government.
- On June 6, the discovery was announced of **gas in the waters of Trinidad and Tobago** with the Savannah and Macadamia drillings in the East Block, situated in the Columbus basin, to the east of the island of Trinidad, in a sheet of water of some 150 meters. Repsol is participating in this block with a 30% interest (the other 70% is held by BP, the block's operating company). The resources are estimated at some 2 trillion cubic feet of gas (2 TCF), equivalent to over two years of consumption in Spain.
- As part of the project for the **redevelopment of the offshore Kinabalu field in Malaysia**, where Repsol is the operating company with 60%, a new riser platform was installed in June 8. Once the development drilling stage ends, after the connection and inauguration of the platform, production is expected to begin in the second half of 2017.
- On June 16, an agreement was announced between the Bolivian government and Repsol for work to begin in a **new exploration block (Iñiguazu),** in the south of the country, where Bolivia's main gas-producing fields are found. The block covers 644 km^2, it is located in Tarija department and it borders on the Caipipendi area (Margarita-Huacaya). Drilling will be carried out by a consortium formed by Repsol, the operating company, YPFB Andina, Shell and PAE.
- On June 19, the Mexican National Hydrocarbons Commission (CNH) awarded Repsol **a gas exploration block in Mexico's shallow waters** as part of Exploration Round 2. This is Block 11, with a total surface area of 533 km^2, in the southeast basin. Repsol will act as operator with a 60% stake, with its partner Sierra Oil & Gas with the other 40%. This award represents Repsol's first exploration block in Mexico; it is returning to the country after an absence following the expiry in January 2014 of the Multiple Services Contract in the Burgos basin.
- On June 29, an agreement was reached with the Russian company **Gazprom Neft by which the latter acquired Repsol's 25% stake in the company Eurotek Yugra**. Thus, Repsol and Gazprom Neft will manage Eurotek Yugra jointly. Eurotek Yugra owns seven licenses in the most western zone of the West Siberia basin (Karabashky licenses 1, 2, 3, 9, 78, 79 and Kileyski). In the framework of this agreement, a memorandum of understanding was also signed to strengthen the collaboration between the two companies in West Siberia, and to explore joint investments in the area near Eurotek Yugra's assets.
- The second quarter of 2017 **saw the early cancellation**, in the Algarve basin in offshore Portugal, **of the exploration licenses** for blocks 11 (Sapateira) and 12 (Caranguejo). Repsol was the operator with a 70% interest, in association with Partex (30%).
- Following the studies of their potential, in the second quarter of 2017, Repsol agreed with the operator, Armstrong, its **early withdrawal** from 19 **marginal blocks to the north of the Alaska North Slope**.
- Also in the second quarter, the launch of the project for the **development of the Angelin gas field in BPTT in Trinidad and Tobag**o was approved. Production is expected to begin in the first quarter of 2019.

5.2. DOWNSTREAM

Operational figures and indicators

	1H 2017	1H 2016
Refining capacity (kbbl/d)	**1,013**	**998**
Europe (including the stake in ASESA)	896	896
Rest of the world	117	102
Conversion ratio (%)	**59**	**59**
Crude oil processed (million t)	**22.6**	**19.8**
Europe	19.8	18.1
Rest of the world	2.8	1.7
Refining margin indicator ($/Bbl)		
Spain	6.6	6.4
Peru	5.5	2.7
Number of gas stations	**4,712**	**4,724**
Europe	4,246	4,299
Rest of the world	466	425
Oil product sales (kt)	**25,071**	**22,051**
Europe	21,794	19,737
Rest of the world	3,277	2,314
Petrochemical product sales (kt)	**1,407**	**1,477**
Europe	1,189	1,255
Rest of the world	218	222
LPG sales (kt)	**750**	**1,052**
Europe	740	682
Rest of the world	10	370
Gas sales in North America (Tbtu)	**266**	**221**
Regasif. LNG (100%) in Canaport (Tbtu)	**9.8**	**11.7**

Results and investments

€ Million	1H 2017	1H 2016	Variation
Operating income CCS	1,234	1,229	0.4%
Income tax	(301)	(281)	(7.1%)
Investees and non-controlling interests	(4)	(14)	71%
Adjusted net income [(1)]	**929**	**934**	**(1%)**
Equity effect	(60)	2	(3,100%)
Special items	22	108	(80%)
Net income	**891**	**1,044**	**(15%)**
EBITDA	**1,518**	**1,585**	**(4%)**
Net investments [(2)(3)]	**245**	**(258)**	**196%**
Effective tax rate (%)	**24**	**23**	**1%**

(1) Detail of Adjusted Net Income by geographical area:

Geographical area	1H 2017	1H 2016	Variation
Europe	883	940	(6%)
Rest of the world	46	(6)	867%
Adjusted Net Income	**929**	**934**	**(1%)**

(2) Gross investments minus divestments for the period.

(3) In 2017, the main investments were for the improvement of energy efficiency and security and environment, together with the multi-year downtimes at the refineries in Spain and the refurbishment of the gasolines block at the La Pampilla refinery in Peru.

Main events of the first half of 2017

- In January, the Chemicals business presented the **new brands Repsol Primeva and Repsol Ebantix** for marketing its range of ethylene-vinyl acetate (EVA) and ethylene butyl acrylate (EBA) copolymers. At the launch, new grades with improved properties were also presented.
- In March, the Chemicals business launched the range of polyolefins for the pharma market. This new range of specialties will be sold under the **Repsol Healthcare trade name** with the aim of supplying the demanding health market, thus confirming Repsol's focus on product differentiation.
- In April, a **new range of Repsol Moto lubricants**, developed in Repsol's Technology Center, was launched; this is an important milestone for maintaining leadership of the Spanish lubricants market and developing the international market.
- In May, agreement with the Rubis group was reached for the **sale of the piping facilities in mainland Portugal** for an amount of 8.2 million euros. The agreement will come into effect on 1 July.
- In June, the new **Repsol WAYLET** app was offered to our service station customers. The launch of this app strengthens the company's transformation based on innovation, technology and the digital environment.
- In June, Repsol, for the second consecutive year, was named the Europe's **best producer of high-density polyethylene (HDPE)**. The prize was presented at the annual meeting of European Plastics Converters (EuPC) and ANAIP (Spanish Association of Plastics Manufacturers).

- In the first half of the year, Repsol **AutoGas** has:

  - Secured **various agreements with leading automotive brands** (Fiat, PSA Group, Ssangyong-Subaru, Opel and Renault Dacia Group) to promote, through joint actions, the sale of vehicles fuelled by automotive LPG or AutoGas.
  - Repsol AutoGas has launched a **program of commercial incentives to adapt gasoline vehicles to AutoGas**.
  - Continued to support the consumption of **Autogas as an alternative fuel** through the Autogas cluster; in June, the cluster had 15 members which, in addition to Repsol, included manufacturers of vehicles and components and technology and/or research institutes.

- In Peru, following the launch of the diesel module of the La Pampilla refinery, in 2017 the **Gasoline block** is being developed in accordance with the timetable.

- In the first half, taking advantage of the scheduled shutdowns at the Bilbao and Cartagena refineries, the following **improvements** were carried out:
  - **In Bilbao**, we invested in **2 new compressors for the FCC unit** to reduce the fuel consumed in the generation of steam, in dry seals in rotating machinery to reduce oil consumption and in the installation of new air pre-heaters in furnaces to reduce their fuel consumption.
  - **In Cartagena**, various **projects have been carried out to improve energy efficiency in the crude unit, the Hydrocracker and the Hydrogen 2 unit**, notably the modifications to the reformer furnace of the Hydrogen 2 unit, which reduce the fuel consumption specific to the process.

5.3. CORPORATION

Main events of the first half of 2017

- On March 3, the **Standard & Poor's (S&P) credit rating agency changed the outlook** from "negative" to "stable" for Repsol's long-term debt, rated as BBB-.
- In April, the Corporate Executive Committee approved a set of **changes in the executive team** in the framework of the transformation of the organization. These changes will enable us to progress towards a more flexible company and strengthen the relationships between the Corporation and the businesses. It represents a simplification of our organizational structure and reduces the number of executives by 14.
- On May 19, 2017, Repsol's General Shareholders' Meeting approved the **appointments as independent external directors** of Ms Maria Teresa Ballester Fornés, Ms Isabel Torremocha Ferrezuelo and Mr Mariano Marzo Carpio. In all cases, for a statutory term of 4 years (see section 2 for further information).
- On May 23, 2017, Repsol International Finance B.V. **issued a "*green*" bond** (a first for the company and for the Oil & Gas sector), guaranteed by Repsol S.A., for a nominal amount of 500 million euros, maturing in 2022 with a fixed annual coupon of 0.50%.
- On May 16, the **Fitch credit rating agency changed the outlook** from "negative" to "stable" for Repsol's long-term debt, rated as BBB.
- On June 20, the Corporate Executive Committee approved the **Global Sustainability Plan** in which Repsol **commits itself to 2020 targets** in the six main areas (Ethics and transparency; People; Operational safety; Management of resources and impacts; Climate change and Innovation and technology).
- On June 22, the **Moody's credit rating agency changed the outlook** from "negative" to "stable" for Repsol's long-term debt, rated as Baa2.
- During the first half, ***Emerging Businesses***, as part of its corporate venture capital activity, made the following investments in start-ups:
    - ***WeSmartPark***: In January, it acquired 11.51% of this Spanish company, which manages a network of shared car parks.
    - ***DriveSmart Technology***: In March, it acquired 15.65% of this Spanish company, which aims to provide a leading tool for obtaining metrics on the driving of vehicles.
    - ***Sorbwater Technology***: In May, it acquired 11.29% of this Norwegian company, whose technology is based on the elimination of crude oil from water, forming part of the treatment of any type of waste water.
- On July 25, **Standard & Poor's (S&P)**, the credit rating agency, **changed the outlook** for Repsol's long-term debt, rated BBB-, from "stable" to "positive".

6. RISKS

6.1. RISK FACTORS

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

The risks facing the Group in the second half of 2017 are detailed in the Management Report which accompanied the 2016 Consolidated Financial Statements. Hence, the information contained here should be read in conjunction with the description of the risk factors included in the 2016 Consolidated Management Report, together with Notes 16 "*Management of financial and capital risks*" and 22 "*Impairment of assets*" in the Consolidated Financial Statements for that year.

Below we summarize the risks that existed at December 31, 2016 and will remain in the second half of 2017, together with any new risk factor identified in the first half of 2017.

Strategic and operational risks

Uncertainty in the current economic context

In the current context of consolidating global growth, the short-term risks to financial stability have reduced considerably, but new risks have acquired importance, some in the longer term.

Thus, while some of the risks that have figured in recent years, such as deflation risk, have diminished, the change taking place in the political situations of some developed economies raises new questions. The UK vote in favor of leaving the European Union (Brexit) and Mr. Trump's victory reflect an increased polarization of society and the status quo in public policy over the last 30 years, particularly the consensus regarding the benefits of globalization and greater international integration, is being called into question. A possible swing towards protectionism in the advanced economies would reduce world growth by curbing international trade and cross-border investment flows. In any case, the election results in The Netherlands and France have slowed the anti-EU movement and reduced political risk in the eurozone.

However, major uncertainties, arising from the difficulties in managing various economic transitions that are taking place simultaneously, continue to hang over the global economy. The most important of these is the need for China to move to a new development model, which cannot proceed in as orderly a fashion as the authorities would like, especially given the country's high levels of indebtedness. Secondly, the normalization of monetary policy in the US, which has included unconventional policies for the first time. The third transition is the adjustment of the commodities cycle.

Beyond the economic risks, the threat of terrorist acts and geopolitical conflicts may create instability in the markets. The investigations into the Trump administration's connections to Russia threaten to become another destabilizing factor in the markets. In addition, tensions have increased around the Korean peninsula, and diplomatic relations between Saudi Arabia and Qatar have soured. At the same time, major social and political tensions persist in Venezuela, while in Brazil the reform timetable may be hindered by a possible corruption case affecting President Temer.

With regard to oil prices, the oversupply of the market, which has depressed prices since the second half of 2014, has reduced considerably and, according to the International Energy Agency (IEA), is likely to disappear in the second half of 2017; this points to a sustained fall in inventories during the rest of the year.

The uncertainty to this scenario arise from three factors. First, the health of demand; second, compliance with the production cuts; and third, the recovery in US supply. With regard to demand, both the economic trend and outlook and the leading indicators for consumption point to relatively healthy growth, with a

low risk of deterioration in the current outlook. The second source of uncertainty regarding the balance forecast by the IEA has to do with compliance with the production cuts. Up to May, the average compliance by the OPEC countries subject to cuts was 96%, much better than the historic average of 75-80%. It is difficult to envisage a scenario in which this compliance deteriorates significantly, mainly because the restriction of production is expected to lead to increased income. If this does not occur, they run the risk of prolonging the delicate economic situation and deepening social unease and political instability. Lastly, the point of greatest uncertainty in the global equilibrium is the recovery in the supply of US unconventional (shale) oil, which has shown unexpected strength in the current price environment.

Climate change

Repsol is exposed to possible changes in the regulatory framework for greenhouse gas emissions arising from either our industrial operations or the use of our products.

Repsol's assets are subject to risks arising from physical changes caused by climate change, such as rising sea levels, changes in precipitation patterns, changes in extreme temperatures or droughts, or even a more frequent occurrence of extreme meteorological phenomena (cyclones, hurricanes, etc.).

Further, a change in consumers' behavior in favor of less carbon-intensive products could also affect Repsol's competitiveness if it fails to adapt to these changes. Repsol, and the oil industry, are exposed to adverse currents of opinion that may affect the share price.

Fluctuations in international prices of crude and related products and in demand, owing to factors beyond Repsol's control

World oil prices have fluctuated widely in recent years, as well as being affected by international supply and demand factors over which Repsol has no control.

The international prices of products are influenced by the price of crude oil and by demand for such products. Also, international prices of crude oil and of products impact the refining margin. International oil prices and demand for crude oil may also fluctuate significantly during economic cycles.

Reductions in oil prices adversely affect the profitability of Repsol’s activity, the value of its assets and its plans for investment, which may be altered as a result of delays, renegotiation or cancellation of projects. Similarly, a significant drop in capital investment could negatively affect Repsol’s ability to replace its crude oil reserves.

Regulatory and tax framework of Repsol's operations

The oil industry is subject to extensive regulation and intervention by governments in upstream activities, in issues such as the award of exploration and production permits, the imposition of contractual obligations regarding drilling and exploration, restrictions on production, price controls, divestments of assets, foreign currency controls, and the nationalization, expropriation or cancellation of contractual rights.

Likewise, *downstream* activities (oil refining and petrochemicals), in general, are subject to extensive government regulation and intervention in matters such as safety and environmental controls.

Also, the energy sector, particularly the oil industry, is subject to a unique tax framework. In *upstream* activities there are often energy taxes on profit and production, while in downstream activities, taxes on consumption products are common.

Repsol is subject to extensive environmental and safety legislation and risks

Repsol is subject to a wide variety of environmental and safety legislation and regulations in every country where it operates. These regulations govern, among other matters, Repsol's operations, environmental quality standards for products, air emissions and climate change, energy efficiency, extractive technologies, water discharges, remediation of soil and groundwater and the generation, storage, transport, treatment and final disposal of waste materials and the safety thereof.

Lastly, following the acquisition of Repsol Oil & Gas Canada Inc., the Company increased its activity in non-conventional hydrocarbons. From an environmental and social standpoint, concern over the impact of exploring for and producing this type of resources could prompt governments and authorities to approve new regulations or impose new requirements on their development. If they do, it could have an adverse impact on the Company.

Operating risks of Repsol's activities

Hydrocarbon exploration and exploitation (Upstream): reliance on the cost-effective acquisition or discovery of, and, thereafter, development of, new oil and gas reserves

Oil and gas exploration and production activities are subject to particular risks, many of which are beyond the control of Repsol. These activities are exposed to production, equipment and transportation risks, errors or inefficiencies in operations' management and purchasing processes, natural hazards and other uncertainties relating to the physical characteristics of oil and natural gas fields and their dismantling.

Furthermore, exploration projects are complex in terms of their scale and are susceptible to delays in execution and cost overruns with respect to initially-approved budgets. In addition, some of the development projects are located in deep waters, mature areas and other difficult environments, such as the Gulf of Mexico, Alaska, the North Sea, Brazil and the Amazon rainforest, or in complex oilfields that could aggravate these risks further. Furthermore, all hydrocarbon transport methods imply inherent risks: during transport by road, rail, sea or through pipelines, spills of hydrocarbons or other hazardous substances may occur.

Moreover, Repsol must replace depleted oil and gas reserves with new proven reserves in a cost-effective manner for subsequent production to be economically viable.

Industrial businesses and marketing of oil products (Downstream)

Refining, Chemical, Trading, production, and distribution activities related to oil derivative products and LPG are exposed to the risk inherent to their activities, and are related to the products' specific characteristics (flammability and toxicity), their use (including that of clients), emissions resulting from the production process (such as greenhouse gas effects), as well as the materials and waste used (dangerous waste, as well as water and energy management), which might impact health, safety, and the environment. Repsol's industrial assets (refineries, regasification plants, warehouses, ports, pipelines, ships, tanker trucks, gas stations, etc.) are exposed to accidents such as fire, explosions, leaks of toxic products, as well as large-scale contaminating environmental incidents. Such accidents may cause death and injury to employees, contractors, residents in surrounding areas, as well as damage to the assets and property owned by Repsol as well as third parties.

On the other hand, industrial and marketing activities take place in a highly competitive environment.

Location of reserves

Part of Repsol's oil and gas reserves are located in countries that are or could be economically or politically unstable.

Estimations of oil and gas reserves

To estimate proven and unproven reserves and oil and gas resources, Repsol uses the criteria established by the SPE/WPC/AAPG/SPEE *Petroleum Resources Management System*, commonly referred to by its acronym SPE-PRMS (SPE standing for *Society of Petroleum Engineers*).

Measurements of reserves are not precise and are subject to revision. The estimate of proven and unproven reserves of oil and gas will also be subject to correction due to errors in the application of published standards and changes in such standards.

Projects and operations in joint ventures and partnerships

Many of the Repsol Group's projects and operations are conducted through joint ventures and partnerships. In those cases where Repsol does not act as the operator, its ability to control and influence the performance and management of the operations, and to identify and manage risks, is limited.

Additionally, there is a possibility that one of Repsol's partners or another member in a joint venture or associated company fails to comply with its financial obligations, or incurs in another breach that could affect a project's viability.

Acquisition, investments and disposals

As part of Repsol’s strategy, the company may engage in acquisitions, investments and disposals of ownership interests. Acquisitions and investments involve a number of risks, including possible adverse effects on Repsol’s operating income, risks associated with unanticipated events or liabilities relating to the acquired assets or businesses which may not have been disclosed during due diligence investigations, difficulties in the assimilation of the operations, technologies, systems, services and products acquired, and risks arising from provisions in contracts that are triggered by a change of control in an acquired company.

Any failure to successfully integrate such acquisitions could have a material adverse effect upon Repsol's business, results of operations or financial position. Any disposal of an ownership interest may also adversely affect Repsol’s financial position, if such disposal results in a loss.

On May 8, 2015, Repsol completed the acquisition of 100% in ROGCI, a Canadian company devoted to oil and gas exploration and production activities. As in any business combination, Repsol's ability to reap the strategic benefits expected from the acquisition will depend on its ability to integrate equipment, processes and procedures, and to maintain existing relationships with its customers and partners.

Repsol’s current insurance coverage may not be sufficient for all the operational risks

Repsol holds insurance coverage against certain risks inherent to the oil and gas industry, in line with industry practice. Insurance coverage is subject to deductibles and limits that, in certain cases, may be significantly lower than its losses and/or liabilities. In addition, Repsol’s insurance policies contain exclusions that could leave the Group with limited coverage in certain circumstances, or indemnities may not be totally or partially collectible in case of insolvency of the insurers. Furthermore, Repsol may not be able to maintain adequate insurance at rates or on terms considered reasonable or acceptable, or be able to obtain insurance against certain risks that could materialize in the future. If the company experiences an

incident against which it is not insured, or the costs of which materially exceed its coverage, it could have a material adverse effect on its business, financial position and results of operations.

Repsol's natural gas operations are subject to particular operational and market risks

Natural gas prices tend to vary between the different regions in which Repsol operates, as a result of significantly different supply, demand and regulatory circumstances, and such prices may be lower than prevailing prices in other regions of the world.

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

Repsol also has long-term contracts to sell gas to customers and, if there should prove to be insufficient reserves in the countries to whose reserves the contracts are linked, Repsol might not be able to satisfy these obligations; some of these contracts include penalty clauses for breach of contract.

Cyclical nature of petrochemical activity

The petrochemicals industry is subject to wide fluctuations in supply and demand, arising from the various economic factors which are responsible for the cyclical nature of the petrochemicals market on a regional and global scale.

Repsol Group's strategy requires efficiency and innovation in a highly competitive market

The oil, gas and petrochemical industry operates in the context of a highly competitive energy sector. This competition influences the conditions for accessing markets or following new business leads, the costs of licenses and the pricing and marketing of products.

The implementation of the Group's strategy requires a significant ability to anticipate and adapt to the market and continuous investment in technological advances and innovation.

The Repsol Group is subject to the effects of administrative, judicial and arbitration proceedings

The Repsol Group is subject to the effects of administrative, judicial and arbitration proceedings that may arise from the performance of its activities. Likewise, Repsol could be involved in other potential future litigation, the scope, content or outcome of which Repsol cannot predict. Any present or future litigation involves a high degree of uncertainty and, therefore, the resolution of these disputes could affect the businesses, results or financial position of the Repsol Group.

Information technology and its reliability and robustness are a key factor in maintaining our operations

The reliability and security of the Group's information technology (IT) systems are critical to maintaining the availability of its business processes and the confidentiality and integrity of the data owned by the company and by third parties. Given that cyber-attacks are constantly increasing, the Repsol Group cannot guarantee that it will not suffer financial and/or material losses in the future as a result of such attacks.

Misconduct or violations of applicable legislation by our employees can damage the reputation of the Repsol Group

The Company's diverse compliance and control models include controls designed to detect and mitigate significant incidents of non-compliance. Management misconduct or breach of any applicable legislation could cause harm to the Company's reputation, in addition to incurring sanctions and legal liability.

Repsol is exposed to negative opinion trends which could have an adverse impact on its image and reputation, thereby affecting its business opportunities

The company carries on its operations in multiple environments with diverse stakeholders, which are mainly local communities in the areas of influence of its operations, as well as local and national civil, political, labor, and consumer organizations, among others.

Should the interests of the above groups be contrary to the Group's activities, and attempts to reach agreements be unsuccessful, Repsol could be affected by the publication of biased or manipulated information that generates opinion contrary to the company's activities.

Financial risks

Repsol has a risk management structure and systems that enable it to identify, measure and control the financial risks to which the Group is exposed. The main financial risks are described below:

Liquidity risk

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

Credit risk

Credit risk is defined as the possibility of a third party not complying with its contractual obligations, thus creating losses for the Group.

The Group's credit risk exposure mainly relates to trade accounts payable, which are measured and controlled by individual client or third party. The Group also has exposure to counterparty risk arising from non-trade contractual operations that may lead to defaults. In these cases, the Group also analyzes the solvency of counterparties with which it maintains or could maintain non-trade contractual relations.

Credit rating risk

Credit ratings affect the cost and other conditions under which the Repsol Group is able to obtain finance. Any downgrade in Repsol S.A.'s credit rating could restrict or limit the Group's access to financial markets, increase the cost of any new finance, and have a negative effect on its liquidity. See credit rating table in section 3.2 "*Credit rating*" in this document.

Market risks

***Exchange rate fluctuation risk*: ** Repsol is exposed to exchange rate risk because the revenues and cash flows generated by oil, natural gas, and refined product sales are generally denominated in dollars or otherwise affected by dollar exchange rates. Operating income is also exposed to fluctuations in currency exchange rates in the countries where Repsol conducts its activities. Repsol is also exposed to exchange rate risk in relation to the value of its financial assets and investments.

Commodity price risk**:** As a result of its trading operations and activities, the Repsol Group's results are exposed to volatility in the prices of oil, natural gas and their derivative products.

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

6.2. RISK MANAGEMENT

During the first half of 2017, Repsol published a **revised version of the Group's Risk Management Policy**. The main change consists of a general declaration of risk tolerance, which establishes the principle that the company aspires to the maintenance of a risk profile aligned with a medium-low risk tolerance, appropriate to the business model of an integrated global energy company, present throughout the value chain and carrying on its activities in a diversified manner.

It also differentiates between those risks that the company wishes to maintain within its tolerance thresholds and targets, which are the majority of strategic, operational and financial risks typical of its activity, and those others that the Group wishes to avoid, transfer and/or mitigate, in any case minimizing by all means their probability of occurring and/or the associated impact, by means of the necessary procedures, resources and tools put in place for that purpose; the latter are health, safety, environmental, security, ethical and conduct, compliance (including tax), and reputation and image risks.

ABOUT THIS REPORT

This report should be read in conjunction with the Repsol Group's Interim Condensed Consolidated Financial Statements corresponding to the first half of 2017. Readers should bear in mind that the forward-looking information contained in the various sections of this document reflect the plans, forecasts and estimates of the Group's managers; these are based on assumptions that are considered reasonable, but cannot be considered to guarantee the company's future performance, inasmuch as such plans, forecasts and estimates are subject to numerous risks and uncertainties and do not imply that the Group's future development will coincide with that initially forecast. The main risks and uncertainties are described in section 6.1 "*Risk Factors*."

For the preparation of this report, consideration was given to the recommendations contained in the "*Guidelines for the preparation of listed company Management Reports*" of the National Security Markets Commission (Comisión Nacional del Mercado de Valores – CNMV), published in 2013.

APPENDIX I: ALTERNATIVE PERFORMANCE MEASURES

Repsol's financial information contains indicators and measures prepared in accordance with applicable financial information regulations, as well as other measures prepared in accordance with the Group's Reporting Model[1], defined as Alternative Performance Measures (APMs). APMs are measures which are "*adjusted*" compared to those presented as IFRS-EU or with Supplementary Information on Oil and Gas Exploration and Production Activities[2], and the reader should therefore consider them in addition to, but not instead of, the latter.

APMs are highly useful for users of financial information as they are the measures employed by Repsol's management to evaluate its financial performance, cash flows, or its financial position when making operational or strategic decisions for the Group.

For further information, see https://www.repsol.es

1. Financial performance measures

Adjusted net income

Adjusted net income is the key financial performance measure which management (the E&P Corporate Executive Committee and *Downstream* Executive Committee) consults when making decisions in accordance with IFRS 8 "*Operating segments*".

Repsol presents its segment results, including joint ventures or other companies which are jointly managed[3], in accordance with the Group's investment percentage, considering its operational and economic indicators within the same perspective and degree of detail as those for companies consolidated under the full consolidation method. Thus, the Group considers that the nature of its businesses and the way in which results are analyzed for decision-making purposes are adequately reflected.

Adjusted net income is calculated as the **Result from continuing operations at Current Cost of Supply (CCS[4])** net of taxes and minority interests. It does not include certain income and costs (***Special items***), or the ***Inventory effect***. **Finance results** is allocated to the Adjusted Net Income/Loss in "*Corporation and others*".

Adjusted net income is a useful APM for investors when evaluating the performance of operating segments while permitting increased comparability with *Oil & Gas* sector companies using different inventory measurement methods (see the following section).

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[1] See Note 2.6 "*Information by segment*" in the Interim Condensed Consolidated Financial Statements for the first half of 2017.

[2] The Hydrocarbon Exploration and Production information, which is compiled and disclosed by the Group annually, is prepared in accordance with the principles generally accepted in the oil and gas industry and, specifically, is based on the disclosure criteria outlined in *Topic 932* issued by the *Financial Accounting Standards Board* (FASB).

[3] See Note 4.2 "*Investments accounted for using the equity method*" and Appendix I of the Interim Financial Statements for the first half of 2017, which identify the Group's main joint ventures.

[4] The Current Cost of Supply (CCS) is commonly used in this industry to present the results of Downstream businesses which must work with huge inventories subject to continual price fluctuations is not a commonly-accepted European accounting regulation, yet does enable the comparability with other sector companies as well as monitoring businesses independently of the impact of price variations on their inventories. Due to the above, the Adjusted Net Income does not include the Inventory Effect.

Inventory Effect

This is the difference between the **Result from continuing operations at Current Cost of Supply (CCS)** and the result calculated as the *Average Weighted Cost* (AWC, which is an inventory valuation method used by the Company to determine its results in accordance with European accounting regulations). It only affects the *Downstream* segment, meaning that for the **Result from continuing operations at Current Cost of Supply**, the cost of volume sold during the period is determined in accordance with supply costs, and production during the year. Apart from the above effect, the ***Inventory Effect*** includes other adjustments to the valuation of inventories (write-offs, economic hedges) and is presented net of taxes and minority interests. Repsol Management considers that this measure is useful for investors, in view of the significant variations arising in the prices of inventory between periods.

AWC is a generally-accepted European accounting method which measures inventories, in that it contemplates purchase prices and historic production costs, valuing inventory at the lower of said cost and its market value.

Special Items

These are significant items which it is considered useful to present separately, in order to facilitate the monitoring of the ordinary management of business operations. It includes capital gains/losses arising from divestitures, restructuring costs, impairments, and provisions for risks and expenses. Special items are presented net of taxes and minority interests. Section 4.1 "*Results and cash flow*" includes the Special Items for the first half of 2017 and 2016. We present below the Special Items for the second quarter of 2016 and 2017.

	Second quarter							
	Upstream		**Downstream**		**Corporation**		**TOTAL**	
€ Million	**Q2 2017**	**Q2 2016**	**Q2 2017**	**Q2 2016**	**Q2 2017**	**Q2 2016**	**Q2 2017**	**Q2 2016**
Divestments	3	(10)	1	201	1	-	5	191
Workforce restructuring charges	(9)	(37)	(4)	(129)	(21)	(150)	(34)	(316)
Impairment	2	(9)	-	-	-	-	2	(9)
Provisions and other	57	(116)	6	(12)	(21)	(37)	42	(165)
TOTAL	**53**	**(172)**	**3**	**60**	**(41)**	**(187)**	**15**	**(299)**

The following is a reconciliation of the Adjusted Income under the Group's reporting model to the Income prepared according to IFRS-EU:

	First half											
			ADJUSTMENTS									
	Adjusted Result		Joint Ventures Reclassifications		Special Items		Inventory Effect [2]		Total Adjustments		Profit/loss under EU-IFRS	
€ Million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Operating income	1,613[1]	997[1]	(221)	(108)	(49)	(219)	(86)	8	(356)	(319)	1,257	678
Financial result	(229)	(262)	39	84	5	(18)	-	-	44	66	(185)	(196)
Share of results of companies accounted using the equity method – net of taxes	135	206	88	6	-	-	-	-	88	6	223	212
Net income before tax	**1,519**	**941**	**(94)**	**(18)**	**(44)**	**(237)**	**(86)**	**8**	**(224)**	**(247)**	**1,295**	**694**
Income tax	(376)	(4)	94	18	34	(45)	22	(3)	150	(30)	(226)	(34)
Net income from continuing operations	**1,143**	**937**	**-**	**-**	**(10)**	**(282)**	**(64)**	**5**	**(74)**	**(277)**	**1,069**	**660**
Income attributed to minority interests	(17)	(20)	-	-	-	2	4	(3)	4	(1)	(13)	(21)
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY	**1,126**	**917**	**-**	**-**	**(10)**	**(280)**	**(60)**	**2**	**(70)**	**(278)**	**1,056**	**639**

(1) Result from continuing operations at current cost of supply (CCS).

(2) The Inventory Effect represents an adjustment to "*Consumption of raw materials and other consumables*" and "*Changes in inventory of finished goods and work in progress*" on the income statement under EU-IFRS.

	Second quarter											
			ADJUSTMENTS									
	Adjusted Result		Joint Ventures Reclassifications		Special Items		Inventory Effect [2]		Total Adjustments		Profit/loss under EU-IFRS	
€ Million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Operating income	671[1]	437[1]	(96)	(83)	37	(241)	(199)	223	(258)	(101)	413	336
Financial result	(74)	(185)	8	87	1	(40)	-	-	9	47	(65)	(138)
Share of results of companies accounted using the equity method – net of taxes	62	95	21	(42)	-	-	-	-	21	(42)	83	53
Net income before tax	**659**	**347**	**(67)**	**(38)**	**38**	**(281)**	**(199)**	**223**	**(228)**	**(96)**	**431**	**251**
Income tax	(154)	6	67	38	(23)	(20)	50	(56)	94	(38)	(60)	(32)
Net income from continuing operations	**505**	**353**	**-**	**-**	**15**	**(301)**	**(149)**	**167**	**(134)**	**(134)**	**371**	**219**
Income attributed to minority interests	(9)	(8)	**-**	-	-	2	5	(8)	5	(6)	(4)	(14)
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY	**496**	**345**	**-**	**-**	**15**	**(299)**	**(144)**	**159**	**(129)**	**(140)**	**367**	**205**

(1) Result from continuing operations at current cost of supply (CCS).

(2) The Inventory Effect represents an adjustment to "*Consumption of raw materials and other consumables*" and "*Changes in inventory of finished goods and work in progress*" on the income statement under EU-IFRS.

EBITDA:

EBITDA *("Earnings Before Interest, Taxes, Depreciation, and Amortization"*) is a financial indicator which determines the operating margin of a company prior to deducting interest, taxes, impairments, restructuring costs, and amortization. Since it does not include financial and tax indicators or accounting expenses not involving cash outflow, it is used by Management to evaluate the Company's results over time, thereby making comparisons with other Oil & Gas sector companies a more straightforward exercise.

EBITDA is calculated as Operating Income + Amortization + Impairments + Restructuring costs as well as other items which do not represent cash entry or outflows from transactions (capital gains/losses from divestitures, provisions, etc.). Operating income corresponds to the Result from continuing operations at Average Weighted Costs (AWC). In cases in which the **Result from continuing operations at Current Cost of Supply** (CCS) is used, it is called ***EBITDA CCS.***

	First half							
	Group Reporting Model		**Joint ventures Reclassifications and Others**		**Inventory Effect**		**Cash Flow Statement EU-IFRS** (1)	
	2017	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Upstream	1,666	933	(642)	(420)	-	-	1,024	513
Downstream	1,518	1,585	(5)	(4)	-	-	1,513	1,581
Corporation and others	(76)	(101)	-	3	-	-	(76)	(98)
EBITDA	**3,108**	**2,417**	**(647)**	**(421)**	**-**	**-**	**2,461**	**1,996**
EBITDA CCS	**3,194**	**2,409**	**(647)**	**(421)**	**(86)**	**8**	**2,461**	**1,996**

	Second quarter							
	Group Reporting Model		**Joint ventures Reclassifications and Others**		**Inventory Effect**		**Cash Flow Statement EU-IFRS** (1)	
	2017	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Upstream	745	529	(251)	(238)	-	-	494	291
Downstream	557	914	(3)	(3)	-	-	554	911
Corporation and others	(38)	(53)	(8)	7	-	-	(46)	(46)
EBITDA	**1,264**	**1,390**	**(262)**	**(234)**	**-**	**-**	**1,002**	**1,156**
EBITDA CCS	**1,463**	**1,167**	**(262)**	**(234)**	**(199)**	**223**	**1,002**	**1,156**

(1) Corresponds to "*Net income before tax*" and "*Result adjustments*" on the Consolidated Cash Flow Statement prepared under EU-IFRS.

ROACE:

This APM is used by Repsol Management to evaluate the capacity of its operating assets to generate profit, and therefore measures invested capital (equity and debt).

The **ROACE** ("*Return on average capital employed*") is calculated as: (operating results adjusted for joint ventures outcomes excluding "***Special Items***" + Income taxes + Recurrent results from investees) / (Capital employed during the continuing operations period). **Capital employed** measures own and external capital invested in the company, and corresponds to Total Equity + ***Net debt***. It includes that which corresponds to joint ventures or other companies whose operations are generated as such.

	1H 17		**1H 16**	
NUMERATOR (*€Million*)				
Operating income EU-IFRS	**1,257**		**678**	
Joint Ventures Reclassification	221		108	
Special Items	49		219	
Income tax [(1)]	(420)		(108)	
Share of results of companies accounted for using the equity method - net of taxes	135		206	
I. ROACE result at average weighted cost	**1,242**	**2,486** [(2)]	**1,103**	**2,142** [(2)]
DENOMINATOR (*€Million*)				
Total equity		30,183		28,822
Net financial debt		7,477		11,709
Capital employed at year end		**37,660**		**40,531**
II. Average capital employed [(3)]		**38,458**		**40,617**
ROACE (I/II)		**6.5**		**5.3**

(1) Does not include income tax on profits corresponding to financial results.
(2) Figure annualized by extrapolating data for the year.
(3) Corresponds to the average balance of capital employed at the beginning and end of the year.

2. Cash flow measures

Free Cash Flow, Cash Generated and Liquidity:

The two main measures used by the Group's Management to evaluate the generation of cash flow in the period are ***Free cash flow*** and ***Cash generated***.

Free Cash Flow measures cash flow generation from operating and investment activities, and is used for evaluating the funds available for paying shareholder dividends, and debt service payments.

Cash flow generated corresponds to ***Free cash flow*** after deducting all payments for dividends, remuneration of other equity instruments such as net interest and payments for leasing and treasury shared. This APM measures the funds generated by the Company before financial transactions (mainly debt issuance and repayments).

The following is a reconciliation of ***Free Cash Flow*** and ***Cash Generated*** with the Consolidated Cash Flow Statements prepared under EU-IFRS:

	First half					
	Adjusted Cash Flow		**Joint Ventures Reclassifications and Others**		**Cash Flow Statement EU-IFRS**	
	2017	**2016**	**2017**	**2016**	**2017**	**2016**
I. Cash flows from / (used in) operating activities	2,175	1,772	(93)	(171)	2,082	1,601
II. Cash flows from / (used in) investing activities	(1,232)	(997)	114	255	(1,118)	(742)
Free cash flow (I+II)	**943**	**775**	**21**	**84**	**964**	**859**
Cash generated	**272**	**57**	**25**	**86**	**297**	**143**
III. Cash flows from / (used in) financing activities and others [1]	(919)	(1,099)	(15)	17	(934)	(1,082)
Net increase / (decrease) in cash and cash equivalents (I+II+III)	**24**	**(324)**	**6**	**101**	**30**	**(223)**
Cash and cash equivalents at the beginning of the period	4,918	2,769	(231)	(321)	4,687	2,448
Cash and cash equivalents at the end of the period	4,942	2,445	(225)	(220)	4,717	2,225

[1] Includes payments for dividends and payments on other equity instruments, interest payments, other proceeds from/ (payments for) financing activities, proceeds from / (payments for) equity instruments , proceeds from / (payments for) financial liabilities and the exchange rate fluctuations effect.

	Second quarter					
	Adjusted Cash Flow		**Joint Ventures Reclassifications and Others**		**Cash Flow Statement EU-IFRS**	
	2017	**2016**	**2017**	**2016**	**2017**	**2016**
I. Cash flows from / (used in) operating activities	1,458	829	(55)	(130)	1,403	699
II. Cash flows from / (used in) investing activities	(635)	(255)	57	128	(578)	(127)
Free cash flow (I+II)	**823**	**574**	**2**	**(2)**	**825**	**572**
Cash generated	**688**	**421**	**5**	**-**	**693**	**421**
III. Cash flows from / (used in) financing activities and others [1]	154	(894)	16	39	170	(855)
Net increase / (decrease) in cash and cash equivalents (I+II+III)	**977**	**(320)**	**18**	**37**	**995**	**(283)**
Cash and cash equivalents at the beginning of the period	3,965	2,765	(243)	(257)	3,722	2,508
Cash and cash equivalents at the end of the period	4,942	2,445	(225)	(220)	4,717	2,225

[1] Includes payments for dividends and payments on other equity instruments, interest payments, other proceeds from/ (payments for) financing activities, proceeds from / (payments for) equity instruments , proceeds from / (payments for) financial liabilities and the exchange rate fluctuations effect.

The Group measures ***Liquidity*** as the total of "*Cash and cash equivalents*" and undrawn long- and short-term committed credit lines at year end; these correspond to facilities granted by financial institutions which may be drawn down by the company in installments, the amount, and the remaining terms of the agreement.

	First half					
	Group Reporting Model		Joint Ventures Reclassifications and Others (1)		EU-IFRS	
	Jun-17	Dec-16	Jun-17	Dec-16	Jun-17	Dec-16
Cash and Cash equivalents	4,942	4,918	(225)	(231)	4,717	4,687
Undrawn credit lines	2,814	4,429	-	-	2,814	4,429
Liquidity	**7,756**	**9,347**	**(225)**	**(231)**	**7,531**	**9,116**

Net Operating Investments:

Group management uses this APM to measure each period's investment effort, as well as its allocation by businesses segment, and corresponds to investments, net of divestments, in the exploitation of resources made by different Group businesses. It includes those which correspond to joint ventures or other companies whose operations are managed as such.

	First half					
	Net Operating Investments		Joint Ventures Reclassifications and Others		Cash flow statement EU-IFRS [(1)]	
	2017	2016	2017	2016	2017	2016
Upstream	921	1,281	(183)	(376)	738	905
Downstream	245	(258)	-	(1)	245	(259)
Corporation and others	8	15	8	(20)	16	(5)
TOTAL	**1,174**[(2)]	**1,038**	**(175)**	**(397)**	**999**	**641**

	Second quarter					
	Net Operating Investments		Joint Ventures Reclassifications and Others		Cash flow statement EU-IFRS[(1)]	
	2017	2016	2017	2016	2017	2016
Upstream	466	643	(82)	(198)	384	445
Downstream	154	(344)	-	1	154	(343)
Corporation and others	10	30	7	(11)	17	19
TOTAL	**630**[(2)]	**329**	**(75)**	**(208)**	**555**	**121**

(1) This corresponds to "*Proceeds from divestments*" and "*Payments on investments*" on the Consolidated Cash Flow Statement of cash flows prepared under EU-IFRS, and does not include items corresponding to "*Other financial assets*."
(2) Gross Operating Investments in the first half and second quarter of 2017 amounted to 1,201and 664 million euros respectively.

3. Financial position indicators

Debt and financial position ratios

Net Debt is the main APM used by Management to measure the Company's level of debt. It is comprised of financial liabilities less financial assets, cash and cash equivalents, and the effect arising from the net market valuation of financial derivatives (excluding those on exchange rates). It also includes the net debt corresponding to joint ventures and other companies operationally managed as such.

	Net Debt			Reclassifications Joint Ventures (1)			Figure according to EU-IFRS balance sheet		
	Jun-17	**Dec-16**	**Jun-16**	**Jun-17**	**Dec-16**	**Jun-16**	**Jun-17**	**Dec-16**	**Jun-16**
Non-current assets									
Non-current financial instruments [2]	379	424	98	692	657	609	1,071	1,081	707
Current assets									
Other current financial assets	44	52	30	1,187	1,228	1,231	1,231	1,280	1,261
Cash and Cash equivalents	4,942	4,918	2,447	(225)	(231)	(222)	4,717	4,687	2,225
Non-current liabilities[3]									
Non-current financial debt	(8,831)	(9,540)	(10,688)	192	58	54	(8,639)	(9,482)	(10,634)
Non-current liabilities[3]									
Current financial liabilities	(4,090)	(4,085)	(3,719)	(2,719)	(2,824)	(2,707)	(6,809)	(6,909)	(6,426)
Items not included on the balance sheet									
Net mark to market valuation of financial derivatives (excl. exchange rate)[4]	79	87	123	-	-	-	79	87	123
NET DEBT	**(7,477)**	**(8,144)**	**(11,709)**				**(8,350)**	**(9,256)**	**(12,744)**

[1] Mainly includes the net financing of the Repsol Sinopec Brasil Group, broken down in the following sections:
June 2016: (cash and cash equivalents of 16 million euros and current financial liabilities as a result of an intra-group loan of 2,780 million euros, less a 366 million euros third-party loan).
December 2016: (Cash and cash equivalents of 43 million euros and current financial liabilities as a result of an intra-group loan of 2,942 million euros, less 344 million euros in third-party loans)
June 2017: (Cash and cash equivalents of 17 million euros and current financial liabilities as a result of an intra-group loan of 2,724 million euros, less 368 million euros in third-party loans).

[2] Corresponds to the Consolidated Balance Sheet heading, "*Non-current financial assets*" (but does not include available-for-sale financial assets).

[3] Does not include finance lease obligations.

[4] The net mark to market value of financial derivatives other than exchange rate derivatives has been eliminated from this section.

Gross Debt is a measure used to analyze the Group's solvency; it includes its financial liabilities and the net fair value of its exchange rate derivatives.

	Gross Debt			Joint Ventures Reclassifications and Others (1)			Figure according to EU-IFRS Balance Sheet		
	Jun-17	Dec-16	Jun-16	Jun-17	Dec-16	Jun-16	Jun-17	Dec-16	Jun-16
Current financial liabilities	(4,059)	(4,061)	(3,675)	(2,719)	(2,824)	(2,708)	(6,778)	(6,885)	(6,383)
Net market valuation of exchange rate derivatives	1	7	(22)	-	-	-	1	7	(22)
Current gross debt	**(4,058)**	**(4,054)**	**(3,697)**	**(2,719)**	**(2,824)**	**(2,708)**	**(6,777)**	**(6,878)**	**(6,405)**
Non-current financial liabilities	(8,752)	(9,452)	(10,567)	192	57	55	(8,560)	(9,395)	(10,512)
Non-current gross debt	**(8,752)**	**(9,452)**	**(10,567)**	**192**	**57**	**55**	**(8,560)**	**(9,395)**	**(10,512)**
TOTAL GROSS DEBT	**(12,810)**	**(13,506)**	**(14,264)**	**(2,527)**	**(2,767)**	**(2,653)**	**(15,337)**	**(16,273)**	**(16,917)**

The following ratios are based on Debt and are used by Group Management to evaluate leverage ratios as well as Group solvency.

*The **Leverage Ratio*** corresponds to ***Net Debt*** divided by ***Capital employed*** at year end. This ratio can be used to determine the financial structure and degree of indebtedness with regard to capital contributed by shareholders and entities which provide financing. It is the chief measure used to evaluate and compare the Company's financial position with others in the Oil & Gas sector.

Debt coverage corresponds to ***Net debt*** divided by ***EBITDA*** and makes it possible to evaluate the company's capacity for repaying external financing over a number of years (x times), as well as to compare it to similar companies in the sector.

The ***Solvency Ratio*** is calculated as ***Liquidity*** (section 2 of this Appendix) divided by ***Current Gross Debt***, and is used to determine the number of times the Group may meet its current debt maturities using its existing liquidity.

Interest coverage is calculated as ***debt interest*** (which comprises finance income and expense) divided by ***EBITDA***. This ratio is a measurement that determines the company's ability to cover interest payments with its **EBITDA**.

	First half					
	Group Reporting Model		Reclassif. Joint Ventures		Figure according to EU-IFRS Balance Sheet	
€ Millions	2017	2016	2017	2016	2017	2016
Interest	183	224	(34)	(35)	149	189
EBITDA	3,108	2,417	(647)	(421)	2,461	1,996
Interest cover	**5.9%**	**9.3%**			**6.1%**	**9.5%**

	Second quarter					
	Group Reporting Model		Reclassif. Joint Ventures		Figure according to EU-IFRS Balance Sheet	
€ Millions	2017	2016	2017	2016	2017	2016
Interest	89	109	(16)	(18)	73	91
EBITDA	1,264	1,390	(262)	(234)	1,002	1,156
Interest cover	**7.0%**	**7.8%**			**7.2%**	**7.9%**

APPENDIX II: TABLE OF CONVERSIONS AND ABBREVIATIONS

			OIL				GAS		ELECTRICITY
			Liters	**Barrels**	**Cubic meters**	**toe**	**Cubic meters**	**Cubic feet**	**kWh**
OIL	1 barrel [1]	bbl	158.99	1	0.16	0.14	162.60	5,615	$1.7x10^6$
	1 cubic meter [1]	m^3	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^3	0.98	0.01	0,001	0,001	1	35.32	10.35
	1,000 cubic feet=$1.04x10^6$ Btu	ft^3	27.64	0.18	0.03	0.02	28.3	1,000	293.1
ELECTRICITY	1 megawatt hour	MWh	93.53	0.59	0.10	0.08	96.62	3,412.14	1,000

[1] Benchmark average: 32.35° API and relative density of 0.8636.

			Meter	**Inch**	**Foot**	**Yard**
LENGTH	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

			Kilogram	**Pound**	**Ton**
MASS	Kilogram	kg	1	2.2046	0,001
	Pound	lb	0.45	1	0,00045
	Ton	t	1,000	2,2046	1

			Cubic feet	**Barrel**	**Liter**	**Cubic meter**
VOLUME	cubic foot	ft^3	1	0,1781	28.32	0,0283
	Barrel	bbl	5,615	1	158,984	0,1590
	Liter	l	0,0353	0,0063	1	0,001
	cubic meter	m^3	35,3147	6,2898	1,000	1

Term	Description	Term	Description	Term	Description
bbl / bbl/d	Barrel/ Barrel per day	**kbbl**	Thousand barrels of oil	**Mm^3/d**	Million cubic meters per day
bcf	Bcf Billion cubic feet	**kbbl/d**	Thousand barrels per day	**Mscf/d**	Million standard cubic feet per day
Bm3	Billion cubic meters	**kboe**	Thousand barrels of oil equivalent	**kscf/d**	Thousand standard cubic feet per day
boe	Barrel of oil equivalent	**kboe/d**	Thousand barrels of oil equivalent per day	**MW**	Million watts
Btu/MBtu	British thermal unit/ Btu/millions of Btu	**km^2**	Square kilometer	**MWh**	Megawatt hour
LPG	Liquefied petroleum gas	**kt/Mt**	Thousand tons/Million tons	**Tcf**	Trillion cubic feet
LNG	Liquid Natural Gas	**Mbbl**	Million barrels	**toe**	Tons of oil equivalent
GWh	Gigawatts per hour	**Mboe**	Million barrels of oil equivalent	**USD / Dollar / $**	US dollar