

REPSOL Group

2017 Integrated  
Management Report

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



## About this report

The 2017 **Management Report** of the Repsol Group<sup>1</sup> fulfills the obligation to prepare a statement of non-financial information mandated under Royal Decree-Law 18/2017<sup>2</sup>, including information necessary to understand the performance, results and position of the group, and the impact of its activity on environmental and social issues, as well as on workforce, on human rights and the fight against corruption and bribery.

In its commitment to transparency and efficiency, Repsol has prepared a report consisting of financial and non-financial information based on the recommendations contained in the “International Integrated Reporting Framework” of the International Integrated Reporting Council (IIRC), the “Guidelines for Preparation of the Listed Company Management Reports” of the Spanish National Securities Market Commission and the European Commission’s non-binding guidelines on the presentation of non-financial information. This “integrated” approach positions this report as a reference point for the Group’s financial and non-financial information.

The **financial information** presented in this document, unless expressly stated to the contrary, was prepared in accordance with the Group’s reporting model, which is described in Note 4 “Segment reporting” in the 2017 consolidated financial statements<sup>3</sup>. Some of the financial indicators and ratios are classified as Alternative Performance Metrics (APMs) in accordance with European Securities Markets Authority (ESMA) guidelines. Appendix I, “Alternative Performance Measures”, includes the reconciliation between the adjusted figures and those corresponding to IFRS-EU financial information.

The **non-financial information** corresponding to Sustainability indicators is presented in accordance with the Global Reporting Initiative (GRI) G4 Guidelines, using the “comprehensive” option. Appendix IV “GRI-G4 Index” contains a list of the GRI-G4 indicators, with references to the indicators that are included throughout the report, in other public reports or reported in Appendix III “GRI-G4 Indicators.” Sustainability figures and indicators have been calculated according to corporate rules that specify the criteria and common methodology to be applied to labor, environment, human rights and social issues that is described in detail in each of its sections. This information was completed in conformity with the basic criteria that govern the standard AA1000 2008 APS: inclusiveness, materiality and responsiveness, and it is verified under the ISAE 3000 and AA1000 2008 AS standard (verification letter available at [www.repsol.com](http://www.repsol.com)). In addition, for the preparation of this information, account has been taken of the Ten Principles of the United Nations Global Compact.

The **forward-looking information** contained in this document reflects the plans, forecasts or estimates of the Group’s managers at the date of preparation. Such forward-looking information is based on assumptions that are considered reasonable, and cannot be considered as a guarantee of the entity’s future performance, in the sense that such plans, forecasts or estimates are subject to numerous risks<sup>4</sup> and uncertainties, meaning that the future performance of the Group will not necessarily coincide with what was initially planned.

## our vision and values

Additional information: [www.repsol.com](http://www.repsol.com)

Repsol’s **vision** is to be a global company that seeks individual welfare and believes in the building of a better future through the development of intelligent energy to offer better energy solutions.

Our values are:

**Integrity**

**Responsibility**

**Flexibility**

**Transparency**

**Innovation**

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. Royal Decree-Law 18/2017, of November 24, amending the Code of Commerce, the restated text of the Spanish Companies Act and the Audit Law, as regards non-financial and diversity information.
3. This report should be read jointly with the Consolidated Financial Statements of the Repsol Group at December 31, 2017, which have been subject to an independent audit.
4. The main risks and risk factors to which the Company is exposed are described in section 2.4 “Risk management” and in Appendix II, “Risk Factors” respectively.

## Message from CEO

The 2017 Management Report gathers together all the Group's financial and non-financial information in a single document, providing a full, comprehensive and accurate overview of our activities. ”



At Repsol, we have been striving to improve the information we offer to our stakeholders for a number of years now. In this connection, the new 2017 Management Report gathers together all the Group's financial and non-financial information in a single document, in line with the new legal framework on the disclosure of non-financial content and information on diversity.

This Integrated Management Report is a key tool in learning about our performance in detail, providing a full, comprehensive and accurate overview of our activities. It includes our financial position, the results of our activities and, as the main new feature, it integrates sustainability information that was previously set out in its own report.

Sustainability is one of the Company's strategic pillars, which includes environmental and social aspects in all decision-making processes. The corresponding chapter provides details on the management activities performed in 2017 concerning climate change, people, safety, the environment, innovation, technology, ethics and compliance, responsible taxation or the supply chain.

I would like to make particular mention of the section dedicated to climate change, in which details are provided on the dedication and commitment of Senior Management and all employees at the Company, the strategy, risk management and the initiatives and projects being developed to offer energy solutions that facilitate the transition toward a low-emissions future.

The 2017 Integrated Management Report provides clear and concise information about the Company's financial position and the results of our activities in a year in which our adjusted net income increased by 25%, the highest over the past 6 years, despite the complex international backdrop. Furthermore, in 2017 we have made progress with our operating efficiency enhancement projects, forging new synergies and continuing to optimize investments, all within the framework of the Strategic Plan.

By business area, *Upstream* recorded the best results due to the recovery of crude oil and gas prices, the improvement in efficiency and the increase in production in Libya and Brazil. In *Downstream*, solid results registered in 2016 were maintained, supported by the quality of our industrial assets and the benefits of our integrated business model.

In my opinion, this Integrated Management Report offers stakeholders the most comprehensive summary of our activities.

It is a faithful reflection of the work we have done to adapt to society's needs and consolidate our position as a key player in the energy sector for the next decades.

Thank you very much for placing your trust in us.

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# 1. Summary of main events

## Upstream

Remarkable improvement

Recovery in prices  
Reduction in operating costs  
Contribution of Libya and Brazil  
Important discoveries

## Downstream

Strong results in line with 2016

Quality of our industrial assets  
Competitive edge of our integrated model

In 2017, Repsol has advanced in the fulfillment of its **2016-2020 Strategic Plan**<sup>1</sup> and in its **process of transformation**, which aims to make the company more efficient, flexible and innovative. Proof of this is that, even in an environment of low crude oil and gas prices, the Company has demonstrated its ability to improve its results and its financial strength.

**Net income** amounted to €2,121 million (+22% over the same period of the previous year), **cash flow from operations** increased to €5,506 million (+44% on the previous year) and **net debt** was down to €1,877 million, which equals to a 17% leverage.

This notable performance helped **increase the share price** and improve the Group's **credit rating**.

### Results for the period

(million euros)

	2017	2016	Δ
Upstream	632	52	580
Downstream	1,877	1,883	(6)
Corporate and other	(104)	(13)	(91)
<b>Adjusted net income</b>	<b>2,405</b>	<b>1,922</b>	<b>483</b>
Inventory effect	104	133	(29)
Special items	(388)	(319)	(69)
<b>Net income</b>	<b>2,121</b>	<b>1,736</b>	<b>385</b>

**Upstream** business segment results show a significant improvement on 2017 (+€580 million), supported by the increase in realization prices of crude oil and gas and the achievements derived from the operational efficiency plans, but also driven by higher contribution of production in Libya and Brazil.

1. The 2016-2020 Strategic Plan was published in October 2015, and is available at [www.repsol.com](http://www.repsol.com).

In **Downstream**, the strong results are in line with those of 2016, which shows the quality of our industrial refining and petrochemical assets and the competitive advantage for the commercial businesses of our integrated business model.

Lower income in **Corporate and other**, despite the decrease of corporate and financial costs, was due mainly to the smaller contribution of Gas Natural Fenosa (GNF).

As a result of the foregoing, **adjusted net income**, which aims to reflect the ordinary profit resulting from business management, amounted to €2,405 million, which is 25% higher than in 2016, and the highest in the past six years, in a period marked by a complex international environment.

*Inventory effect*, which reflects the impact of price changes on inventories, is positive due to the upward trend in crude oil prices.

*Special items* in the period (€-388 million) mainly include the movement of provisions for accounting write-downs. In this period, the reversal of provisions related to assets in the United Kingdom stands out, due to the significant improvements obtained in its operation, as well as the provision to adjust the value of existing US tax credits to the reduction of rates in corporate tax and the provisions related to our investments in Venezuela, in line with the evolution of country risk.

In sum, the Group's 2017 **net income** amounted to a profit of €2,121 million, up 22% on 2016.

The **EBITDA** of €6,723 million, is 29% higher than in 2016, driven by a substantial improvement in results in the *Upstream* segment. **Free cash flow** in 2017 came to €2,560 million, due to the significant increase in cash flow from operations (+44%) and despite the absence of significant divestments.

€2,121 million

Net income of 2017  
[↑22%]

22% ↑

Earnings per share

<b>Important discoveries</b>	<b>Shareholders Remuneration</b>	<b>Occupational safety</b>	<b>Reduction in CO<sub>2</sub></b>
North Slope Trinidad and Tobago	<b>€0.76</b> per share	TRIR:1.43 No fatalities	<b>216</b> Thousand Tons

**44%** ↑  
cash flow from operations

**Net debt** at the end of the period amounted to €6,267 million, which constitutes an important reduction on year-end 2016 (€8,144 million).

The Group's **credit rating improved**. For S&P, it went from BBB- to BBB for the long term, and from A-3 to A-2 in the short term, both with a stable outlook. Moody's and Fitch improved their outlooks from "negative to "stable."

The company provided **remuneration to its shareholders** under its "Repsol Flexible Dividend" program, which allowed shareholders in 2017 to choose to receive an equivalent remuneration of €0.76 per share<sup>1</sup> in either new shares or cash.

**Repsol shares** gained 10% during the period, outperforming the Ibex-35 index and in line with the average of the European Oil & Gas sector. Progress in achieving the targets of the strategic plan, and the gradual recovery of the Brent price, lifted the share price in the second half of the year.

## Other events during the period

There were **two major discoveries** during the year. One was in the Alaska *North Slope*, with the *Horseshoe-1* and *Horseshoe-1A* drillings, the biggest conventional hydrocarbon find in the U.S. in the last thirty years. The other was in Trinidad and Tobago with the *Savannah* and *Macadamia* drillings, Repsol's largest gas discovery in the last five years. In addition, **large projects were commissioned** in the *Upstream* segment, such as *Flyndre* and *Shaw/Cayle* in the UK, *Juniper* in Trinidad and Tobago, the re-development of *Kinabalu* in Malaysia, *Sagari* in Block 57 in Peru, *Lapa* in Brazil and *Reganne* in Algeria.

A **Global Sustainability Plan (GSP)** has been drawn up, in which Repsol commits itself to 2020 targets in the six main areas of Sustainability (climate change, people, safe operation, environment, innovation and technology, ethics and transparency).

In the context of an energy transition towards a low-emissions future that will limit the effects of **climate change**, in 2017 Repsol implemented improvement actions in its facilities that avoided 216 thousand tons in CO<sub>2</sub> emissions, while also reducing its energy consumption. Also worthy of note was the issuance of a **green bond**, the first for the Company and for the Oil & Gas sector, in the amount of €500 million.

With respect to **occupational safety**, the Total Recordable Incident Rate (TRIR) decreased 2% from the 2016 figure and there were no fatalities occurring among either own personnel or that of contractors' personnel.

In 2017, three new independent non-executive Directors were appointed, promoting the **diversity of knowledge and gender** in the Board of Directors.

**GSP**

Throughout this document, GSP Ambitions and Targets are identified with an **a** and a **2020** in similar boxes. Further information: [www.repsol.com](http://www.repsol.com)

**23%** ↓  
Net debt

1. This includes the commitment to purchase free-of-charge allocation rights assumed by Repsol in the two capital increases concluded in January and July 2017 (€0.335 and €0.426 gross per right, respectively).

## Main figures and indicators

Financial indicators <sup>(1)</sup>	2017	2016	Macroeconomic environment	2017	2016
<b>Results</b>			Brent (\$/bbl) average	54.2	43.7
EBITDA	6,723	5,226	WTI (\$/bbl) average	50.9	43.5
Adjusted net income	2,405	1,922	Henry Hub (\$/MBtu) average	3.1	2.5
Net income	2,121	1,736	Algonquin (\$/MBtu) average	3.7	3.1
Earnings per share (€/share)	1.35	1.11	Exchange rate (\$/€) average	1.13	1.11
Capital employed <sup>(2)</sup>	36,330	39,255			
ROACE (%)	7.4	5.8	<b>Our business performance<sup>(1)</sup></b>	<b>2017</b>	<b>2016</b>
<b>Financial overview and cash flows</b>			<b>Upstream</b>		
Net debt (ND)	6,267	8,144	Proven reserves (MMboe)	2,355	2,382
ND / EBITDA (x times)	0.9	1.6	Proven reserve-replacement ratio (%)	89	103
ND / Capital employed (%)	17.3	20.7	Net daily liquids production (kbb/d)	255	243
Debt interest / EBITDA (%)	5.2	8.2	Net daily gas production (kboe/d)	440	447
Free cash flow	2,560	4,323	Net daily hydrocarbon production (kboe/d)	695	690
Net investments	2,856	(500)	Average crude oil price (\$/bbl)	49.6	39.0
<b>Shareholder remuneration</b>			Average gas price (\$/kscf)	2.9	2.4
Shareholder remuneration (€/share)	0.76	0.76	EBITDA	3,507	2,072
			Adjusted net income	632	52
			Net investments	2,072	1,889
<b>Stock market indicators</b>	<b>2017</b>	<b>2016</b>	<b>Downstream</b>		
Share price at year-end (€/share)	14.75	13.42	Refining capacity (kbb/d)	1,013	1,013
Average share price (€/share)	14.57	11.29	Conversion rate in Spain (%)	63	63
Market capitalization at year-end (€ million)	22,521	19,669	Conversion utilization Spanish Refining (%)	104	103
			Distillation utilization Spanish Refining (%)	94	88
<b>Sustainability Indicators</b>	<b>2017</b>	<b>2016</b>	Refining margin indicator in Spain (\$/Bbl)	6.8	6.3
<b>People</b>			Service stations (no.) <sup>(9)</sup>	4,709	4,715
No. employees <sup>(3)</sup>	25,085	25,469	Oil product sales (kt)	51,836	48,048
New employees <sup>(4)</sup>	3,157	2,445	Petrochemical product sales (kt)	2,855	2,892
Total Employee turnover rate (%)	9	13	LPG sales (kt)	1,375	1,747
Hours of training per employee	40	41	Gas sales in North America (TBtu)	496	414
<b>Tax paid (€ million)<sup>(5)</sup></b>	<b>11,979</b>	<b>11,764</b>	EBITDA	3,386	3,367
<b>Safety</b>			Adjusted net income	1,877	1,883
Lost Time Injury Frequency Rate <sup>(6)</sup>	0.71	0.69	Net investments	757	(496)
Total Recordable Incident Rate <sup>(7)</sup>	1.43	1.46			
<b>Environment</b>					
Direct CO <sub>2</sub> emissions (Mt)	18.38	19.74			
Annual CO <sub>2</sub> emissions reduction (Mt) <sup>(8)</sup>	0.216	0.312			
No. of hydrocarbon spills > 1 bbl (t)	17	11			
<b>Social</b>					
Voluntary social investment (€ million)	23.5	19.8			

(1) Where applicable, figure shown in millions of euros.

(2) Capital employed from continuing operations.

(3) Number of employees that belong to companies in which Repsol establishes people management policies and guidelines, irrespective of the type of contract (fixed, temporary, partially retired, etc.).

(4) Only fixed or temporary employees with no prior working relationship with the Company are considered to be new hires. 31% of new employees in 2017 and 43% in 2016 had fixed contracts.

(5) Includes taxes paid which represent a cash expense for the company, thus reducing its earnings, as well as those withheld or passed on to the end taxpayer. Does not include amounts accrued payable at a future date or collected in previous periods. For further information, see section 6.6 of this document.

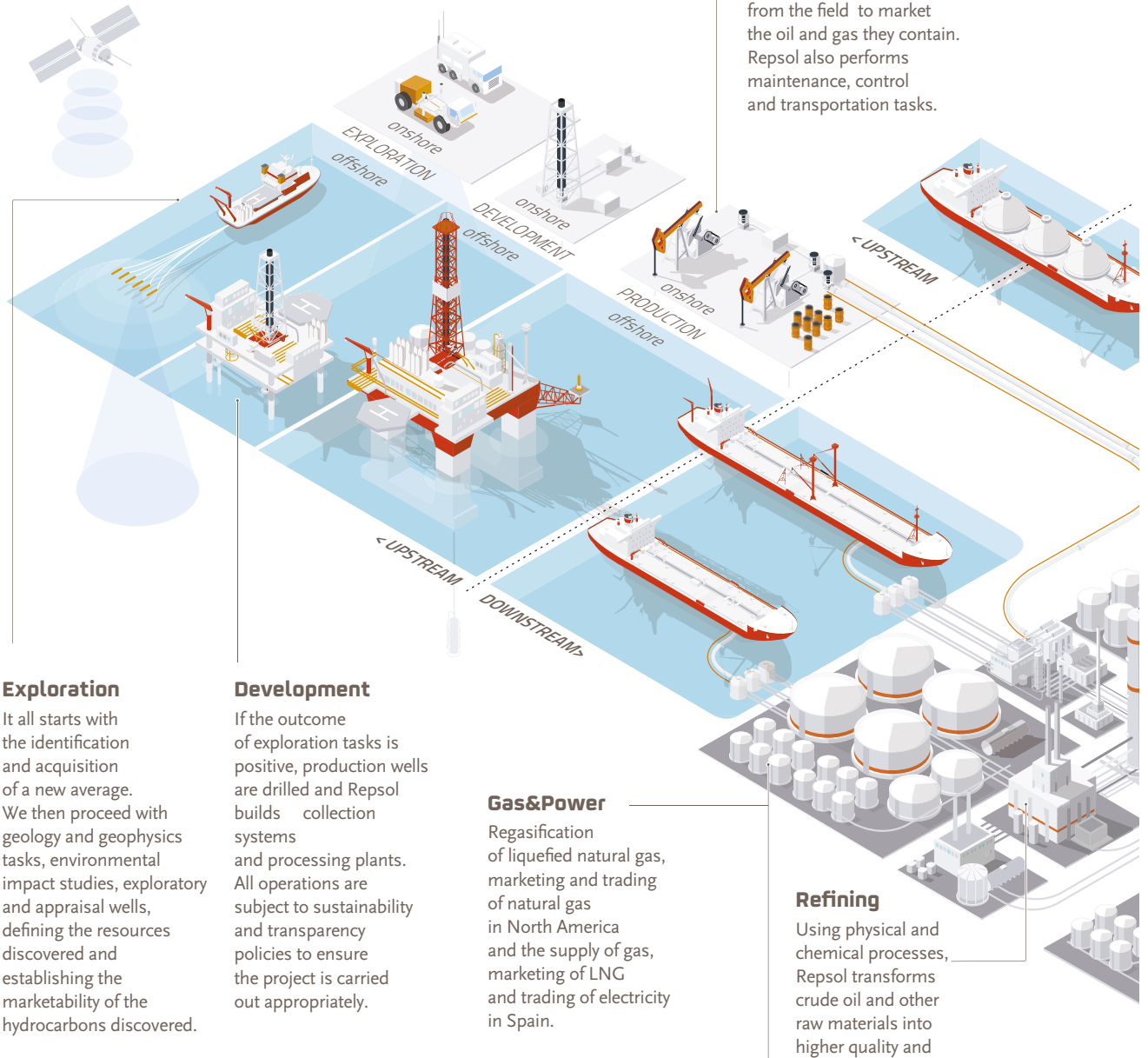
(6) Lost time injury frequency rate (LTIF): number of lost time injuries and fatalities per million work hours.

(7) Total Recordable Incident Rate (TRIR): Total number of injuries (fatalities, lost time injuries, medical treatment and restricted work) accumulated within the period per million hours worked.

(8) Reduction of CO<sub>2</sub> compared with the 2010 baseline.

(9) The number of service stations (SS) includes those controlled and licensed.

# 2. Our Company



**Exploration**  
 It all starts with the identification and acquisition of a new average. We then proceed with geology and geophysics tasks, environmental impact studies, exploratory and appraisal wells, defining the resources discovered and establishing the marketability of the hydrocarbons discovered.

**Development**  
 If the outcome of exploration tasks is positive, production wells are drilled and Repsol builds collection systems and processing plants. All operations are subject to sustainability and transparency policies to ensure the project is carried out appropriately.

**Gas&Power**  
 Regasification of liquefied natural gas, marketing and trading of natural gas in North America and the supply of gas, marketing of LNG and trading of electricity in Spain.

**Production**  
 The Company extracts the reserves from the field to market the oil and gas they contain. Repsol also performs maintenance, control and transportation tasks.

**Refining**  
 Using physical and chemical processes, Repsol transforms crude oil and other raw materials into higher quality and higher added-value products for the market (fuels and other oil products).

## Upstream

Operational Indicators	
Proven reserves: 2,355 MMboe	Production: 695 kboe/día
Reserve replacement rate: 89%	Gas Production: 63%
Gas reserves: 74%	
Sustainability Indicators*	
No. Employees: 4,291 (28% women)	TRIR: 1.82
CO <sub>2</sub> e emissions: 10.6 Mt (Scope 1 and Scope 2 included)	PSIR <sub>1+2</sub> : 0.94
Water withdrawn: 1,921 kt	

(\*) Sustainability indicators are defined in section 6 of this document..

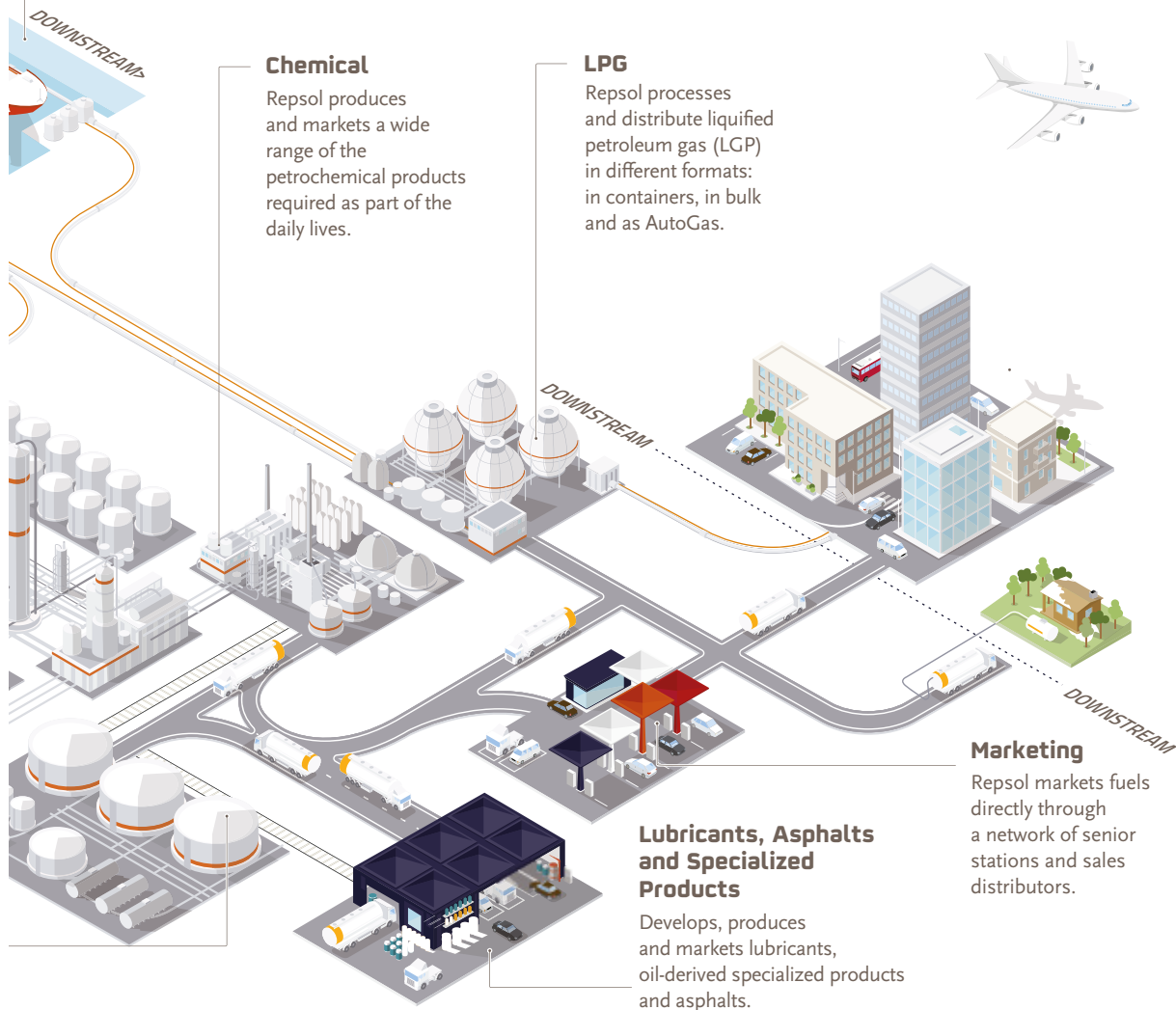


### Trading

Once the hydrocarbons have been extracted, they are either transported to supply the refineries or they are sold on international markets. The best alternatives for supplying the Downstream system are also sought and any surplus sold for export.

## 2.1. Business Model

Repsol is an integrated energy company with a broader experience in the sector that operates across the world in two business areas.



### Chemical

Repsol produces and markets a wide range of the petrochemical products required as part of the daily lives.

### LPG

Repsol processes and distributes liquefied petroleum gas (LPG) in different formats: in containers, in bulk and as AutoGas.

### Marketing

Repsol markets fuels directly through a network of senior stations and sales distributors.

### Lubricants, Asphalts and Specialized Products

Develops, produces and markets lubricants, oil-derived specialized products and asphalts.

## Downstream

### Operational Indicators

Refining capacity: 1,013 kbb/d

Chemical capacity:

Basic: 2,603 kt

Derivative: 2,235 kt

Processed crude: 47,357 kt

Marketing (No. service stations):

3,445 at Spain

1,264 rest of the World

### Sustainability Indicators\*

No. employees: 18,604 (36% women)

CO<sub>2</sub>e emissions: 12.7 Mt (Scope 1 and Scope 2 included)

Water withdrawn: 51,577 kt

TRIR: 1.30

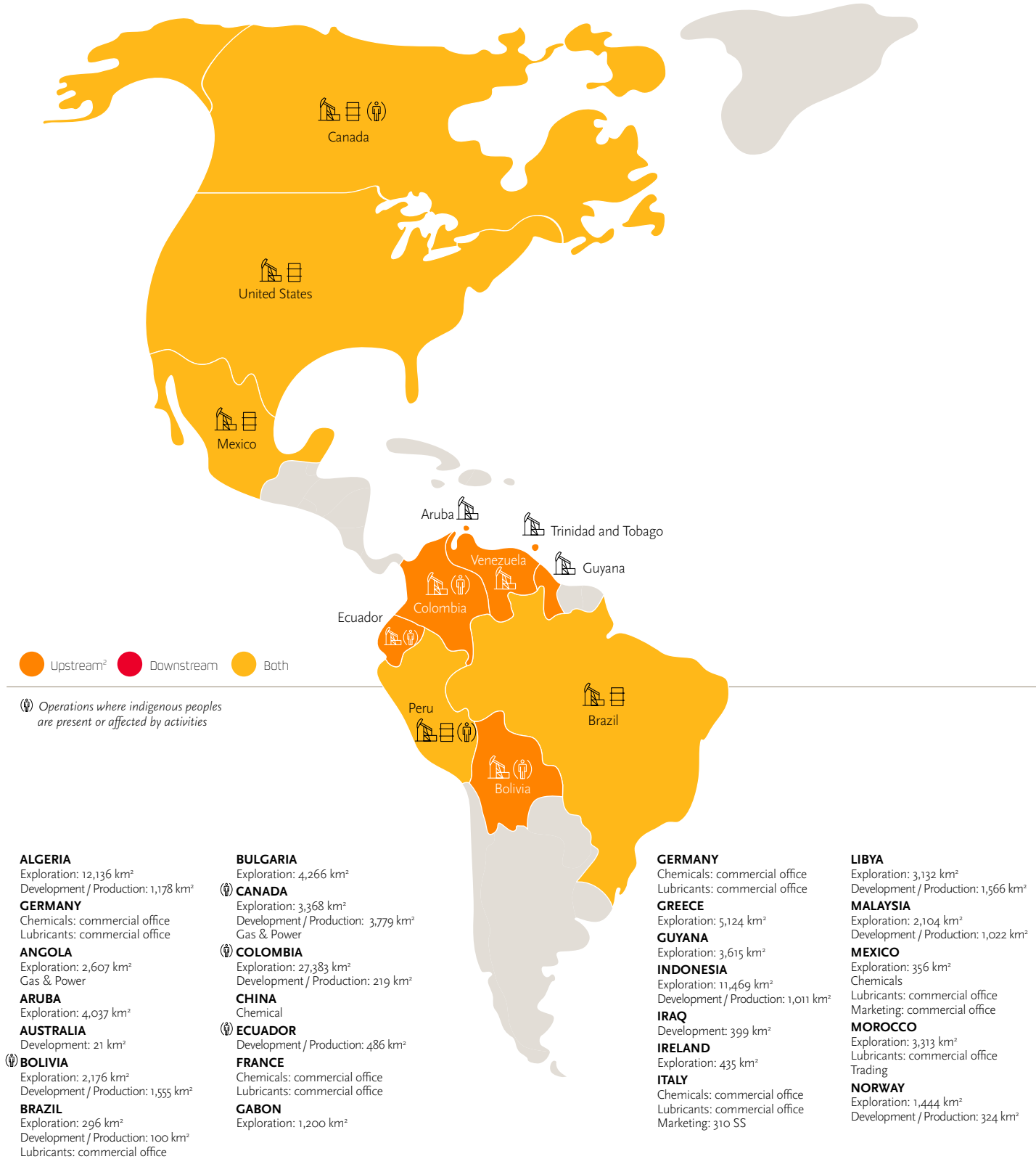
PSIR<sub>1+2</sub>: 0.45

Electric recharge points: 1,055

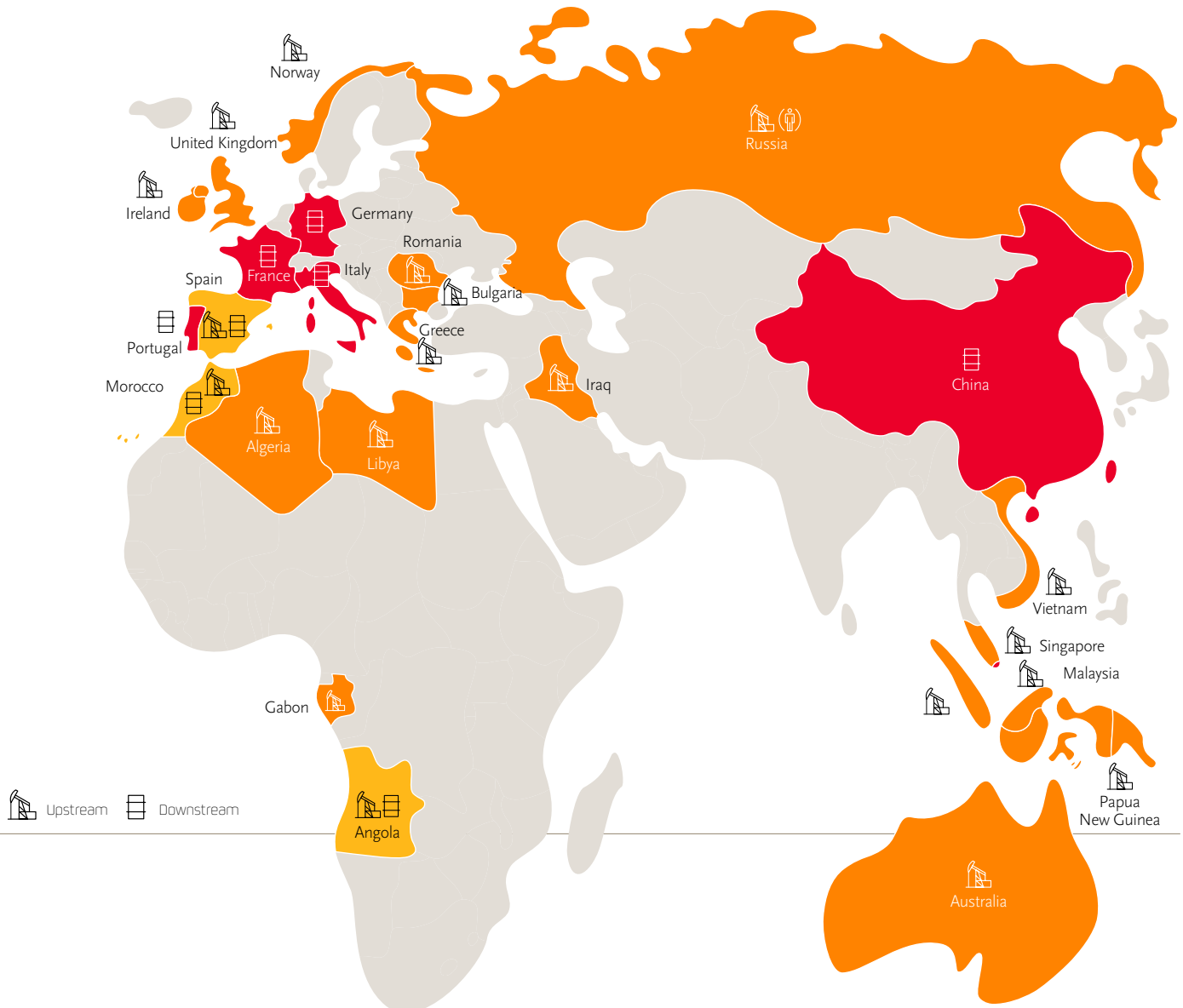
Autogas points: 767

(\*) The Sustainability indicators are defined in section 6 of this document

## 2.2. Repsol around the world <sup>1</sup>



1. The information on this map reflects the Company's situation as of December 31, 2017.  
 2. Exploration and production/development data is reported in net surface area of mineral rights.



Upstream Downstream

**PAPUA NEW GUINEA**

Exploration: 7,418 km<sup>2</sup>  
Development: 1,303 km<sup>2</sup>

**PERU**

Exploration: 10,255 km<sup>2</sup>  
Development / Production: 141 km<sup>2</sup>  
Lubricants: commercial office  
Refining: 1 refinery  
Trading  
Marketing: 490 SS

**PORTUGAL**

Chemicals  
Lubricants: commercial office  
Marketing: 464 SS  
GLP

**ROMANIA**

Exploration: 3,189 km<sup>2</sup>

**RUSSIA**

Exploration: 2,272 km<sup>2</sup>  
Development / Production: 169 km<sup>2</sup>

**SINGAPORE**

Lubricants: commercial office  
Trading

**SPAIN**

Exploration: 798 km<sup>2</sup>  
Development / Production: 331 km<sup>2</sup>  
Chemicals  
Lubricants  
Refining: 5 refineries  
Trading  
Marketing: 3,445 SS  
GLP

Gas & Power

**TRINIDAD & TOBAGO**

Development / Production: 1,121 km<sup>2</sup>

**UNITED KINGDOM**

Exploration: 117 km<sup>2</sup>  
Development / Production: 543 km<sup>2</sup>

**UNITED STATES**

Exploration: 1,780 km<sup>2</sup>  
Development / Production: 1,455 km<sup>2</sup>  
Chemicals: commercial office  
Trading  
Gas & Power

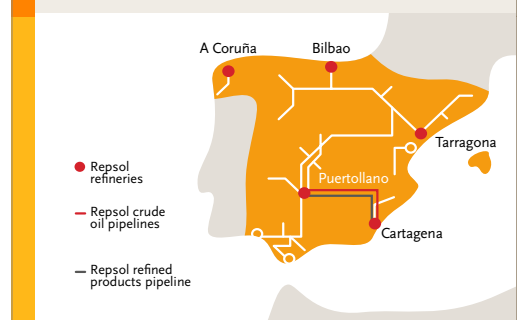
**VENEZUELA**

Development / Production: 853 km<sup>2</sup>

**VIETNAM**

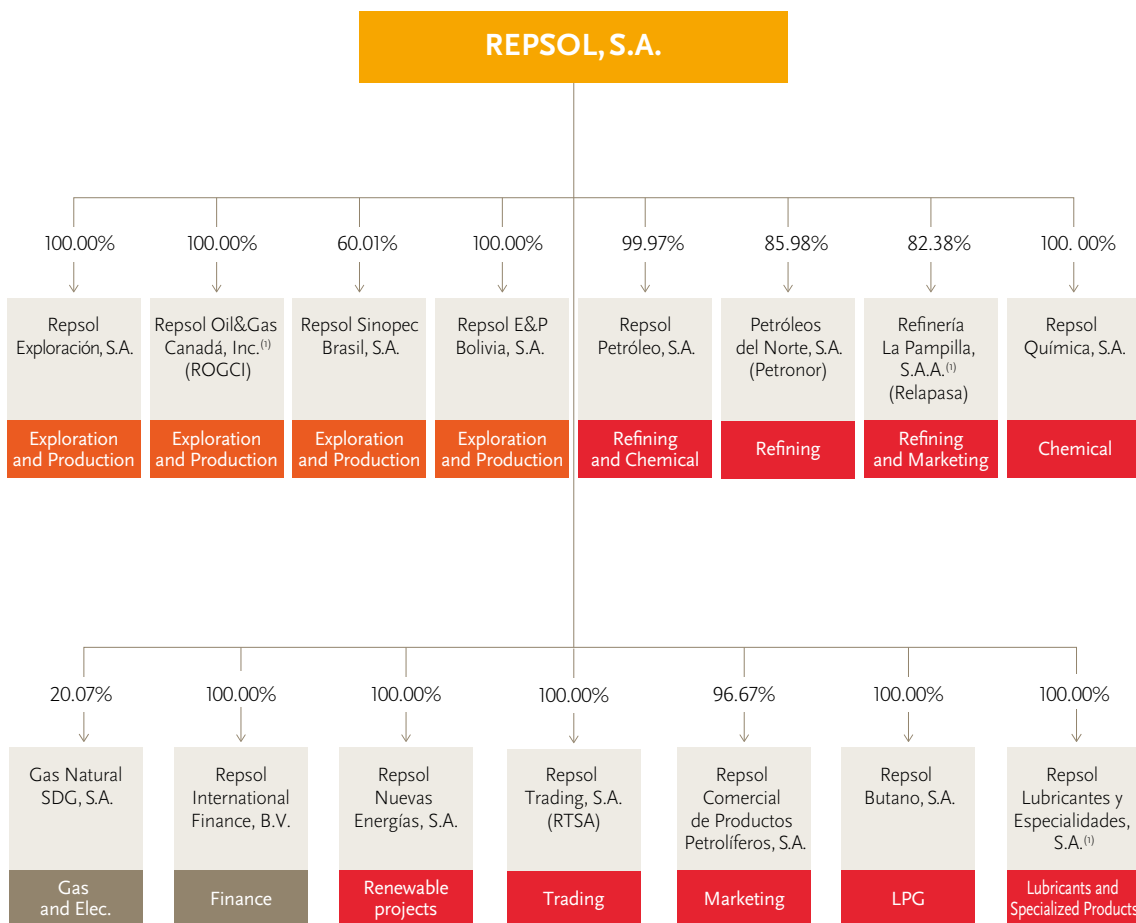
Exploration: 73,336 km<sup>2</sup>  
Development / Production: 179 km<sup>2</sup>

**Repsol Refineries in Spain**



## 2.3. Corporate structure

The corporate structure of the Repsol Group is shown below, in the form of the main companies making up the Group:



(1) Indirect ownership interests

● Upstream ● Downstream ● Corporate

### Sale agreement of Gas Natural, SDG, S.A.:

On February 22, 2018, Repsol, S.A. has reached an agreement with Rioja Bidco Shareholdings, S.L.U., ["Rioja"] a company controlled by funds advised by CVC, for the sale of its stake in Gas Natural SDG, S.A. ["Gas Natural"], representing approximately 20.072% of the share capital of Gas Natural, for a total amount of €3,816,314,502, equivalent to a price of €19 per share. For further information, see Note 31 of the Consolidated financial statements.

### Corporate structure:

For further information on the main companies comprising the Repsol Group and the main changes during the year, see Appendix I and Ib of the consolidated financial statements.

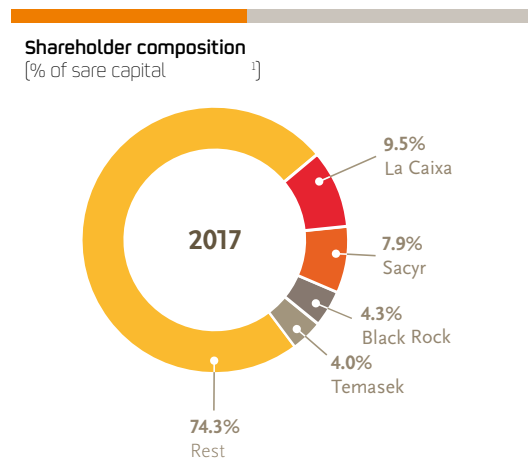
### Corporate streamlining:

For further information on the process of streamlining the corporate structure launched following the integration of ROGCI, see section 6.7 of this document.

## 2.4. Corporate governance

Repsol's system of corporate governance, which was established in accordance with best national and international practice and standards, guides the structure, organization, and operation of corporate bodies in the interests of the Company and of its shareholders, and is based on the principles of transparency, independence and responsibility.

The **governance structure** at Repsol adequately differentiates the governance and management functions of the Company from its oversight, control, and strategic definition functions. The Annual General Meeting is the sovereign corporate body through which shareholders intervene in the taking of essential decisions of the Company, with the Board of Directors, either directly or through its various Committees, responsible for the formulation of general policies, the strategy of the Company, and basic management directives, as well as general oversight and consideration of matters of special importance that are not reserved to the Annual General Meeting.

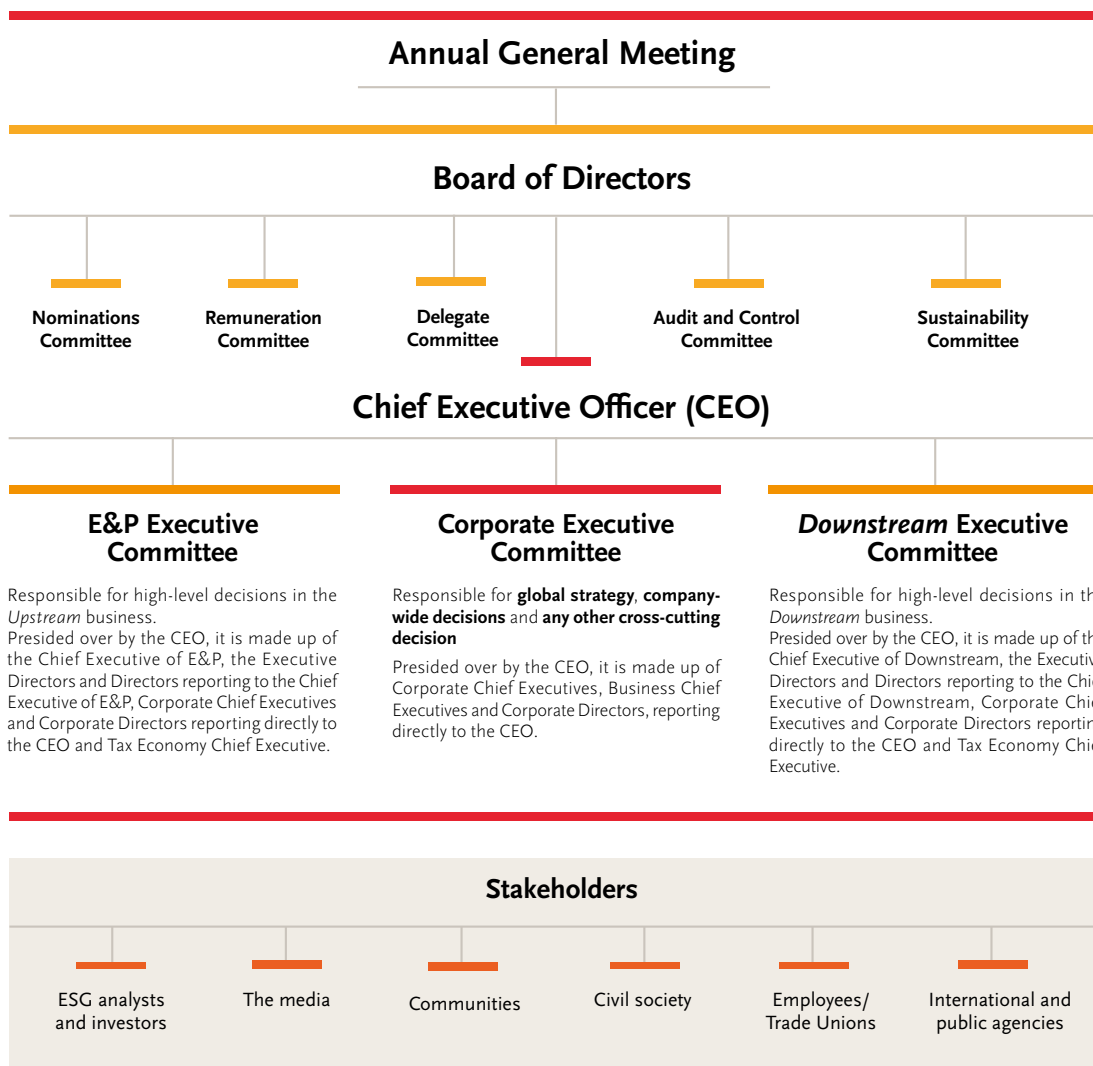


1. % of share capital according to the latest information available at the date of this document. Information provided by Compañía de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A.U. (Iberclear), and information submitted by shareholders to the Company and to the CNMV.

**GSP**

**a**

**Ambition:**  
Achieve maximum national and international standards in terms of Good Governance.



The **composition of the Board of Directors** and its committees is as follows:

**13.3%**  
of foreigners  
in the Board  
of Directors







**13.3%**  
of women  
in the Board  
of Directors

**GSP**

**20  
20**

**Target:**  
30% of women  
in the Board of  
Directors

## Board of Directors

<p>Chairman <b>Antonio Brufau Niubó</b> Chairman of the Delegate Committee First appointment: 07/23/96 Last appointment: 04/30/15</p>				
<p><b>Gonzalo Gortazar Rotaache</b> First Vice Chairman Member of the Delegate Committee Member of the Remuneration Committee First appointment: 04/30/15 Last appointment: 05/20/16</p> 	<p><b>Manuel Manrique Cecilia</b> Second Vice Chairman Member of the Delegate Committee First appointment: 04/25/13 Last appointment: 05/19/17</p> 	<p><b>Josu Jon Imaz San Miguel</b> CEO Member of the Delegate Committee First appointment: 04/30/14 Last appointment: 04/30/15</p>	<p><b>Mª Teresa Ballester Fornés</b> Member of the Audit and Control Committee First appointment: 05/19/17</p>	<p><b>Artur Carulla Font</b> Member of the Delegate Committee Chairman of the Remuneration Committee Member of the Nominations Committee Coordinating Director First appointment: 06/16/06 Last appointment: 03/28/14</p>
<p><b>Luis Carlos Croissier Batista</b> Member of the Audit and Control Committee Member of the Sustainability Committee First appointment: 05/09/07 Last appointment: 04/30/15</p>	<p><b>Rene Dahan</b> Member of the Delegate Committee First appointment: 05/31/13 Last appointment: 05/19/17</p> 	<p><b>Ángel Durández Adeva</b> Chairman of the Audit and Control Committee Member of the Remuneration Committee First appointment: 05/09/07 Last appointment: 04/30/15</p>	<p><b>Jordi Gual Solé</b> Member of the Nominations Committee Member of the Sustainability Committee First appointment: 12/20/17</p> 	<p><b>José Manuel Loureda Mantiñán</b> Member of the Nominations Committee Member of the Remuneration Committee Member of the Sustainability Committee First appointment: 01/31/07 Last appointment: 04/30/15</p> 
<p><b>Mariano Marzo Carpio</b> Member of the Nominations Committee Chairman of the Sustainability Committee First appointment: 05/19/17</p>	<p><b>Isabel Torremocha Ferrezuelo</b> Member of the Audit and Control Committee First appointment: 05/19/17</p>	<p><b>J. Robinson West</b> Member of the Delegate Committee First appointment: 01/28/15 Last appointment: 04/30/15</p>	<p><b>Luis Suárez de Lezo Mantilla</b> Director and General Secretary to the Board of Directors Member of the Delegate Committee First appointment: 02/02/05 Last appointment: 05/19/17</p>	<p>Legend:   Independent   Proprietary   Executive   External</p>

## Changes to the Board

On May 19, 2017, Repsol's Annual General Meeting approved the re-election of Mr. Rene Dahan, Mr. Manuel Manrique Cecilia and Mr. Luis Suárez de Lezo Mantilla as Directors, the ratification and re-election of Mr. Antonio Massanell Lavilla as a Director and the appointment of Ms. María Teresa Ballester Fornés, Ms. Isabel Torremocha Ferrezuelo and Mr. Mariano Marzo Carpio as Directors. All shall serve a term of office of 4 years.

On December 20, 2017, the Board of Directors agreed, at the proposal of shareholder CaixaBank, S.A. the appointment by cooptation of Mr. Jordi Gual Solé as an External Director to cover the vacancy generated by the resignation of Mr. Antonia Massanell Lavilla.

On February 20, 2018, Mr. Mario Fernández Pelaz has resigned his position as Director of Repsol, S.A. Board of Directors.

## Board Remuneration

Information on remuneration of members of the Board of Directors and executive personnel is provided in Note 27 of the consolidated financial statements. Repsol publishes an annual report on Remuneration of Directors, which contains detailed information on the application of the Directors Remuneration Policy, both of which are available at [www.repsol.com](http://www.repsol.com)

## Sustainability and governance model

The Repsol Sustainability model identifies, systematizes and launches actions which contribute to sustainability development, where the Board of Directors and the Sustainability Committee play a key role. The Board approves the Company's strategy and policy on sustainability and corporate governance, while the Committee is aware of and orients the Company's policy, objectives and guidelines with respect to environmental, social and safety matters. In 2017, this Committee held four meetings and addressed the following:

- Sustainability Policy and Global Sustainability Plan.
- Risk Map.
- Sustainability Report 2016 and Sustainability Website.
- Scorecard, indicators and fulfillment of Safety and Environment targets.
- Energy and climate change: progress and commitments of OGCI and OGCI-Climate Investment, E&P emission reduction target, challenges of energy transition and Company's position in carbon capture, use and storage.
- Progress on Circular Economy Strategy.
- Progress and significant issues in Community Relations and Human Rights.
- Self-assessment of the Sustainability Committee.

In ethics and transparency matters, the Audit and Control Committee and the Ethics and Compliance Committee oversees compliance with the Code of Ethics and Conduct, and they examine proposed codes of ethics and conduct and reforms thereof, ensuring compliance with standards and that such codes are adequate for the Group.

Further, senior management, defines the Company's objectives, action plans and practices with respect to sustainability. To ensure the deployment of sustainability policies, targets and guidelines, sustainability targets account for up to 5% of the CEO's annual variable remuneration, and up to 10% of the multi-year variable remuneration implemented through long-term incentive plans for executives and other employees, including the CEO and General Counsel Secretary.

## Risk management

As a global and integrated oil company, Repsol is exposed to different types of risk that may affect the future performance of the organization, and which must be mitigated in the most effective way possible.

The Company has an organization, procedures and systems that allow it to reasonably manage the risks to which the group is exposed, as an integral part of decision-making processes in both corporate governance bodies and business management.

Repsol has an integrated risk management model designed to anticipate, manage, and control risks from a global perspective. The Integrated Risk Management System (SGIR in Spanish) provides a comprehensive and reliable view of all risks that might affect the Company.

The Repsol Group has a system of internal control over financial reporting (ICFR) whose correct functioning can reasonably ensure the reliability of the Group's financial reporting. The ICFR model is based on the methodological framework of COSO 2013 (Committee of Sponsoring Organizations of the Treadway Commission).

## Risk management

Additional information in Appendix II "Risks" and sections E and F of Annual Corporate Governance Report (Appendix VI).

# 3. Environment

**3.1%** ↑  
 GDP growth in Spain in 2017 (estimated)

## 3.1. Macroeconomic environment

### Recent economic trends

In 2017, the **world economy** consolidated the recovery that began in mid-2016. After modest growth of 3.2% in 2016, economic activity grew by 3.7% in 2017. The rebound was synchronized by regions, which contributed to the reduction of economic risk in the short term and to an improvement of the outlook.

Growth in the **advanced economies** rose from 1.7% in 2016 to 2.3% in 2017, due to an improvement in domestic demand, with the deleveraging of the private sector now well advanced and with fiscal policy becoming more expansive. In addition, with inflation levels still low – below the target level – the normalization of monetary policy is expected to be gradual, helping maintain better financial conditions and the stimulus for the global economy.

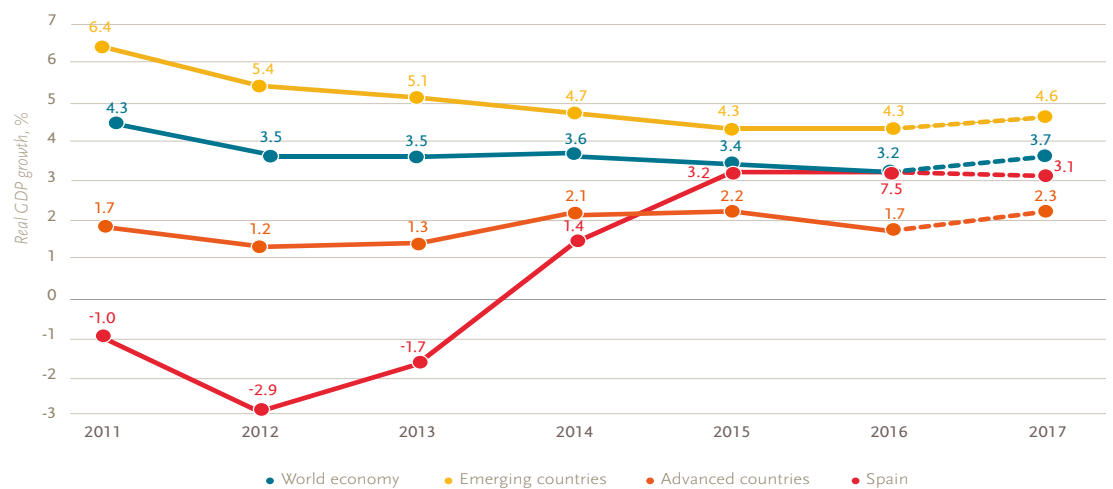
By regions, the 2.4% growth in the **Eurozone** is surprising on the upside, supported by the quantitative easing program of the European Central Bank (ECB), the recovery in lending,

looser fiscal policies, and the improvement in competitiveness. In **Spain**, not only does the economy remain dynamic (with YoY growth of 3.1% in 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.

Meanwhile, growth in the **US**, after easing to 1.5% in 2016, has showed greater dynamism in recent quarters, ending 2017 with growth of 2.3%. In addition, the possible approval of a fiscal reform that substantially reduces the tax burden, especially in corporate income tax, may boost activity even more in 2018.

For their part, the rebound of emerging economies from 4.4% growth in 2016 to 4.7% in 2017 is due to the greater dynamism of China, and especially of commodity-exporting countries against a backdrop of a certain degree of recovery in the prices of primary products and the return of capital inflows.

### GDP evolution



Source: Bloomberg and Repsol Research Unit



## Evolution of the exchange rate

The first part of 2017 was marked by the progressive weakening of the US dollar following the rally it underwent in late 2016. The Fed's decision to hike interest rates in December, and Trump's election as US president in November were the main factors explaining the strength of the dollar toward the end of the previous 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) would continue with their balance sheet expansion programs, with interest rates at historical lows, would exert downward pressure on the euro and yen. On the other hand, 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.

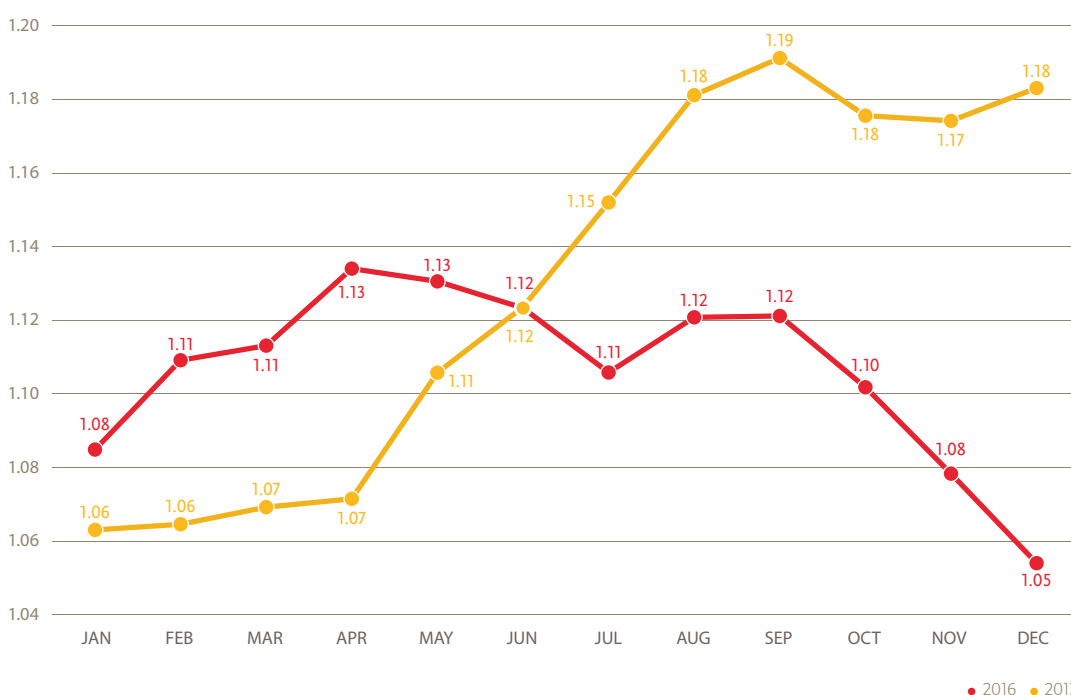
However, throughout the first part of this year, some of these factors weakened, favoring the strength of the dollar against the euro. Doubts arose about the capacity of the Trump administration to carry out its electoral promises - especially the fiscal expansion - and, in Europe, political risk diminished following the victories of pro-EU parties. In addition, with economic growth in Europe showing clear signs of strength, the ECB reduced the size of its asset purchasing program, thus narrowing the divergence in the monetary policy stance vis-à-vis the US.

This weak dollar trend began to reverse in early October, in tandem with highly favorable macro data also in the US and, above all, the progress in negotiations to finally approve the tax reform in the country.

Emerging markets saw their currencies appreciate in the first half of 2017, benefiting from a recovery in commodities prices and increased capital inflows, although some of these gains began to abate starting in October.

€/\$1.20  
FX  
year-end 2017

Evolution of EUR/USD exchange rate (monthly average)



Source: Bloomberg and Repsol Research Unit

**24%** ↑  
Brent Price

### 3.2. Energy landscape

#### Crude oil - Brent

In the second half of 2017, the oil market followed an upward price trend, with Brent crude rising from an average of \$46.5/bbl in June to \$64.2/bbl in December, with the average coming out to \$54.2/bbl, nearly \$10 above the 2016 average. This price rebound was accompanied by several factors, most particularly the policy for cutting back production agreed in late 2016 by the OPEC countries, which was joined by a group of ten non-OPEC countries (Russia, Mexico, Kazakhstan, Azerbaijan, Oman, Malaysia, South Sudan, Sudan, Bahrain and Brunei).

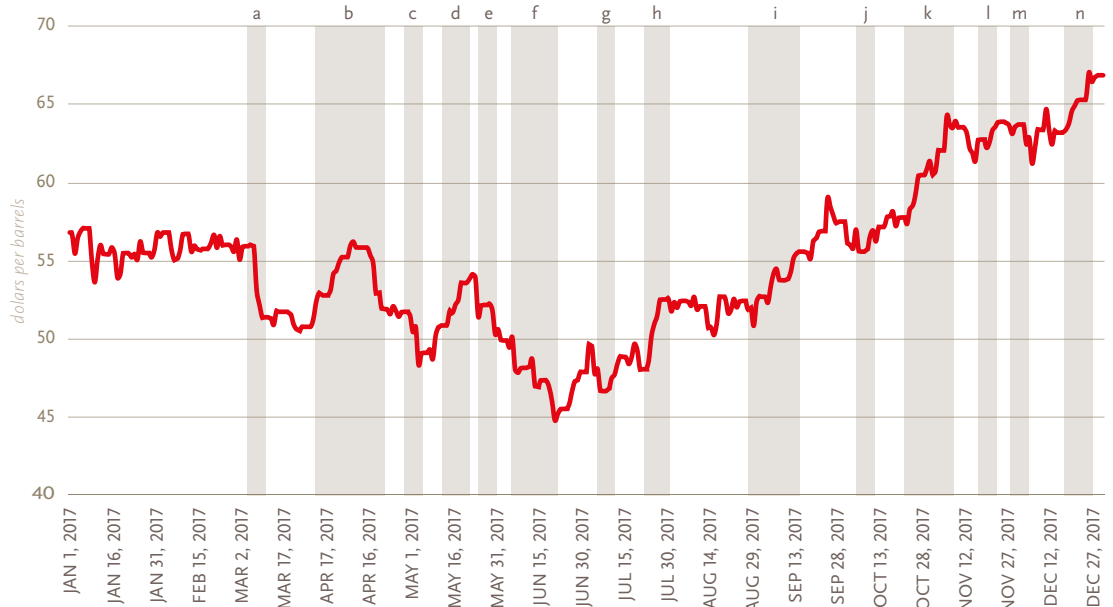
This agreed cut of about 1.8 million bbl/d in total, which will now last until the end of 2018, has reached a higher-than-expected level of compliance. This led to a sustained drop in inventories in the second half of 2017, causing a global deficit in the balance between supply and demand. In addition, geopolitical events (tension in Iraqi Kurdistan), natural disasters (intense hurricane season in the

US and Caribbean) and logistics problems (closure of major pipelines) also contributed to the price rebound in the second half of 2017.

In spite of the renewed balance achieved in supply and demand, certain risk factors could lead to a price correction: i) a far lower level of compliance with production cutbacks than seen to date; ii) a larger-than-expected increase in US production; and iii) lower-than-expected growth in the demand of emerging countries.

The Brent In January, the Brent price continued the upward trend of year-end 2017. The average price in January was \$69.2/bbl, which amounts to an increase of \$5/bbl on the December average, and nearly \$15/bbl on the average of January 2017. The forces driving up the price include geopolitical factors, notably the instability in Iran at the start of the month, in addition to fundamental factors arising from the improvement in the global economic outlook and the ongoing fall in inventories, particularly in the US. In short, the fundamentals side of supply and demand is showing the effects of the production cutback

Main milestones marking the price of Brent crude oil

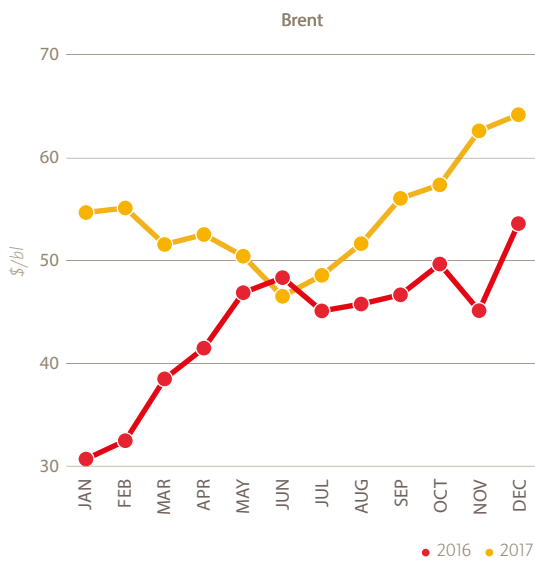


Source: Bloomberg and Repsol Research Unit

- a) Increase of production in the USA and bad signals in the demand.
- b) Forecast of extension of the OPEC agreement, but doubts about its effect on price.
- c) Doubts about China’s economic growth.
- d) Expectations prior to OPEC’s meeting.
- e) OPEC’s meeting (Vienna).
- f) Distress by OPEC’s findings and increased production in Libya.
- g) Significant changes in short positions in the market.
- h) Weakening of the dollar.
- i) Strong hurricanes in the USA.
- j) Tension in the Iraqi Kurdistan.
- k) Closure of the Keystone XL pipeline.
- l) Closure of the Forties pipeline and reduction of inventories in the USA.

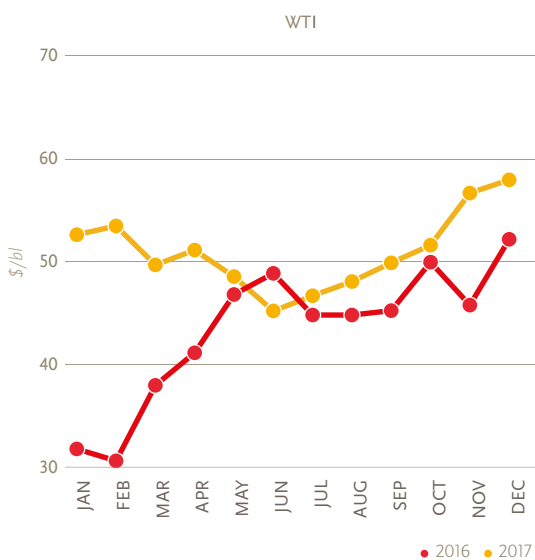
policy agreed by OPEC and some non-OPEC countries, in spite of the expected production increases that have occurred in the US. Moreover, the activity of non-commercial agents in petroleum oil financial markets also helped drive prices upward in January.

**Brent price evolution**



Source: Bloomberg and Repsol Research Unit

**West Texas Intermediate (WTI) price evolution**



Source: Bloomberg and Repsol Research Unit

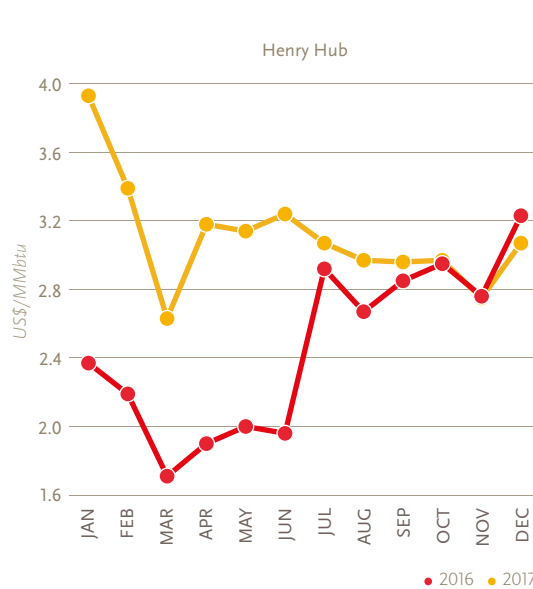
**Natural Gas - Henry Hub**

With respect to US natural gas, the average one-month futures price of HH was \$3.1/MMBtu in 2017 (increase of 26% on 2016), as a result of an adjustment of the supply-demand balance compared to the previous year. This adjustment was reflected in inventories which, at year-end, were 6% below the 2016 levels and compared to average level of the past five years. In this regard, the increase in exports of Liquefied Natural Gas (LNG), which nearly quadrupled, represented a key element for adjusting the balance sheet. In fact, in 2017, the US became a net exporter of natural gas in annual terms for the first time in its history since 1957.

In spite of the year-on-year price increase, it should be noted that in quarter-on-quarter terms, the trend was downward mainly due to the increase in the production of dry gas against a backdrop of weak demand. Specifically, the more temperate weather, following the cold waves of the start of the year, lower coal prices and higher hydraulic generation caused a 6% drop in electricity demand compared to 2016. For its part, US dry gas production increased by 1% on 2016.

**26%** ↑  
Henry Hub Price

**Henry Hub price evolution**



Source: Bloomberg and Repsol Research Unit

## 4. Financial performance and shareholder remuneration

**25%** ↑  
adjusted net income

### 4.1. Results

Million euros	2017	2016	Δ
Upstream	632	52	580
Downstream	1,877	1,883	(6)
Corporate and other	(104)	(13)	(91)
<b>Adjusted net income</b>	<b>2,405</b>	<b>1,922</b>	<b>483</b>
Inventory effect	104	133	(29)
Special items	(388)	(319)	(69)
<b>Net income</b>	<b>2,121</b>	<b>1,736</b>	<b>385</b>

EBITDA (million euros)	2017	2016
Upstream	3,507	2,072
Downstream	3,386	3,367
Corporate and other	(170)	(213)
<b>TOTAL</b>	<b>6,723</b>	<b>5,226</b>

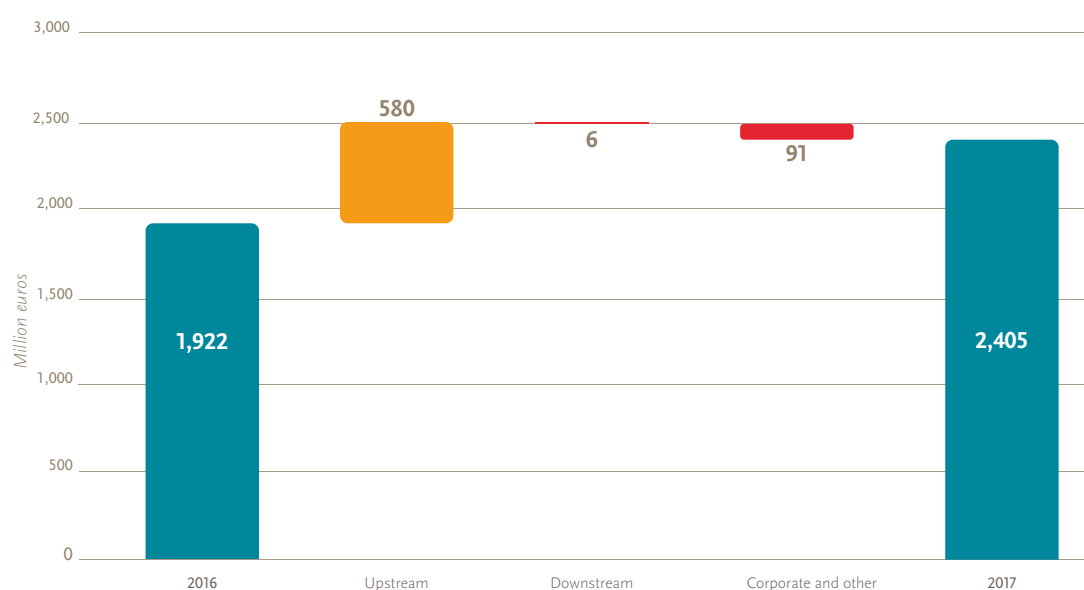
The results for 2017, compared to the same period in the previous year, occur in a more favorable environment, marked by the recovery of oil and gas prices (Brent + 24% and Henry Hub +26%) with a noteworthy increase in the last quarter of 2017, solid international refining margin indicators (around US\$7/bbl) as well as petrochemical margins, and a weaker dollar against the euro.

Against this backdrop, the Company, relying on the resilience of its integrated model, has continued to pursue its projects aimed at the enhancement of operating efficiency, realization of synergies and optimization of investment, within the scope of its 2016-2020 Strategic Plan.

**Adjusted net income** in 2017 amounted to €2,405 million, 25% higher than in the same period of 2016.

**29%** ↑  
EBITDA

#### Adjusted net income variation



## Upstream

Average **production** of 2017 amounted to 695 kboe/d, which is 1% higher than in 2016. The increased production was due to Libya (resumption of activity), Brazil (commencement of production in *Lapa* and the bringing on stream of new wells in *Sapinhoá*), Trinidad and Tobago and UK (launch of new projects, like *Juniper* area of MAR, *Flyndre* and *Shaw/Cayle*). This increase in production has been offset by the effect of divestments made in Indonesia (*Tanggung* and *Ogan Komering*) and Trinidad and Tobago (TSP), the natural decline of some fields and the lower gas exports to the Brazilian market in Bolivia.

In terms of **exploration activity**, fourteen exploratory wells and two appraisal wells were completed during the reporting period. The findings in six instances have been positive (five exploratory and one appraisal well) and in ten instances, they have been negative (one appraisal). Highlights, due to their potential, were the discoveries in Alaska (*Horseshoe-1* and *Horseshoe-1A*) and in Trinidad and Tobago (*Savannah* and *Macadamia*), see section 5.1.

**Upstream adjusted net income** amounted to €632 million, well up on the same period in the previous year (€52 million). This significant

improvement was due to the increase in the realization prices of crude oil and gas because of the better environment, the higher volumes sold, driven mainly by Libya and Brazil and lower operating costs. These positive effects are partially offset by higher corporate tax as a result of the higher income, the increase of amortization and depreciation due to the increasing exploration costs, as well as the 2016 effect of the reversal of abandonment provisions.

**Upstream EBITDA** amounted to €3,507 million, up 69% on the same period the previous year, driven by the improvement in operating results.

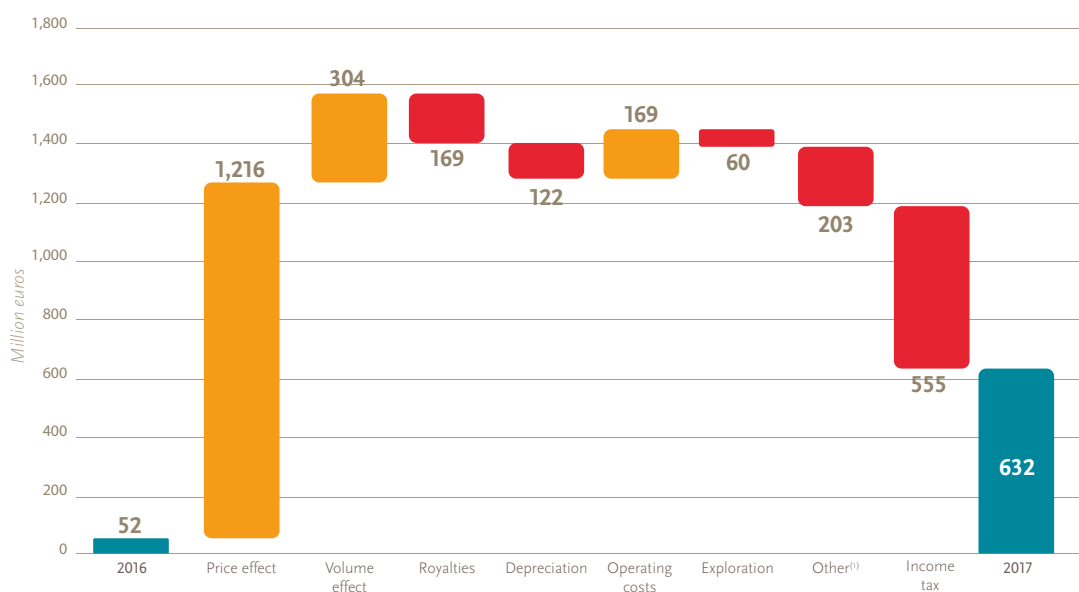
**Net capital expenditure** amounted to €2,072 million in 2017. Gross operating investment has been undertaken mainly in:

- Investment in production and/or development assets: (77%): mainly in the U.S. (21%), Trinidad and Tobago (16%), Canada (12%), Brazil (9%), Algeria (8%), the UK (6%) and Malaysia (5%).
- Investment in exploration (20%): mainly in Colombia (13%), Trinidad and Tobago (11%), Bolivia (9%), Indonesia (8%), Vietnam (8%), Bulgaria (8%), the US (6%) and Algeria (5%).

€580 million  
adjusted net income

69% ↑  
EBITDA

### Upstream adjusted net income variation



(1) Includes income from investees, the effect of exchange rate and other.

**€1,877**  
million  
adjusted net  
income

### Downstream

**Adjusted net income** in 2017 amounted to €1,877 million, which is in line with the same period of 2016.

Change in result due mainly to:

- In **Refining**, strong results continued, boosted by a more favorable international environment (better margin indicator of \$6.8 vs. \$6.3/bbl in Spain and in Peru \$5.4 vs. \$3.1/bbl) and larger volumes of distillation in plants due to high utilization levels (94% in Spain and 90% in Peru), which offset higher amortizations and depreciation and the negative exchange rate effect (at year-end, \$1.20 vs. \$1.05 /€ in 2016).
- In **Chemicals**, which maintain good international margins from the previous year, income decreased due to the rise in the price of naphta and the higher variable costs due to plant shutdowns.
- Better income in **Trading**, mainly from crude oil transactions in Brazil, and the recovery of the **Gas&Power** business in North America, driven by larger volumes sold and lower costs.

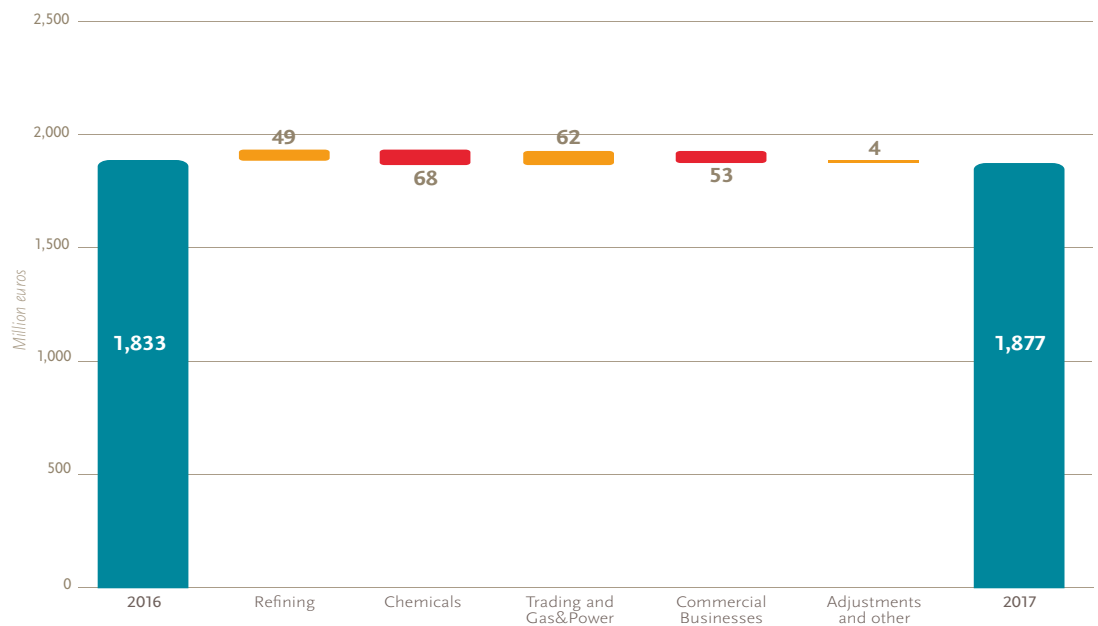
- In **Commercial Businesses**, better Marketing results in Spain due to larger margins and volumes, the improvement of non-oil activity and the lower amortizations and depreciation. On the contrary, income from the LPG business decreased due to the smaller margins from regulated LPG containers in Spain, the absence of the 2016 income from indemnities pursuant to the regulated maximum price formula for LPG containers in 2008-2010 and from the business sold off in 2016 (piped gas in Spain and LPG Peru and Ecuador).

**Downstream EBITDA** totaled €3,386 million (compared to the €3,367 million recorded in the same period of 2016).

**Net Downstream investment** in 2017 amounted to €757 million (vs. -€496 million in 2016, when significant divestments were made). Gross investment increased by 8% on the same period of 2016. The largest investments were undertaken to enhance energy efficiency and safety and the environment, and for multi-year shutdowns of refineries in Spain and the remodeling of the gasoline block in the Pampilla refinery in Peru.

**€3,386**  
million  
EBITDA

Downstream adjusted net income variation



## Corporate and other

Results (-€104 million) were lower than in 2016 (-€13 million). The reduction of corporate costs in Madrid and Calgary and lower debt interest could not offset the lower contribution of Gas Natural Fenosa (after the reduction of the stake in 2016, as the worse performance of electricity in Spain and higher personnel expenses have been compensated with the gains from divestments) and the absence of gains on the repurchase of ROGCI bonds carried out in 2016.

The **inventory effect** amounted to €104 million, which was due to price trends during the year.

**Special items** amounted to -€388 million which are mainly explained by the following:

- The *impairment* of assets amounting to -€635 million, with a highlight on provisions in Venezuela (-€695 million; for both impairment of fixed assets and credit risk) and net reversal of assets in North America, mainly in *Marcellus* (U.S.) and in assets in Canada (+94 million euros), and
- In *provisions and others*, the net effects of the reversal of the provision for obligations related to the Group's stake in RSRUK (+€911 million) the impact of the tax reform in the US (-€406 million) and net provisions for other risks (€-154 million).

(Million euros)		
Special items	2017	2016
Divestments	(51)	737
Workforce restructuring charges	(64)	(393)
Impairment	(635)	(434)
Provisions and other	362	(229)
<b>TOTAL</b>	<b>(388)</b>	<b>(319)</b>

As a result of the foregoing, **net income** amounted to €2,121 million, up 22% on 2016.

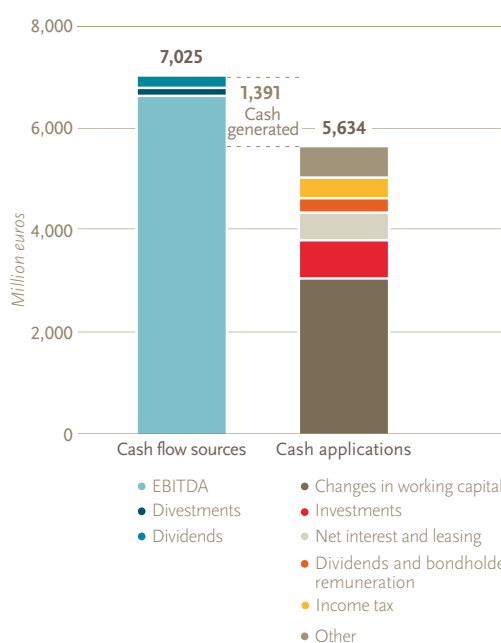
Performance indicators	2017	2016
Return on average capital employed (ROACE) (%)	7.4	5.8
Earnings per share (€/share)	1.35	1.11

## 4.2. Cash flow

**Free cash flow** in 2017 came to €2,560 million, compared to €4,323 million in 2016. The sizable improvement of EBITDA has been offset by the absence of significant divestments in the period.

Cash flow (million euros)	2017	2016
EBITDA	6,723	5,226
Changes in working capital	(751)	(777)
Dividends received	218	383
Income tax receipts/(payments)	(357)	(283)
Other receipts/(payments)	(327)	(717)
<b>I. Cash flow from operations</b>	<b>5,506</b>	<b>3,832</b>
Payments on investments	(3,030)	(3,157)
Proceeds from divestments	84	3,648
<b>II. Cash flow from investments</b>	<b>(2,946)</b>	<b>491</b>
<b>Free cash flow (I + II)</b>	<b>2,560</b>	<b>4,323</b>
Dividends and other equity instruments	(332)	(420)
Net interest and leasing	(544)	(600)
Treasury shares	(293)	(92)
<b>Generated cash flow</b>	<b>1,391</b>	<b>3,211</b>

### Cash sources and applications



**44%** ↑  
Cash flow from operations

**7.4%**  
ROACE of the period

€1,391 million generated cash flow

The notorious increase in **cash flow from operations** (+44%) was due mainly to the increase of EBITDA stemming from the improvement of *Upstream* operating income due to the increase in the prices of crude oil and products, the collection of the indemnities pursuant to the judgements related to the regulated maximum price formula for LPG containers and, to a lesser extent, the decrease in workforce restructuring charges (2016 collective dismissal). Conversely, receipts decreased on dividends of Gas Natural Fenosa and payments for taxes increased.

**Cash flow from investments** totaled -€2,946 million, compared to €491 million in 2016, which included income from divestments in that year (€3,648 million). In 2017, the Company continued with its efficiency program, optimising investments with a decrease of 4%. Notable efforts were made in *Upstream* and, more intensely, in exploration (17% reduction).

As a result, **free cash flow** amounted to €2,560 million (€4,323 million in 2016). Following payment, among other items, of finance costs (-€544 million) and shareholder remuneration (-€332 million), the Company **generated a cash flow** of €1,391 million.

### 4.3. Financial overview

In line with the commitment to bolster the Group's financial structure, measures continued to be taken in 2017 to reduce debt and improve the Group's credit rating (in the case of S&P, the rating improved from BBB- to BBB with a stable outlook; for Moody's and Fitch, the outlook improved 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 year and available credit lines amply exceed the maturity dates of its short-term debt.

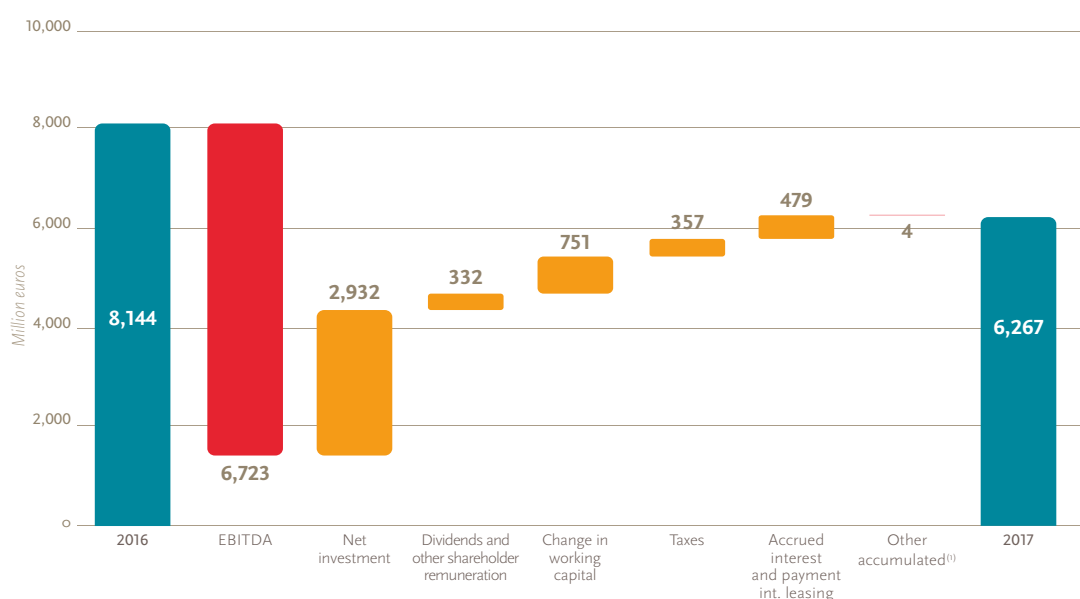
#### Indebtedness

The **net debt** at December 31, 2017 is €6,267 million, significantly lower than at the same date last year (€8,144 million), due to the improvement in the cash flow generated by the businesses driven mainly by the *Upstream* segment, discipline in investments and the lower costs of borrowing.

€1,877 million of net debt reduction



Net debt variation



(1) Mainly includes treasury stock transactions, receipt of dividends, other payments of exploitation activities 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 for the nominal amount of €886 million, 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, maturing in 2022 and carrying a fixed annual coupon of 0.50%. This represents the first issue of a **"green bond"** 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.
- In July 2017, ROGCI obtained the necessary number of consents from holders of its outstanding US dollar bonds to amend certain terms and conditions of these issues, mainly in order to: (i) replace ROGCI's reporting duties with the periodic financial information published by Repsol; and (ii) remove the merger covenant in order to optimize the Group's operating and financial flexibility. In addition, ROGCI repurchased and canceled bonds in the amount of \$87 million.

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 matures or is canceled.

- In September 2017, ROGCI repurchased and canceled a 6.625% fixed annual bond maturing in December 2017 for a total of £266 million.
- In November 2017, ROGCI repurchased and canceled a 7.750% fixed annual bond maturing in June 2019 for a total of \$403 million.

### Green bond

Further information at  
[www.repsol.com](http://www.repsol.com)

## Debt maturities

The **maturity dates for gross debt** at December 31, 2017 are as follows:

Million euros	
Gross debt <sup>(1)</sup> (2)	Total
Maturity 2018	4,144
Maturity 2019	1,415
Maturity 2020	1,982
Maturity 2021	1,108
Maturity 2022	591
Maturity 2023 and subsequent years	2,444
<b>TOTAL</b>	<b>11,684</b>

### Bond maturities

Year	Currency	Nominal amount	Coupon	Maturity
2018	€	750 <sup>(3)</sup>	4.38	feb-18
	€	600	Euro 3M+bp	jul-18
2019	€	1,000 <sup>(3)</sup>	4.88	feb-19
	€	100	0.125	jul-19
2020	€	1,200 <sup>(3)</sup>	2.63	may-20
	€	600 <sup>(3)</sup>	2.13	dec-20
2021	\$	237 <sup>(4)(5)</sup>	3.75	feb-21
	€	1,000 <sup>(3)</sup>	3.63	oct-21
2022	€	500 <sup>(3)</sup>	0.50	may-22
	€	500 <sup>(3)</sup>	2.25	dec-26
	\$	50 <sup>(4)</sup>	7.25	oct-27
	€	100 <sup>(3)</sup>	5.38	jan-31
	\$	88 <sup>(4)</sup>	5.75	may-35
	\$	102 <sup>(4)</sup>	5.85	feb-37
2023 and subsequent years	\$	115 <sup>(4)</sup>	6.25	feb-38
	\$	57 <sup>(4)</sup>	5.50	may-42
	€	1,000 <sup>(6)</sup>	4.50	mar-75

(1) Does not include the perpetual subordinated bond issued by RIF on March 25, 2015 in the amount of €1,000 million.

(2) Includes interest and exchange rate derivatives.

(3) Issues of RIF under the "Euro 10,000,000,000 Guaranteed Euro Medium Term Note Programme (EMTNs)" guaranteed by Repsol, S.A.

(4) Issues placed through ROGCI under the "Universal Shelf Prospectus" debt issue programs guaranteed by Repsol, S.A.

(5) Issue repurchased on January 17, 2018 for \$251 million.

(6) 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.

Additionally, RIF holds a Euro Commercial Paper (ECP) Programme guaranteed by Repsol, S.A., with a limit up to €2,000 million; the outstanding balance at December 31, 2017 was €1,710 million.

**17.3%**  
leverage  
ratio

## Financial prudence

Group liquidity, including committed and undrawn credit facilities, stood at €7,554 million at December 31, 2017, which is enough to cover its short-term debt maturities by a factor of 1.8. Repsol had undrawn credit lines amounting to €2,503 and 4,429 million at December 31, 2017 and 2016, respectively.

Indicators of financial position	12/31/2017	12/31/2016
Net financial debt (€ million)	6,267	8,144
Net financial debt / EBITDA (x times)	0.9	1.6
Net financial debt / Total capital employed (%)	17.3	20.7
Liquidity / Gross short-term debt (x times)	1.8	2.3
Debt interest / EBITDA (%)	5.2	8.2

## Treasury shares and own equity investments

In 2017, no transactions involving treasury shares or own equity investments were performed. For further information, see Note 6.2 “*Treasury shares and own equity investments*” of the consolidated financial statements.

## Average payment period to suppliers

The average payment period to suppliers for the Group's Spanish companies was 25 days in 2017, which is generated a cash flow the maximum 60-day limit stipulated by Law 15/2010, of July 5 (amended by final provision two of Law 31/2014), which establishes measures to combat late payment in commercial transactions. For further information, see Note 19 “*Trade payables and other payables*” of the 2017 consolidated financial statements.

## Credit rating

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

**€7,554M**  
liquidity

Term	Standard & Poor's		Moody's		Fitch	
	Repsol, S.A.	ROGCI	Repsol, S.A.	ROGCI	Repsol, S.A.	ROGCI
Long-term	BBB	BBB	Baa2	Baa2	BBB	BBB
Short-term	A-2	A-2	P-2	NR	F-3	F-3
Outlook	stable	stable	stable	stable	stable	stable
Last date of change	11/28/2017	11/28/2017	6/22/2017	6/22/2017	5/16/2017	5/16/2017

## 4.4. Shareholder remuneration

Repsol does not have a formal policy on dividends, and the Company's decisions on remuneration of shareholders depend on various factors, including the performance of its businesses and its operating results.

The remuneration received by shareholders in 2017 and 2016 under the "Repsol Flexible Dividend" program<sup>1</sup> is as follows:

- Remuneration of €0.76 per share<sup>2</sup> in 2017. Repsol paid out a gross total of €288 million to shareholders and distributed 61,751,953 new shares, worth €840 million, to those shareholders opting to take their dividend in the form of new company shares.
- Remuneration of €0.76 per share<sup>3</sup> in 2016. In 2016 Repsol paid out a gross total of €377 million to shareholders and distributed 65,283,041 new shares, worth €697 million, to those shareholders opting to take their dividend in the form of new company shares.

In addition, in January 2018, under the "Repsol Flexible Dividend" program, replacing what would have been the interim dividend from 2017 profits, Repsol paid out €153 million in cash (€0.388 gross per right) to those shareholders opting to sell their bonus share rights back to the Company and delivered 29,068,912 shares, worth €440 million, to those opting to take their dividend in the form of new company shares.

At the date of the authorization for issue of the Management Report, the Board of Directors is expected to submit a proposal to shareholders at the next Annual General Meeting to continue the

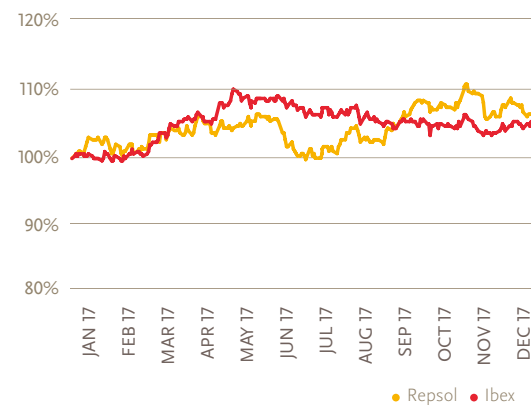
"Repsol Flexible Dividend" program, through the implementation of a capital increase charged to voluntary reserves from retained earnings, on the same dates as those on which the company has traditionally paid the final dividend.

### Our share price

The Repsol share price rose by 10% in 2017, outperforming the Ibx 35 and in line with the average of its peers in the European Oil & Gas sector.

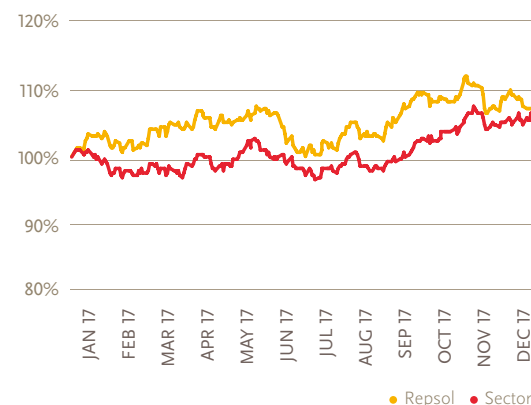
**€0.76**  
per share  
Of shareholder remuneration

Repsol share price vs. the Ibx 35



Source: Bloomberg

Repsol vs. the European oil sector



Source: Bloomberg

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

1. For additional information on the total remuneration received by shareholders and the aforementioned capital increases issued under the "Repsol Flexible Dividend" program, see section "Share capital" of Note 6 "Equity" of the consolidated financial statements.

2. This includes the amount of the irrevocable commitment to purchase free-of-charge allocation rights assumed by Repsol in the two capital increases concluded in January and July 2017 (€0.335 and €0.426 gross per right, respectively).

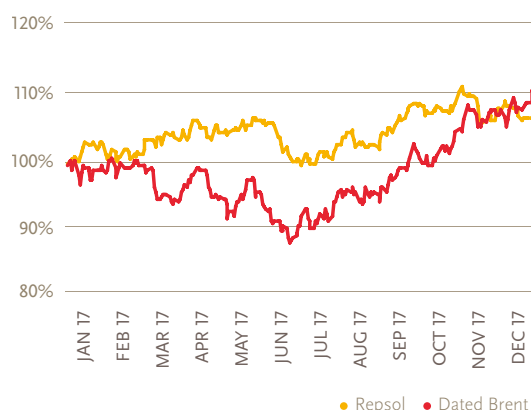
3. This includes the amount of the irrevocable commitment to purchase free-of-charge allocation rights assumed by Repsol in the two capital increases concluded in January and July 2016 (€0.466 and €0.292 gross per right, respectively).

**10%**  
share  
revalorization

Up to the middle of the year, the share price was adversely influenced by the weakness of crude prices, which weighed down the sector as a whole and caused the share price to close the first half of the year slightly down. However, progress in achieving the targets of the 2016-2020 Strategic Plan, combined with the improvement in leading macroeconomic indicators, gave a strong boost to the share price in the second half of the year.

Brent crude, which was below 50 dollars a barrel from the start until the middle of the year, saw a major recovery in the second half of the year that lifted it to its highest price in two and a half years, closing at above 65 dollars a barrel by year end.

#### Repsol vs. Brent Crude



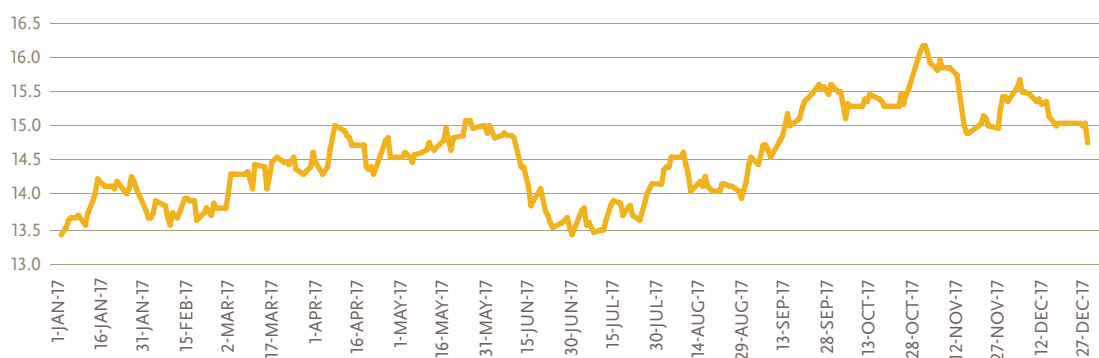
Source: Bloomberg

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

Main stock market indicators	2017	2016
Shareholder remuneration (€/share) <sup>(1)</sup>	0.76	0.76
Share price at period-end <sup>(2)</sup> (€)	14.75	13.42
Period average share price (€)	14.57	11.29
Maximum price of the period (€)	16.16	13.83
Minimum of the period price (€)	13.40	8.02
Number of shares outstanding at end of the year (million)	1,527	1,466
Market capitalization at end of the year (million euros) <sup>(3)</sup>	22,521	19,669
PER <sup>(4)</sup>	10.9	11.6
Dividend yield (%) <sup>(5)</sup>	5.7	7.5
Book value per share (€) <sup>(6)</sup>	19.5	20.6

- (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) Year-end closing market price per share, times the number of shares in circulation.
- (4) Year-end closing market price per share / Earnings per share attributable to the parent company
- (5) Remuneration per share for each year / Share price at end of previous year.
- (6) Equity attributed to the parent/Number of shares outstanding at year-end.

#### Share price evolution



# 5. Performance of our businesses



## 5.1. Upstream<sup>1</sup>

### Our activities

- **New areas:** Identification and entry into new projects (organic or inorganic growth).
- **Exploration:** Geology, geophysics activities and drilling exploratory wells in the search for hydrocarbon resources.
- **Evaluation:** Drilling appraisal wells, definition of the resources discovered and determination of the commercial viability.

- **Development:** Drilling production wells and facilities for starting production of the reserves.
- **Production:** Commercial exploration of hydrocarbons.
- **Decommissioning:** Abandonment and reconditioning of all facilities in order to leave the area in the same environmental conditions as prior to the start of exploitation and production activities.

**695 Mboe/d**  
net  
production

Main operational figures	2017	2016
Net undeveloped acreage (Km <sup>2</sup> )	199,599	277,027
Net developed acreage (Km <sup>2</sup> )	5,783	4,862
Reserves of crude oil, condensate and LPG (MMb)	617	584
Natural gas reserves (MMboe)	1,738	1,798
Reserve replacement ratio (%) <sup>(1)</sup>	89	103
Total production of liquids (kbb/d)	255	243
Total net gas production (Mboe/d)	440	447
Total net hydrocarbon production (Mboe/d)	695	690
Average crude oil price (\$/bbl)	49.6	39.0
Average gas price (\$/kscf)	2.9	2.4
Bonds, dry wells, and general and administration expenses <sup>(2)</sup>	457	443

(1) Reserve replacement ratio (calculated by dividing total additions of proven reserves in the period by production for the period).

(2) Only costs directly assigned to exploration projects.

### Main events of the period

- Average net **production** was 1% higher than in 2016, up to 695 Mboe/d. The increase is mainly due to the resumption of production in Libya, the addition of new wells in Sapinhoá and Lapa in Brazil, and the implementation of new projects in Trinidad and Tobago, (*Juniper*) and in UK (*MAR* area and *Flyndre and Shaw/Cayle*) offset by the loss of production resulting from the disposal of assets in Indonesia (*Tangguh* and *Ogan Komering*) and Trinidad and Tobago (TSP), the lower demand in the Brazilian market for exports from Bolivia, the natural decline in the United States and the decline and cease of activity in the Norway fields.

### Our performance in 2017

Million euros	2017	2016	Δ
Operating income	1,009	(87)	1,096
Income tax	(408)	147	(555)
Investees and non-controlling interests	31	(8)	39
<b>Adjusted net income<sup>(1)</sup></b>	<b>632</b>	<b>52</b>	<b>580</b>
Special items	(151)	(1,013)	862
<b>Net income</b>	<b>481</b>	<b>(961)</b>	<b>1,442</b>
Effective tax rate (%)	(40)	168	(208)
<b>EBITDA</b>	<b>3,507</b>	<b>2,072</b>	<b>1,435</b>
<b>Net investments</b>	<b>2,072</b>	<b>1,889</b>	<b>183</b>

(1) Detail of adjusted net income by geographical area:

Geographical area	2017	2016	Δ
Europe, Africa and Brazil	355	167	188
Latin America	386	234	152
North America	(43)	9	(52)
Asia and Russia	161	(4)	165
Exploration and other	(227)	(354)	127
<b>Adjusted net income</b>	<b>632</b>	<b>52</b>	<b>580</b>

- **Exploratory campaign:** in 2017, drilling of 14 exploratory wells and 2 appraisal wells was concluded, 6 with positive results (5 exploratory wells and 1 exploratory well) and 10 negative (all exploratory except one appraisal well). At year end, 8 appraisal wells were still ongoing.
- The evolution of **reserves** was positive, with the addition of a total of 227 MMboe, mainly from extensions and discoveries in the United States, and revisions of previous estimates in Trinidad and Tobago, Brazil, Vietnam and the US.
- In 2017, there were 138 **non-significant ceases of activity** due to the closure of wells in different onshore operating areas, and 9 in offshore areas.

**227** ↑  
**MMboe**  
evolution of  
reserves

1. For more information, see "Information on oil and gas exploration and production" at [www.repsol.com](http://www.repsol.com).

# North America

**504MMboe** **63MMboe**

proven  
reserves

net  
production



## Performance of operations

	2017	2016
Net developed acreage (Km <sup>2</sup> )	2,199	2,184
Net undeveloped acreage (Km <sup>2</sup> )	8,538	20,473
Net developing acreage (Km <sup>2</sup> )	5,234	5,316
Net exploration acreage (Km <sup>2</sup> )	5,503	17,342
Total proven reserves (MMboe)	504	496
Exploratory wells completed and in progress <sup>(1)</sup> :		
Positive	1	-
Negative	-	-
Under evaluation	-	-
Ongoing	2	-
Finished development wells:		
Positive	153	150
Negative	-	-
Under evaluation	-	-
Net production of liquids (MMb)	18	20
Net production of natural gas (bcf)	256	262
Total production (MMboe)	63	67
Oil production wells	2,657	2,924
Gas production wells	2,219	2,610
Average crude oil realization price	47.4	36.5
Average gas realization price	14.6	11.4

(1) Does not include appraisal wells: 1 positive in 2017, and 1 under evaluation in 2016.

## Sustainability performance

	2017	2016
No. employees	961	1,038
% women	33	33
% of women in leadership positions	24	21
Hydrocarbon spills (>1bbl) (t)	17.63	5.8
CO <sub>2</sub> e emissions (Mt)	1.23	1.51
TRIR	3.16	1.96
PSIR	3.08	1.91
Voluntary social investment (€ thousand)	1,083	1,451

## Main events of the period

- On March 9, the announcement was made of the discovery, in the **Horseshoe-1** and **Horseshoe-1A** drillings in **Alaska**, confirming that the *Nanushuk* formation has one of the highest potentials of the prolific *North Slope* zone, extending it 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 work, which will allow the development plan to be defined, is currently pending completion, with production expected to begin in 2022. Repsol has a 25% stake in this discovery.
- In the second quarter, following the studies carried out on its potential, Repsol has agreed on the early withdrawal from 9 marginal blocks to the north of the **North Slope area in Alaska**.
- On June 19, the Mexican National Hydrocarbons Commission (CNH) awarded Repsol **an exploration block in Mexico in the shallow waters** of the Exploration Round 2. Block 11 has got a total surface area of 593 km<sup>2</sup> in the southeast basin. Repsol is the 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.
- In the first semester, Repsol has acquired **in Canada** (up to a 35% interest) a portion of its partner Delphy's stake in assets in the *Bigstone* zone of Alberta, in the *Greater Edson* production area. Also in Alberta, Repsol has acquired a stake in *Gilby* the *Duvernay* Area.



# 5,503 km<sup>2</sup>

net exploration  
acreage

- On August 16, as part of the Exploration Round 249 in the US **Gulf of Mexico**, Repsol (operator, 50% W.I.) was awarded four new exploration blocks (blocks 77, 78, 121 and 122) in the Garden Banks.
- On September 7, Repsol (which holds a 22,5% stake) and its partners announced that they had met a number of key milestones to commence **execution of the Buckskin project**. This large-scale project for the development of deep water has been previously outlined by a number of wells, and it will have an underwater link with the *Lucius Spar* operated by *Anadarko* and located in blocks 785, 828, 829, 830, 871 and 872 of *Keathley Canyon* in the Gulf of Mexico, approximately 6,800 feet underwater. Toward the end of January 2018, the drilling operations envisaged in the development program and the bringing on stream of the discovery were initiated. To perform development drilling at *Buckskin*, the company has decided to use the *Seadrill West Neptune* drilling platform, a cutting edge, sixth-generation, class DP3 vessel for drilling in deep waters.
- In the **Alaska North Slope Areawide Lease Sale**, Repsol was awarded 45 new exploration blocks located to the south of the discoveries made in the first semester of 2017 with the probes *Horseshoe-1* and *Horseshoe-1A* wells in the *Nanushuk* formation.
- In **Mexico**, Repsol was awarded, with different consortia, three new blocks (Blocks 10, 14 and 29) in the deep water exploration round held on January 31, 2018.

Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
United States	Shenzi	28.00%	P	L-G	Deep waters of the Gulf of Mexico to the southeast of the state of Louisiana.
United States	Midcontinent	7.24%	P	L-G	Gas with associated liquids in the Mississippi basin in the states of Kansas and Oklahoma
United States	Eagle Ford	35.41%	P	L-G	Unconventional onshore gas assets with associated liquids to the south of the state of Texas
United States	Marcellus	83.96%	P	G	Unconventional assets of shale gas mainly in the states of Pennsylvania, New York and West Virginia.
United States	Buckskin	22.50%	D	L-G	Deep waters of the Gulf of Mexico to the southwest of the state of Louisiana
United States	Horseshoe	49.00%	D	L-G	New development area in Horseshoe discovery in the north of Alaska
United States	North Slope	Average 28.72%	E	--	Extensive, mainly onshore, exploration area in the north of Alaska
United States	Leon	60.00%	E	L-G	Exploratory asset in the deep waters of the Gulf of Mexico to the southwest of the state of Louisiana
Canada	Greater Edson	Average 63.82%	P	L-G	Production area in the heart of the state of Alberta Unconventional
Canada	Chauvin	Average 67.41%	P	L-G	Heavy crudes located in Alberta/Saskatchewan Unconventional
Canada	Duvernay	Average 95.15%	P	L-G	Area in development phase, with crude and gas production, in the central region of Alberta Unconventional

(1) Further information in Appendix II of the consolidated financial statements.

(2) P: Production / D: Development / E: Exploration / L: Liquids / G: Gas

# Latin America

## 1,490MMboe 127MMboe

proven  
reserves

net  
production



Performance of operations	2017	2016
Net developed acreage (Km <sup>2</sup> )	688	715
Net undeveloped acreage (Km <sup>2</sup> )	51,550	57,207
Net developing acreage (Km <sup>2</sup> )	4,475	4,736
Net exploration acreage (Km <sup>2</sup> )	47,763	53,186
Total proven reserves (MMboe)	1,490	1,525
Finished and ongoing exploratory wells <sup>(1)</sup> :		
Positive	3	-
Negative	4	2
Under evaluation	-	-
Ongoing	5	1
Finished development wells		
Positive	69	52
Negative	2	2
Under evaluation	3	7
Net production of liquids (MMb)	38	39
Net production of natural gas (bcf)	498	486
Total net production (MMboe)	127	125
Oil production wells	873	953
Gas production wells	241	216
Average crude oil realization price	47.0	37.1
Average gas realization price	13.3	11.0

(1) Does not include appraisal wells: 1 negative in 2017 and 5 in 2016, 1 positive, 2 negatives and 2 ongoing.

Sustainability performance	2017	2016
No. employees	1,234	1,322
% women	25	25
% of women in leadership positions	20	18
Hydrocarbon spills (>1bbl) (t)	11	0
CO <sub>2</sub> e emissions (Mt)	0.96	1.41
TRIR	1.71	0.83
PSIR	0.80	0.13
Voluntary social investment (€ thousand)	5,250	4,597

### Main events of the period

- On January 19, exploratory drilling PTJ-X5 in **Bolivia** in the *Patujú* 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 April 16, exploratory drilling PTJ-WX1 in **Bolivia** in the *Patujú* block (48.33% Repsol) ended with a positive result.
- 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 off **Brazil**. The third production well came on stream in the middle of the year.





47,763 km<sup>2</sup>

net exploration  
acreage

- On May 29, drilling ended at *Siluro 1B*, in **Colombia** block RC-11 (Repsol 50%) with a negative result. The RC-11 block was reverted.
- On June 6, the discovery of gas was announced 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 about 150 meters. Repsol is participating in this block with a 30% interest (the other 70% is held by BP). The resources are estimated at around 2 billions cubic feet of gas (2 TCF), equivalent to over two years of gas consumption in Spain.
- In the second quarter, the launch of the project for the development of the *Angelin* gas field in BPTT in **Trinidad and Tobago** was approved, in which Repsol holds a 30% interest. Production is expected to begin in the first quarter of 2019.
- On June 13, the first congress was held in Peru (Lima) of Latin American professionals in the field of Community Relations and Human Rights. Nearly 20 people from seven countries shared success stories in countries where Repsol is a leader in areas such as open and informed consultation, grievance mechanisms, management of social investment, among other issues.
- 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<sup>2</sup>, 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 (37.50%), who will be the operating company, YPFB Andina, YPFB Chaco Shell and PAE.

# Latin America

## June

Announcement of the biggest gas volume discovery by Repsol in the last 5 years in Trinidad and Tobago.



- In August, gas production commenced in the *Juniper* field with the assets of the company BPTT in **Trinidad and Tobago**, where Repsol has a 30% interest.
- In September, the *Brama-1* exploratory well in the *Tayrona* offshore block of **Colombia** ended with negative results.
- On October 9, the National Agency of Petroleum (ANP) of Brazil announced the award of an exploratory block to Repsol as the operating company in the 14th round. The new exploratory block (ES-M-667) is located in the waters of the *Espirito Santo* Basin and first exploration block in **Brazil** since 2005.
- Also in October, Repsol won the 2nd round of the PSC for the Entorno de *Sapinhoá* block of Brazil, along with Petrobrás and Shell.
- In November, **gas production commenced in the Sagari field** in block 57 in the *Ucayali-Madre de Dios* Basin, one of the most prolific gas zones of Peru, where Repsol is the operator, with an interest of 53.84%. The other major discovery in block 57, *Kinteroni*, entered into production in 2014.

In our continuous process of relating with local communities, in early 2017 members of the Nuevo Mundo community mobilized in the proximity of Repsol facilities to demand larger compensation for the easement rights associated with the compression project. After some weeks of participative and transparent dialog, a long-term agreement was reached with the community. It was signed in the community assembly of February 28 pursuant to the laws of the indigenous community and the requirements of the law.



## November

Start of gas production in the Sagari field, in block 57 of the Peruvian Cusco region.

Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Trinidad and Tobago	BP TT	30.00%	P	L-G	Colombus offshore basin
Brazil	BM-S-9 ( <i>Sapinhó</i> )	15.00%	P	L-G	Ultra-deep waters in pre-salt area of Santos Basin
Brazil	BM-S-9 ( <i>Lapa</i> )	15.00%	P / D	L	Ultra-deep waters in pre-salt area of Santos Basin
Brazil	BM-S-50 ( <i>Sagitario</i> )	12.00%	E	L-G	Ultra-deep waters in pre-salt area of Santos Basin
Brazil	BM-C-33 ( <i>C-M-539</i> )	21.00%	E	L-G	Ultra-deep waters in pre-salt area of Campos Basin
Brazil	Albacora Leste	6.00%	P	L-G	Deep waters in Campos Basin
Bolivia	Margarita - Huacaya ( <i>Caipipendi</i> )	37.50%	P	L-G	Sub-Andean Sur basin in the south of the country
Bolivia	Sábalo	24.17%	P	L-G	Sub-Andean Sur basin in the south of the country
Bolivia	San Alberto	24, 17%	P	L-G	Sub-Andean Sur basin in the south of the country
Colombia	Equion	Average 21.32%	P	L-G	Llanos Basin in center of country
Colombia	CPO-9 Akacias	45.00%	P / D	L	Llanos Basin in center of country
Colombia	Cravo Norte	5.63%	P	L	Llanos Basin next to Venezuelan border
Peru	Camisea (blocks 56 and 88)	10.00%	P	L-G	Ucayali Basin in Andean region
Peru	Block 57 ( <i>Kinteroni &amp; Sagari</i> )	53.84%	P / D	L-G	Madre de Dios Basin (Andean region)
Venezuela	Cardón IV (Perla)	50.00%	P / D	L-G	Shallow waters of the Gulf of Venezuela basin
Venezuela	Quiriquire	40.00%	P	L-G	Maturin onshore basin
Venezuela	Barua Motatan	40.00%	P	L	Maracaibo onshore basin
Venezuela	Mene Grande	40.00%	P	L	Maracaibo onshore basin
Venezuela	Carabobo	11.00%	P / D	L	Heavy crudes of Orinoco Petroleum Belt in the southeast of country

(1) For further more information see Appendix II of Consolidated financial statements.

(2) P: Production / D: Development / E: Exploration / L: Liquids / G: Gas.

## Asia and Oceania

# 174 MMboe

proven  
reserves

# 31 MMboe

net  
production



Performance of operations	2017	2016
Net developed acreage (Km <sup>2</sup> )	982	564
Net undeveloped acreage (Km <sup>2</sup> )	99,721	113,633
Net developing acreage (Km <sup>2</sup> )	4,105	4,638
Net exploration acreage (Km <sup>2</sup> )	96,598	109,560
Total proven reserves (MMboe)	174	174
Finished and ongoing exploratory wells <sup>(1)</sup> :		
Positive	1	-
Negative	2	6
Under evaluation	-	2
Ongoing	-	-
Finished development wells		
Positive	31	46
Negative	1	-
Under evaluation	3	-
Net production of liquids (MMb)	9	11
Net production of natural gas (bcf)	122	137
Total net production (MMboe)	31	36
Oil production wells	606	621
Gas production wells	78	91
Average crude oil realization price	51.2	39.4
Average gas realization price	29.6	25.1

(1) Does not include appraisal wells: 1 positive in 2016.

Sustainability performance	2017	2016
No. employees	1,038	1,141
% women	27	27
% of women in leadership positions	18	15
Hydrocarbon spills (>1bbl) (t)	0	1,9
CO <sub>2</sub> e emissions (Mt)	8.38	9.67
TRIR	1.16	0.96
PSIR	0.25	0.72
Voluntary social investment (€ thousand)	1,779	446

### Main events of the period

- On April 6, drilling P-8 ended; this is situated in the **Russian Karabashsky-1** block (73.63% stake), and was declared negative.
- 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 the 07/03 block of **Vietnam** 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. Repsol has a 51.75% interest in the project following the purchase, in the first half of 2017, of an additional 5% from the company Pan Pacific.
- On November 1, the **first encounter of Asian professionals on community relations and human rights** was held in Ho Chi Minh City. The meeting helped strengthen processes in all countries of the ROGCI origin region, in accordance with the company's framework for management of community relations and human rights. Case studies of countries were also presented on social investment, social context, participative dialog and impacts on human rights.
- 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 on June 8. Following the development drilling carried out in the second half of the year and the connection and start-up work on the platform, in October, crude oil production commenced in this redevelopment project in Malaysia.



# 96,598km<sup>2</sup>

net exploration  
acreage

- On June 29, an agreement was reached with the Russian company Gazprom Neft under which the latter acquired Repsol's 25% stake in the company Eurotek Yugra. Thus, Repsol and Gazprom Neft will manage Eurotek Yugra on a joint basis. 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.
- In the first half of the year, Repsol sold its 50% interest in the *Ogan Komering* block of **Indonesia** to the company Jadestone.
- In September, the 136-CKN-1X exploratory well in the 136 offshore block of **Vietnam** ended with a positive result.
- In September, a **new well in the 15-2/01 block (HST/HSD) of Vietnam**, in which Repsol has a 60% interest, came on stream.
- In September, it was announced that the installation of the new *Wellhead* platform in the northern zone of the **PM-3 CAA block** had been successfully completed in as part of the 6th phase of this development project in **Malaysia**. The new platform (called *Bunga Pakma*) will bring about increases in production in mid-2018 following the tender process for of connection and start-up work, in addition to development drilling activities.
- In October, the Ayu-1 exploratory well in the East Jabung block **Indonesia** ended with negative results.

Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Russia	SNO	49.00%	P	L	Diverse assets in the Volga-Urals Basin
Russia	TNO	49.00%	P	L	Diverse assets in the Volga-Urals Basin
Russia	Karabashky	73.62%	E	L - G	Exploratory blocks located in the West Siberia Basin
Indonesia	Corridor	36.00%	P	L-G	Onshore asset in the South Sumatra Basin
Malaysia	PM3 CAA	41.44%	P	L-G	Offshore production block in the west of the Malay Basin
Malaysia	Kinabalu	60.00%	P	L	Offshore production block in the west of the Malay Basin
Vietnam	Block 15-2/01 (HST / HSD)	60.00%	P	L-G	Offshore assets in the Cuu Long Basin
Vietnam	Block 07/03 (CRD)	51.75%	D	L-G	Block under development in Nam Con Son offshore basin

(1) For further more information see Appendix II of Consolidated financial statements.

(2) P: Production / D: Development / E: Exploration / L: Liquids / G: Gas.

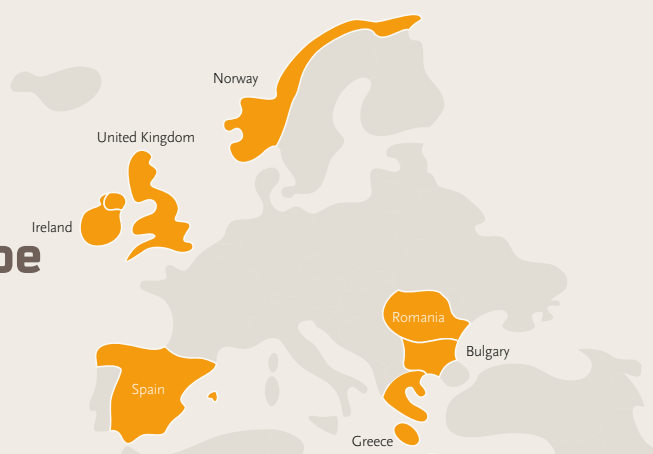
# Europe

## 59MMboe

proven  
reserves

## 19MMboe

net  
production



Performance of operations	2017	2016
Net developed acreage (Km <sup>2</sup> )	680	686
Net undeveloped acreage (Km <sup>2</sup> )	15,891	28,888
Net developeing acreage (Km <sup>2</sup> )	1,199	1,230
Net exploration acreage (Km <sup>2</sup> )	15,373	28,344
Total proven reserves (MMboe)	59	62
Finished and ongoing exploratory wells <sup>(1)</sup> :		
Positive	-	-
Negative	2	-
Under evaluation	-	1
Ongoing	-	1
Finished development wells:		
Positive	4	3
Negative	-	-
Under evaluation	-	-
Net production of liquids (MMb)	16	16
Net production of natural gas (bcf)	17	17
Total net production (MMboe)	19	19
Oil production wells	222	236
Gas production wells	6	3
Average crude oil realization price	55.2	44.9
Average gas realization price	34.2	27.2

(1) Does not include appraisal wells: no activity in 2017 y 2016.

Sustainability performance	2017	2016
No. employees	886	954
% women	31	31
% of women in leadership positions	24	21
Hydrocarbon spills (>1bbl) (t)	-	-
GHG emissions (Mt)	0.06	0.09
TRIR	1.88	1.69
PSIR	1.92	0
Voluntary social investment (€ thousand)	340	271

### Main events of the period

- 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 RSRUK within 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 1, the Stordal-1 well, located in block PL705 in Norway (Repsol 40%) was finished with a negative result.
- 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 8,540 km<sup>2</sup>; they form part of the *Hellinide* fold belt and are related to the recent important discoveries in Albania (the *Shell Shpirag* discovery). 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.



# 15,373 km<sup>2</sup>

net exploration  
acreage

Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Norway	Operated assets (Blane, Varg, Gyda, etc.)	Average 67.26%	P	L-G	<i>Offshore</i> assets located in the North Sea, in the south of the country
Norway	Non-operated assets (Brage, Gudrun...)	Average 21.59%	P	L-G	<i>Offshore</i> assets located in the North Sea, in the south of the country
United Kingdom	RSRUK operating assets (Beatrice, Claymore, etc.)	Average 40.92%	P	L-G	<i>Offshore</i> assets mainly located in the Central North Sea Basin
United Kingdom	RSRUK non-operated assets (Balmoral, Cawdor, etc.)	Average 7.67%	P	L-G	<i>Offshore</i> assets mainly located in the Central North Sea Basin

(1) For further more information see Appendix II of Consolidated financial statements.

(2) P: Production / D: Development / E: Exploration / L: Liquids / G: Gas

- 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%). In the second half of 2017, the *Ameijoa*, *Camarao*, *Lagosta*, *Lagostim*, *Mexilhao* and *Ostra* blocks were reverted. Hence, at December 31, 2017, the company had no exploration and production presence in the country.
- On February 1, 2018, the agreement in **Norway** with Total for the acquisition of the company's 7.7% stake in the *Visund* field was announced. The field is located in the Norwegian waters of the North Sea. Operated by Statoil, the *Visund* field is a crude oil and gas field located 22 km off the coast of Norway. In 2017, its average production was in excess of 120 Mboe/d.

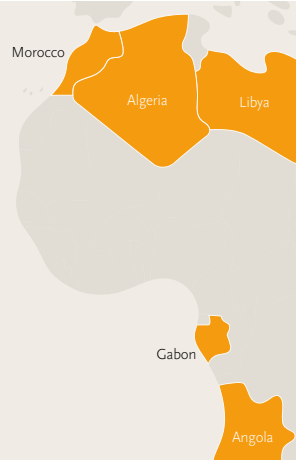
# Africa

## 128 MMboe

proven  
reserves

## 14 MMboe

net  
production



Performance of operations	2017	2016
Net developed acreage (Km <sup>2</sup> )	1,234	713
Net undeveloped acreage (Km <sup>2</sup> )	23,899	56,825
Net developing acreage (Km <sup>2</sup> )	2,744	2,744
Net exploration acreage (Km <sup>2</sup> )	22,389	54,794
Total proven reserves (MMboe)	128	125
Finished and ongoing exploratory wells <sup>(1)</sup> :		
Positive	-	-
Negative	1	1
Under evaluation	-	1
Ongoing	1	-
Finished development wells:		
Positive	12	8
Negative	1	1
Under evaluation	-	1
Net production of liquids (MMb)	12	3
Net production of natural gas (bcf)	8	16
Total net production (MMboe)	14	6
Oil production wells	248	128
Gas production wells	84	79
Average crude oil realization price	52.8	41.8
Average gas realization price	27.1	

(1) This does not include appraisal wells: 1 positive in 2016.

Sustainability performance	2017	2016
No. employees	172	145
% women	15	15
% of women in leadership positions	4	0
Hydrocarbon spills (>1bbl) (t)	0	0
GHG emissions (Mt)	0.0001	0.002
TRIR	0	0
PSIR	0	0
Voluntary social investment (€ thousand)	3,990	14

### Main events of the period

- 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 2017 amounted to 208 Kbb/d gross (299 Kbb/d gross at December 31), representing net Repsol production of 25.4 Kbb/d (38.8 Kbb/d in December).

In 2017, analysis was undertaken of the social backdrop and community impacts deemed to be potentially associated with production activity. The analysis was completed with interviews and surveys of key people, through which the needs communities feel to be a priority were identified. Repsol carried out significant work in community relations in 2017. It coordinated a global program jointly with the United Nations on community relations, involving the contribution of 9.6 million euros by the consortium in which Repsol has contributed in a 40%.

- In November, the *Ksar Chellala-1 ST1* (KCL-1 ST1) exploratory well in the *Boughezoul* block of **Algeria** ended with a negative result.





# 22,389 km<sup>2</sup>

net exploration  
acreage

Start of production  
of Project *Reggane*,  
in Algeria.

Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Algeria	Tin Fouyé Tabankort (TFT)	30.00%	P	L-G	Production block located in the Illizi basin in the southeast of the country
Algeria	Reggane Nord	29.25%	P / D	G	Gas assets in the center of the country, in the Reggane basin in the south
Algeria	Greater MLN/ Menzel Ledjmet Sud-Est	35.00%	P	L	Assets located in the Ghadames/Berkine basin in the east of the country
Algeria	South East Illizi	72.50%	E	L-G	Exploratory block located in the Illizi basin in the southeast of the country
Libya	NC-115	20.00%	P	L	Asset located in the Murzuk basin in the southwest of the country
Libya	NC-186	16.00%	P	L	Asset located in the Murzuk basin in the southwest of the country

(1) Further information in Appendix of the consolidated financial.

(2) P: Production / D: Development / E: Exploration / L: Liquids / G: Gas

- In mid-December, the entry into production announced of the Reganne North gas project in the desert of **Algeria**, was around 1,500 km to the southwest of Algiers. The Reggane North gas fields are expected to reach their maximum

production capacity of 8 million cubic meters a day in the first quarter of 2018. The Reggane North project comprises six gas fields: *Azrafil Sud-Est*, *Kahlouche*, *Kahlouche Sud*, *Tiouliline*, *Sali* and *Reggane*.

## 5.2. Downstream

### Our activities

The *Downstream* business consists of six divisions:

- **Refining:** production of fuel and other petroleum-derived products.
- **Chemicals:** the production and sale of a wide variety of products, ranging from basic petrochemicals to derivatives.
- **Trading and Gas:** transport and supply of crude oil and products to the refining system, marketing of crude oil and products outside the system, regasification of liquefied natural gas, marketing and trading of natural gas in North America and the supply of natural gas in Spain, and renewable energy projects.
- **Marketing:** marketing and sale of the company's oil products through its network of service stations and other sales channels that provide differentiated services to sectors such as aviation, maritime, large industries and end consumers.
- **LPG:** production, distribution, wholesaling and retailing of liquefied petroleum gas (LPG).
- **Lubricants, Asphalt and Specialized products:** national and international production and working of lubricants, lubricant bases, bitumen for asphalt, extensor oils, sulfur, paraffin and other propellant gases.

Main figures	2017	2016
<b>Refining capacity (kbbbl/d)</b>	<b>1,013</b>	<b>1,013</b>
Europe (including the stake in ASESAs)	896	896
Rest of world	117	117
<b>Conversion rate in Spain (%)</b>	<b>63</b>	<b>59</b>
<b>Conversion utilization Spanish Refining (%)</b>	<b>104</b>	<b>103</b>
<b>Distillation utilization Spanish Refining (%)</b>	<b>94</b>	<b>88</b>
<b>Processed crude oil (million t)</b>	<b>47.4</b>	<b>43.2</b>
Europe	41.9	39.4
Rest of world	5.4	3.8
<b>Refining margin indicator (\$/bbl)</b>		
Spain	6.8	6.3
Peru	5.4	3.1
<b>Number of service stations</b>	<b>4,709</b>	<b>4,715</b>
Europe	4,219	4,275
Rest of world	490	440
<b>Oil product sales (kt)</b>	<b>51,836</b>	<b>48,048</b>
Europe	45,081	42,787
Rest of world	6,755	5,261
<b>Petrochemical product sales (kt)</b>	<b>2,855</b>	<b>2,892</b>
Europe	2,412	2,428
Rest of world	443	464
<b>LPG sales (kt)</b>	<b>1,375</b>	<b>1,747</b>
Europe	1,356	1,261
Rest of world	19	486
<b>Gas sales in North America (Tbtu)</b>	<b>496</b>	<b>414</b>
<b>LNG regasified (100%) in Canaport (Tbtu)</b>	<b>15</b>	<b>16</b>

### Our performance in 2017

Million euros	2017	2016	Δ
Operating income	2,467	2,467	-
Income tax	(572)	(565)	(7)
Investees and non-controlling interests	(18)	(19)	1
<b>Adjusted net income<sup>(1)</sup></b>	<b>1,877</b>	<b>1,883</b>	<b>(6)</b>
Inventory effect	104	133	(29)
Special items	(121)	261	(382)
<b>Net income</b>	<b>1,860</b>	<b>2,277</b>	<b>(417)</b>
Effective tax rate (%)	23	23	-
<b>EBITDA</b>	<b>3,386</b>	<b>3,367</b>	<b>19</b>
<b>Net investments<sup>(2)</sup></b>	<b>757</b>	<b>(496)</b>	<b>1,253</b>

(1) Detail of adjusted net income by geographic area:

Geographical area	2017	2016	Δ
Europe	1,852	1,895	(43)
Rest of world	25	(12)	37
<b>Adjusted net income</b>	<b>1,877</b>	<b>1,883</b>	<b>(6)</b>

(2) In 2017 and 2016, most investments were allocated to operating improvements at facilities and to fuel quality, in addition to safety and respect of the environment.

Sustainability performance	2017	2016	Δ
No. employees	18,604	18,392	212
% women	35.8	35.0	1
% of women in leadership positions	26.1	25.1	1

Oil product sales	Europe		Rest of world		Total	
	2017	2016	2017	2016	2017	2016
<i>Thousand tons</i>						
<b>Own marketing</b>	<b>21,186</b>	<b>20,468</b>	<b>2,288</b>	<b>2,238</b>	<b>23,474</b>	<b>22,706</b>
Light products	17,868	17,114	2,077	2,072	19,945	19,186
Other products	3,318	3,354	211	166	3,529	3,520
<b>Other sales<sup>(1)</sup></b>	<b>8,471</b>	<b>8,083</b>	<b>1,393</b>	<b>1,341</b>	<b>9,864</b>	<b>9,424</b>
Light products	8,257	7,867	1,143	1,106	9,400	8,973
Other products	214	216	250	235	464	451
<b>Exports<sup>(2)</sup></b>	<b>15,424</b>	<b>14,236</b>	<b>3,074</b>	<b>1,682</b>	<b>18,498</b>	<b>15,918</b>
Light products	6,433	5,939	740	561	7,173	6,500
Other products	8,991	8,297	2,334	1,121	11,325	9,418
<b>TOTAL</b>	<b>45,081</b>	<b>42,787</b>	<b>6,755</b>	<b>5,261</b>	<b>51,836</b>	<b>48,048</b>

(1) Includes sales to oil product operators and bunker sales.

(2) From country of origin.

### Main events of the period

- In January, the **new brands Repsol Primeva and Repsol Ebantix** were presented. They will be used for marketing the company's range of ethylene-vinyl acetate (EVA) and ethylene butyl acrylate (EBA) copolymers, along with new grades with enhanced properties.
- In March, also in Chemicals, a new range of polyolefines was launched under the **Repsol Healthcare brand name** with the aim of supplying the demanding health (Pharma) 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, reaching the highest market quality standards. This is an important milestone for maintaining leadership of the Spanish lubricants market and developing the international market.
- In April, Repsol and Enagás supplied LNG as fuel to a vessel from a regasification plant for the first time in Europe. Repsol took part as the supplier of LNG and Enagas as the manager of regasification infrastructure in Cartagena. This type of supply, carried out for the first time in Europe, is known as pipe-to-ship bunkering.
- In May, agreement with the Rubis group was reached for the **sale of the LPG piping facilities in mainland Portugal**. The agreement was executed and closed at the end of June 2017. In July, also with the Rubis Group, Repsol agreed to **sell its LPG business in the islands of Portugal (Azores and Madeira)**, pending approval of the transaction by the Portuguese competition authority.
- In May, customers of our service stations were given access to the new **Repsol WAYLET** app, thus strengthening the transformation in which the Company is engaged on the basis of innovation, technology and the digital environment.
- In June, Repsol, for the second consecutive year, was named **Europe's best producer of high-density polyethylene (HDPE)** in the annual meeting of European Plastics Converters (EuPC) and the Spanish Association of Plastics Manufacturers (ANAIP).
- In June, a **third production shift was established in the Puertollano lubricant plant** and new investments were performed in order to increase its production capacity. The new shift is necessary to launch this business line's growth strategy for the coming years.
- At the end of 2017, the project of **entering the Mexican fuel market** was launched with the aim of achieving 8-10% of the market share and a network of around 1,200 service stations in the next 5 years.
- In 2017, and taking advantage of the scheduled shutdowns at the Cartagena and Bilbao 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 for 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.
- In Peru, after the launch of the diesel module of the La Pampilla refinery, progress in 2017 on the **Gasoline block** proceeded in accordance with the timetable.

## 5.2.1. Refining

The refining business activities are framed within the 2016-2020 Strategic Plan, which includes greater integration between the refining and marketing activities and a clear goal to reduce energy costs and CO<sub>2</sub> emissions. Investments made in the Cartagena and Bilbao refineries, and the corresponding improvement in the overall margin of the refining system, have been key to placing Repsol at the head of the integrated European companies in terms of efficiency, creation of guaranteed value, and resilience against scenarios for low oil prices.

In addition to a wide range of efficiency measures implemented, the business' competitiveness continues to improve through managing markets and market access logistics, and relating to the business environment. These initiatives are underpinned by appropriate human resources management and an active policy of safety, environmental protection and innovation.

### Assets

The Repsol Group owns and operates five refineries in Spain (Cartagena, A Coruña, Bilbao, Puertollano and Tarragona), with a combined distillation capacity of 896 thousand barrels of oil per day (including in Tarragona, the stake in Asfaltos Españoles, S.A.) In the case of the La Pampilla refinery (Peru), in which Repsol holds a 82.38% interest and is the operator, installed capacity rose from 102 thousand barrels of oil per day to 117 thousand barrels of oil per day after the inauguration of the low sulfur diesel production unit in 2016.

Refining capacity <sup>(1)</sup>	Primary distillation (Thousand bbl/d)	Conversion ratio <sup>(2)</sup> (%)	Lubricants (Thousand t/d)
Cartagena	220	76	155
A Coruña	120	66	-
Puertollano	150	66	110
Tarragona <sup>(1)</sup>	186	44	-
Bilbao	220	63	-
<b>Total Repsol (Spain)</b>	<b>896</b>	<b>63</b>	<b>265</b>
Peru La Pampilla	117	24	-
<b>TOTAL</b>	<b>1,013</b>	<b>59</b>	<b>265</b>

(1) The capacity of Tarragona includes 50% of the capacity of Asfaltos Españoles S.A. (ASESA), in which Repsol and Cepsa each hold a 50% interest.

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

### Performance

The refining margin in Spain stood at \$6.8 per barrel in 2017, up on the same figure for 2016 (\$6.3 per barrel). In Peru, the annual refining margin came in at 5.4 dollars per barrel, in comparison to the 3.1 dollars per barrel seen in 2016.

In 2017, refining margins were higher than in 2016 due to the widening price spread between the main products, basically the mid distillates, which offset the increase in the price of crude oil. The high margins of mid distillates are due to the higher demand in Europe throughout the year, while gasolines kept their spread at slightly higher levels than in 2016 due to the impact of Hurricane Harvey on the Gulf of Mexico coast in late August, along with the higher demand for gasoline in the US during the summer months.

Against this backdrop, the Group's refineries processed 47.4 million tons of crude oil, 10% higher than the amount processed in 2016. The average use of refining capacity was 94% in Spain, compared to the 88% recorded in the previous year. In Peru, refinery use was up on 2016, rising from 68.9% to 89.8% in 2017.

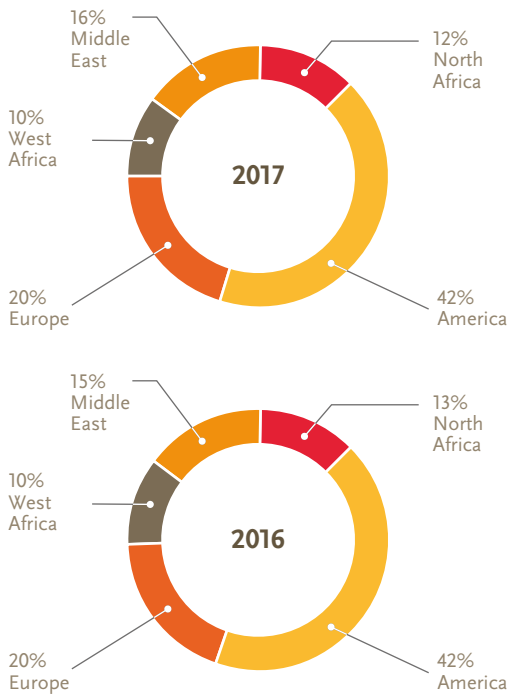
Thousand tons		
Processed raw material	2017	2016
Crude oil	47,357	43,226
Other non material	8,565	9,387
<b>Total</b>	<b>55,922</b>	<b>52,613</b>

Thousand tons		
Refining production	2017	2016
Intermediate distillates	26,830	24,882
Gasoline	9,881	9,354
Fuel oil	4,996	4,500
LPG	990	1,008
Asphalts <sup>(1)</sup>	1,537	1,499
Lubricants	265	284
Other (including petrochemicals) <sup>(2)</sup>	7,913	7,574
<b>Total</b>	<b>52,412</b>	<b>49,101</b>

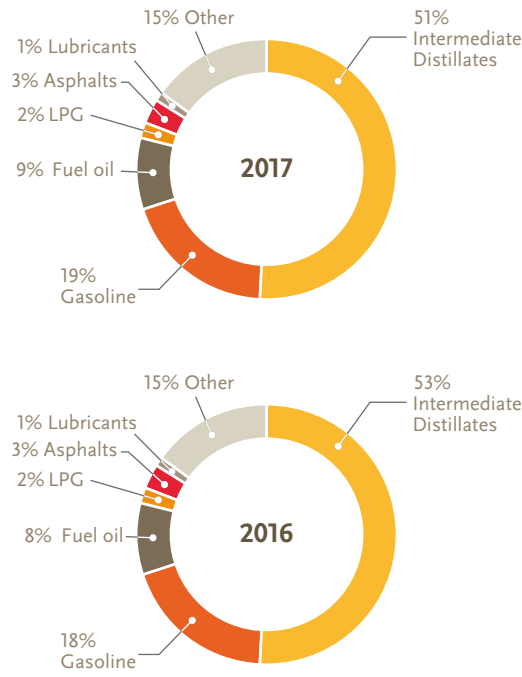
(1) Includes 50% of the production of ASESA.

(2) Includes figures for petrochemical products (1,849 thousand tons in 2017 and 1,976 thousand tons in 2016).

Source of processed crude oil



Refining production



**\$6.8/bbl**  
Refining margin

Sustainability performance	2017	2016
Hydrocarbon spills (>1bbl) (t)	5.28	1.39
CO <sub>2</sub> e emissions (Mt) <sup>(1)</sup>	9.11	9.13
TRIR	2.08	2.17
PSIR	0.46	0.86
Refining Peru TRIR	0.92	1.14
Refining Peru PSIR	0.31	0.28
Voluntary investment (€ thousand)	1,496	2,174

(1) This indicator does not include craker emissions. These are included in chemicals, in the next section. The 2016 indicator has been recalculated according to this criteria.

5.2.2. Chemicals

Assets

Production of the Repsol Chemicals business is concentrated at three petrochemical facilities located in Puertollano, Tarragona (Spain) and Sines (Portugal), where there is a high level of integration between basic and derivative chemicals, as well as with refining activities in the case of the Spanish facilities. Repsol also has a number of subsidiaries and affiliated companies, through which it produces polypropylene compounds, synthetic

rubber and chemical specialties. In particular, these chemical specialties are produced through Dynasol, a 50% partnership with the Mexican KUO group, with plants in Spain, Mexico and China, the latter of which work with local partners.

Production capacity *Thousand tons*

Production capacity	Thousand tons
<b>Basic petrochemicals</b>	<b>2,603</b>
Ethylene	1,214
Propylene	864
Butadiene	185
Benzene	290
Methyl tert-butyl ether / Ethyl tert-butyl ether	50
<b>Derivative petrochemicals</b>	<b>2,235</b>
Polyolefins	
Polyethylene <sup>(1)</sup>	793
Polypropylene	505
Intermediate products	
Propylene oxide, polyols, glycols, and styrene monomer	937

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

**2.6Mt**  
Basic petrochemical capacity

## 2.9Mt

### Petrochemical product sales

#### Performance

Earnings posted by Repsol's chemical business in 2017 maintained the strong results achieved in 2015 and 2016, in a year characterized by a more favorable international environment shaped by strong demand and higher margins. Efficiency improvements and advances in differentiation were consolidated during the year, particularly in the Repsol Resistex metallocene polyethylene line and in the Repsol Healthcare line.

Sales to third parties in 2017 amounted to 2.9 million tons, which is in line with the volume of 2016. Favorable market conditions, combined with healthy plant operations, helped maintain a high sales volume. The margin environment continued at historic highs, similar to 2016, albeit with a decrease in the last quarter of the year.

<i>Thousand tons</i>		
Sales by type of product	2017	2016
Basic petrochemicals	978	994
Derivative petrochemicals	1,877	1,898
<b>Total</b>	<b>2,855</b>	<b>2,892</b>
Sales by region	2017	2016
Europe	2,412	2,428
Rest of world	443	464
<b>Total</b>	<b>2,855</b>	<b>2,892</b>

As for investments, they were mainly earmarked to improve and optimize existing assets, enhance efficiency, reduce costs, differentiate products, and improve quality, safety, and environmental standards. The main expenses incurred in 2017 relate to projects designed to enhance efficiency, and on projects to be undertaken in the multi-year shutdowns scheduled in 2018 both in the Sines complex and in the propylene oxide/styrene plant of Tarragona.

With respect to recognitions, Repsol won the award for Best Producer of PEAD of Europe from the European Plastics Converters Association (EuPC) for the second consecutive year. The award is given on the basis of a vote by all the clients that are members of the association. In May, Repsol also received the Safety Award of the Business Federation of Spanish Chemical Industries (FEIQUE) for its Chemicals and for the chemical unit of the Tarragona industrial

complex, which recognizes the accident-related work carried out in 2016.

Sustainability performance	2017	2016
Hydrocarbon spills (>1bbl) (t)	0	0
CO <sub>2</sub> e emissions (Mt) <sup>(1)</sup>	3.50	3.75
TRIR	1.42	1.89
PSIR	0.61	0.60
Voluntary social investment (€ thousand)	906	771

(1) This indicator includes cracker emissions. The 2016 indicator has been recalculated according to this criterion.

### 5.2.3. Marketing

#### Assets

At year-end 2017, Repsol had 4,709 service stations, with the following geographic distribution:

Country	No. of points of sale
Spain	3,445
Portugal	464
Peru	490
Italy	310
<b>Total</b>	<b>4,709</b>

#### Performance

In 2017, the company faced the challenge of consolidating the results achieved in 2016 and continuing to grow in order to stay at the forefront and offer our customers the best service by bearing in mind our strategy of "Transforming while Performing". The robustness of our business model proved itself in 2017 in both operations and results and in the change being undergone by the Company in line with the targets of its 2016-2020 Strategic Plan: creating value and boosting resilience. Highlights:

- In spite of limitations on the growth of points of sale in the Service Station business, sales increased on the previous year, with a strong performance from Premium products.
- The share and volume of Direct Sales increased from 2016, along with growth in unit margins.

## 4,709

### Worldwide marketing points of sale

- In Marketing Portugal, the Service Station and direct sales businesses continued to show healthy performance in both sales and results.

The launch of the Repsol WAYLET app is furthering the transformation of the business based on innovation, technology and the digital environment.

The company has continued its policy of forming strategic alliances with market leaders, such as El Corte Inglés, Starbucks, Nespresso, Amazon, Correos and Disney. A strategic agreement has been signed with El Corte Inglés that will enable Repsol to create the largest network of proximity and convenience stores in Spain in the company's service stations, under the brand name "Supercor Stop&Go." The agreement with Correos involves the development of a package storage service at our service stations.

The alliance with Amazon consists of installing "Amazon Lockers" in our stations, where customers can pick up orders made on the Amazon website.

The strategic alliance has allowed Repsol to be more connected to the new technological trends related to electronic commerce. The acquisition in December of a 70% stake in the company Klikin will help boost the Waylet app as the universal means of payment with a mobile phone, allowing it to be used outside Repsol service stations.

Sustainability performance	2017	2016
Hydrocarbon spills (>1bbl) (t)	5.05	0
Hydrocarbon spills Repsol Peru (>1bbl) (t)	46.35	30.69
CO <sub>2</sub> e emissions (Mt)	0.03	0.04
TRIR	1.12	1.31
TRIR Marketing Perú	0.39	0.56
% of contracts with human rights, environmental and anti-corruption clauses	100	100

## 5.2.4. Trading and gas

### Trading

The function of Trading is to optimize the supply and marketing of Group positions in international markets (integrated supply chain) and its activity consists of the following: (i) supply of crude oils and products for the refining systems and other needs of the Repsol Group; (ii) marketing of crude oil and surplus products from the Group's own production; (iii) maritime transport of crude oil and derivative products associated to such activities, and (iv) management of hedges on products in financial derivative markets.

Trading activities are carried on globally through a number of offices in the leading markets of Europe, America and Asia.

In 2017, a total of 1,515 vessels were chartered (1,339 in 2016), and 270 voyages were made through the Time Charter fleet.

### Sustainability performance

In safety and the environment in 2017, evaluation procedures were reviewed by the Vetting<sup>1</sup> area, which involves requirements that are more stringent and appropriate for the current risk map:

1. Process of assessment of vessels to be contracted:
  - For ships between 1 and 15 years of use, under OCIMF/ SIRE inspection in the previous process, it was used for vessels between 1 and 5 years of use.
  - For ships less than one year and more than 20 years, assessment for voyage to voyage.
  - Inclusion of Short Time Charter concept and of its assessment process.
  - Inclusion in Repsol Vetting Process (RVP) of attendance at sea trials for time charter vessels, new building vessels and LNG vessels gas test.
2. Safety criteria applicable to SIRE vessels (oil or gas tankers, chemical tankers, barges and tugboats) and bulk carriers:
  - New limits on vessels' age according to type of vessel.

**1,515**  
vessels  
chartered

1. Procedures apply to time charters, voyage or spot charters, and to vessels owned by Repsol, vessels carrying Repsol cargo, and vessels that visit terminals owned or operated by Repsol.

**20%** ↑  
Volume marketed in North America

- Increase in requirement to employ the condition assessment program (CAP). In the new procedure, vessels of between 15 and 20 years of use are assessed. Previously, this applied to vessels of more than 20 years.

### North America gas

#### Assets

At December 31, 2017, the Group had both its regasification and transport assets in its marketing businesses in North America, including the Canaport regasification plant and the gas pipelines in Canada and the United States.

#### Performance

Natural Gas in North America	2017	2016
LNG regasified (TBtu) in Canaport (100%)	15	16
Gas marketed in North America (TBtu)	496	414

The volume marketed in North America increased by 20%.

In the US northeast, where natural gas supplies tend to be more limited, cold temperature scenarios may cause significant peaks in benchmark prices in the region, such as Algonquin (the benchmark price for the Boston area). The company's activity in the northeast is focused on optimizing the margin obtained from the marketing of LNG in capitalizing on the flexibility offered by the Canaport plant. That is, flexibility in send out allows for concentrating gas sales in days of peak prices in winter.

In 2017, business activity was limited by the lack of sustained low temperatures over time in the northeast US, owing to an abnormally warm winter (not representative of an average winter temperatures for the region), thus reducing the Canaport regasification plant's capacity to capture commercial margin.

**9%** ↑  
LPG sales growth in Spain

### 5.2.5. Liquefied petroleum gas (LPG)

Repsol is one of the leading retail distributors of LPG<sup>1</sup> in the world, ranking first in Spain and maintaining top positions in Portugal.

LPG sales totaled 1,375 Mt in 2017. Total sales in Spain increased 9% year on year, primarily due to higher sales to distributors. Sales in Portugal reached 138 thousand tons, making the company the third-largest operator.

Thousand tons

#### LPG sales by geographical area

area	2017	2016
<b>Europe</b>	<b>1,356</b>	<b>1,261</b>
Spain	1,218	1,116
Portugal	138	145
<b>Latin America<sup>(1)</sup></b>	<b>19</b>	<b>486</b>
Peru (Autogas)	19	188
Ecuador	-	298
<b>TOTAL</b>	<b>1,375</b>	<b>1,747</b>

(1) On April 20, 2016, Repsol sold its LPG businesses in Peru and Ecuador to the international operator Abastible.

In Spain, Repsol distributes bottled, bulk, and Autogas networks, with over 4 million active customers. Bottled LPG sales accounted for over 75% of total retail LPG sales in Spain, through an extensive network of distribution agencies. In Portugal, Repsol distributes LPG bottled, bulk and in AutoGas to end customers, while also supplying other operators.

Thousand tons

#### Sales volume of LPG by product

product	2017	2016
Bottled	670	1,049
Bulk, piped and others <sup>(1)</sup>	705	698
<b>TOTAL</b>	<b>1,375</b>	<b>1,747</b>

(1) Includes sales to the automotive market, LPG operators and other.

1. In Spain, prices continue to be regulated for piped LPG and LPG bottles of between 8 and 20 kg with a tare weight above 9 kg, excluding bottled mixtures for using LPG as fuel. For further information on the applicable legal framework in Spain, see Appendix IV of the consolidated financial statements.



AutoGas (LPG for vehicles) is the most widely-used alternative fuel in the world, in over 26 million vehicles (more than 14 million in Europe). Although it has yet to make a meaningful impact on the Spanish market, sales growth exceeded 8.1% in 2017, confirming the increased demand for this affordable fuel that also helps improve urban air quality. The main milestones in 2017 of this business are as follows:

- Various agreements were secured with leading automotive brands (Fiat, PSA Group, Ssangyong-Subaru, Opel and Renault Dacia Group) to promote, through joint actions, the sale of vehicles fueled by automotive LPG or AutoGas.
- A program of commercial incentives has been launched to adapt gasoline vehicles to AutoGas.
- Use of AutoGas as an alternative fuel through the AutoGas cluster was promoted; in June, the cluster had 15 members which, in addition to Repsol, included manufacturers of vehicles and components and technology and/or research institutes.
- The company took part in the most significant Spanish events of the year: the first AutoGas Forum and the first ExpoAutoGas. In the second half of the year, the 100% AutoGas bus was presented as part of a project led by the Center For Industrial Technological

Development (CDTI), which received the innovation award from the World LPG Association (WLPGA). Repsol is partnering on the project the carmaker BEGAS and the bus manufacturer KING LONG.

**90**  
countries  
International  
presence  
of lubricant  
business

Sustainability performance	2017	2016
Hydrocarbon spills (>1bbl) (t)	0	0
CO <sub>2</sub> e emissions (Mt)	0.01	0.02
TRIR	1.91	3.80
PSIR	0	0
% of contracts with human rights, environmental and anti-corruption clauses	100	100

### 5.2.6. Lubricants, asphalts and specialized products

The objective of this business unit is to maximize value through the whole oil-product claim from the refining activity.

In all cases production is centered mainly in Spain, although there are arrangements with local producers in some key countries to produce *in-situ* certain lubricant lines. Marketing and distribution are strongly international in scope, with sales in more than 90 countries throughout the world.

Sales by geographic destination are as follows:

Thousand tons

Country	Lubricants	Asphalts	Specialities <sup>(1)</sup>	2017 Total	2016 Total
Spain	86	313	257	656	637
Europe	24	347	253	624	607
Africa	2	-	238	240	281
America	18	-	7	25	34
Asia and Oceania	31	-	47	78	57
Sales to Traders		203	-	203	200
<b>Total</b>	<b>161</b>	<b>863</b>	<b>802</b>	<b>1,826</b>	<b>1,816</b>

(1) Includes mainly lubricant bases, extensor oils, sulfur, paraffin and propellant gases.

Regarding the evolution of the business during 2017, it should be noted that, with respect to 2016:

- Lubricants enhanced its leadership position in the Spanish market, with sales growth of 3%. In international markets, overall sales growth amounted to 17%.
- Sakes of bitumen for asphalt increased by 1.8% on 2016, and asphalt specialized products did so by 10%, even though its natural markets (Spain, France and Portugal) have seen minimum levels of demand.
- Record highs were reached in sales of Group II and III base oils. This product line grew by 101%.

The primary milestones are as follows:

- Launch of **production and distribution of lubricants in Thailand and Mexico**.
- Launch of a **new line of Repsol Moto lubricants** developed in the Repsol Technology Center, reaching the highest market quality standards, which is an important milestone for maintaining leadership of the Spanish lubricants market and developing the international market. In this sense, **agreements have been signed for the use of our lubricants with Honda and Kymco** in Spain, and with **SK Lubricants in Korea**, in this case for premium lubricants, and in **India**, for the launch of the **first synthetic product for motorcycles**, Repsol Moto 4T Sintético 10W-60.

- A **third production shift** has been established at the **Puertollano** lubricant plant. Combined with investments to boost capacity, this allowed for reaching production of 127,000 t (117,000 t in 2016). The objective is to reach 170,000 t/year by 2021.
- Launch of supply of asphalt-based emulsions in **Morocco**. This is the first part of a commercial agreement to export 1,400 t for maintenance work on roadbeds.
- Production launch of rubber paraffin in **China** under a toll arrangement, with expected annual production of 1,500 t.

Sustainability performance	2017	2016
Hydrocarbon spills (>1bbl) (t)	0	0
CO <sub>2</sub> e emissions (Mt)	0.01	0.012
TRIR	0.82	0.63
% of contracts with human rights, environmental and anti-corruption clauses	100	100

Regarding social commitment, all international agreements include clauses related to human rights, safety, the environment and anti-corruption were carried out on lubricant manufacturers and distributors. Ten social audits were carried out during the year. In addition, all international agreements include clauses on these issues.





## 5.3. Corporate

### Our activities

Relates mainly to the operating expenses of the Corporation, the financial result and figures for the 20% interest in Gas Natural SDG, S.A.

#### Our financial performance

Million euros	2017	2016	Δ
Corporate and adjustments	(262)	(313)	51
Financial result	(356)	(315)	(41)
Gas Natural Fenosa	272	361	(89)
Income tax	242	254	(12)
<b>Adjusted net income<sup>(1)</sup></b>	<b>(104)</b>	<b>(13)</b>	<b>(91)</b>
Special items	(117)	433	(550)
<b>Net income</b>	<b>(221)</b>	<b>420</b>	<b>(641)</b>
Effective tax rate (%)	(39)	(41)	2
<b>EBITDA</b>	<b>(170)</b>	<b>(213)</b>	106
<b>Net investments</b>	<b>27</b>	<b>(1,983)</b>	<b>2,010</b>

#### Sustainability performance

	2017	2016
No. employees	2,190	2,477
% women	53.9	52.3
% of women in leadership positions	42.5	41.2

### Main events of the period

- 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 (for further information, see section 6.2).
- In May, the Repsol General Shareholder's Meeting approved the appointment of PricewaterhouseCoopers Auditores, S.L. as the **auditor** of Repsol, S.A. and of the Group for the years 2018, 2019 and 2020.
- In May, RIF issued a bond guaranteed by Repsol S.A., in the amount of €500 million, maturing in 2022 and carrying a fixed annual coupon of 0.50%. This represents the **first issue of a "green bond"** by Repsol, 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.
- In June, the Corporate Executive Committee approved the **Global Sustainability Plan** in which Repsol **commits itself to 2020 targets** in the six main areas of sustainability (see next section).
- With the integration of ROGCI in the Group, it has progressively been **released from its contractual and regulatory obligations to publish financial information** in Canada (Alberta Securities Commission), the US (Securities and Exchange Commission) and the United Kingdom (London Stock Exchange), which culminated with the ceasing order of its status as a reporting issuer by the Canadian authorities on September 29.
- During the year, Repsol's long-term debt **credit rating improved**:
  - Standard & Poor's improved the rating from BBB- to BBB, with a stable outlook.
  - Fitch changed its outlook from "negative" to "stable" (with a BBB rating).
  - Moody's changed its outlook from "negative" to "stable" (with a Baa2 rating).

# 6. Sustainability

## Sustainability

For more information on sustainability, see Appendix III and IV and [www.repsol.com](http://www.repsol.com)

Repsol works to provide accessible, efficient and safe energy to meet growing energy demand without compromising future generations. Commitment to sustainability, a cornerstone of our vision of the future as an integrated energy company.

Repsol's commitment to sustainability is integrated in the Company's strategy, and it has the support and engagement of senior management.

Accordingly, we have set our ambitions and targets for 2020 related to the six pillars of the **Repsol Sustainability Model**: Climate change, People, Safe operation, Environment, Innovation and technology and Ethics and transparency. The model takes specific form in the **Global Sustainability Plan (GSP)**. Each year, the Company sets out concrete lines of

action to advance towards the 2020 targets. The GSP is the roadmap used to deploy local sustainability plans in countries or in the main industrial facilities. These local plans are which are defined in accordance with the context, activities, the risks and impacts and the expectations of the stakeholders of each place where Repsol operates.

In addition, as a member of the United Nations Global Compact, belonging to the Executive Committee of the Spanish Network of this initiative, as well as a member of IPIECA (The Global Oil and Gas Industry Association for Environmental and Social issues), Repsol supports the UN Agenda by 2030 and contributes to meet the 17 Sustainable Development Goals (SDG).

## Global Sustainability Plan (GSP)



The Global Sustainability Plan focuses on the **six** axes of Repsol's Sustainability Model.



## Sustainability Goals

for 2018 15%-20% variable remuneration of businesses.

## Sustainability Plans and Sustainable Development Goals

Since 2010, Repsol has published Local Sustainability Plans in countries where it operates and in major industrial facilities. These plans align with the Global Sustainability Plan (GSP), but they also meet the expectations of local stakeholders. In 2017, local plans were published in Bolivia, Brazil, Colombia, Ecuador, the United States, Peru, Trinidad and Tobago and Venezuela, and in the industrial centers of La Coruña, Petronor, Tarragona, Puertollano and Cartagena.

In 2018, the Company will continue to broaden its commitment to Sustainability by incorporating new countries in the definition of local plans in Indonesia, Malaysia and Vietnam, and in the Sines Chemical facility of Portugal. The extension of this project to southeast Asian countries is a further illustration of the integration of the activities that came from ROGCI (acquired in 2015) in Repsol's Sustainability Model.

These plans, combined with the GSP, set out goals that help make achievement of the Sustainable Development Goals (SDGs) possible. In 2018, the Company will continue to commit to actions aligned with the six pillars of the Sustainability Model and the SDGs:

- Climate change: the CO2 emissions reduction plan defined by 2020 will continue. (SDG7 Affordable and clean energy and SDG 13 - Climate action).
- People: actions will be taken to strengthen community relations and human rights while favoring equality and work-life balance. (SDG 5 – Gender equality; SDG 8 – Decent work and economic growth and SDG 16 - Peace, justice and strong institutions).
- Safe Operation: actions will continue to be taken to strengthen the culture of safety. (SDG8: Decent work and economic growth)
- Environment: actions will be committed in relation to protection of biodiversity, air quality and reduction of waste. (SDG 6 –Clean water and sanitation; SDG 14 - Life below water and SDG 15 - Life on land, SDG 12: Responsible consumption).
- Ethics and transparency: internal awareness will continue to be raised in issues of ethics and anti-corruption. (SDG 16 - Peace, justice and strong institutions).



GSP

a

**Ambition:**  
Position the Company in a scenario compatible with the Paris Agreement.

## 6.1. Climate change<sup>1, 2, 3</sup>

### Governance

The Board of Directors, at the proposal of the Sustainability Committee, approves the strategy for sustainability and, specifically, for climate change. In addition, the Sustainability Committee's duties include analyzing the expectations of the Company's stakeholders and reporting them to the Board, and orienting and monitoring the Company's sustainability objectives, action plans and practices.

Strategic decisions on climate change and lines of action are set at the highest executive level. The Corporate Executive Committee (CEC) has direct responsibility in the management of matters related to climate change. The CEC also approves the multi-year objectives and annual targets for reduction of greenhouse gases (GHG).

At least twice a year, or as often as necessary, the CEC and the Sustainability Committee review information on execution of the climate change and CO<sub>2</sub> emission strategy.

The Director of Sustainability, who reports directly to the CEO, coordinates with all business units involved in developing the climate change strategy the proposed objectives and monitoring of action plans to reduce Repsol's CO<sub>2</sub> emissions.

GHG emissions reduction targets weight between 5% and 20% of the targets of the business of the

Company, and have a direct impact on the variable remuneration of employees up to the Executive Directors.

### Strategy

Repsol shares society's concerns regarding the effect of human activity on the climate. The Company is firmly committed to the ambition of limiting the average global temperature rise below 2°C above pre-industrial levels by the end of the century. As a signatory of the Paris Pledge for Action document, Repsol supports the Paris Agreement, and works towards being part of the climate change solution

This transition to a low-emissions future requires a holistic approach that means considering the costs and maturity of the technologies that will ultimately be successful. There are many possible paths towards a low-emissions future, in which Repsol has identified three common elements: enhanced energy efficiency and energy savings; reduction of emissions in the generation of electricity, where natural gas will be a key player, and the deployment of low-emission technologies in final sectors.

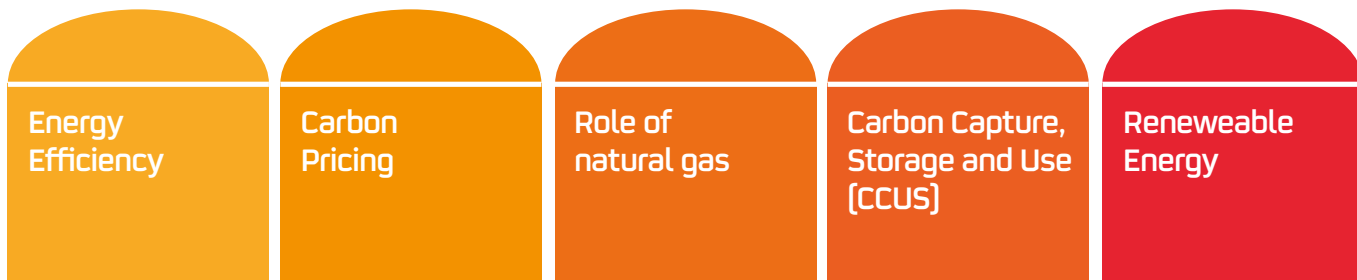
Repsol's business strategy is defined in five-year plans that are reviewed on an annual basis. These plans take account of the risks and opportunities of climate change and its impact on strategic lines and on competitiveness. The Company's 2016-2020 Strategic Plan is an example of what Repsol considers the most efficient solution to fostering a structured transition toward a low-emissions future, with a clear orientation to natural gas as a low-emission fuel. Repsol's *Upstream* portfolio is evolving towards a higher percentage of gas: about 63% in production and 74% of reserves.

The climate change strategy has a longer time horizon, and it is based on five pillars involving solutions that can enable society to move toward a sustainable future with low GHG emissions:

1. The figures and indicators in this section have been calculated in accordance with corporate standards that set out the criteria and common methodology to be applied in Safety and Environment (S&E). As a general rule, information includes 100% of the data from companies in which the Company holds a controlling interest or control over operation.

2. This section aims to meet the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), with the limitations of the first year of application.

3. Repsol publishes additional information on climate change issues in the Climate Disclosure Project (CDP) questionnaire, available at [www.cdp.net](http://www.cdp.net).



The **short-term strategy** is influenced by climate change issues that are more closely related to competitiveness (energy costs and CO<sub>2</sub>), and by the regulatory framework of its activities. Its strategy is focused on boosting the Company's resilience to these regulatory frameworks.

**Carbon pricing** is a critical element of climate policies aimed at carrying out the transition to a low-emissions future. Accordingly, for investment decision-making in new projects, Repsol has established an initial internal carbon price of \$25/t CO<sub>2</sub>, with the aim of attaining \$40/t CO<sub>2</sub> in 2025.

In addition, **energy efficiency** will allow reducing the energy and carbon intensity of its operations. Repsol has adopted specific targets and plans on **energy efficiency** that include, inter alia, projects of energy integration of units, optimization of processes and efficient operation of facilities. Indeed, the current contribution of energy efficiency will be extended as the main drive of emission reduction until nearly the midway point of this century.

For the **medium and long term**, Repsol is analyzing different models of energy supply and demand in order to comprehend how the sector can tackle the future challenges with respect to mitigating climate change while supplying energy for a growing world population. These models are used to develop scenarios that show how energy demand will change over time, how quickly supply technologies can change, and the implications in terms of CO<sub>2</sub> emissions.

Analysis of climate scenarios is a very important tool for determining how the energy sector will continue to supply the energy society needs while doing so in a sustainable manner. Repsol is currently developing its own scenarios compatible with a 2°C future and, more specifically, with the Sustainable Development Scenario (SDS) of the International Energy Agency. Hence, the company is showing its ability to analyze the key levers and technologies that will make up a low-emissions future and identify new risks and opportunities. The Company is also applying metrics that will enable it to quantitatively contribute to the development of its long-term strategy.

In addition, Repsol is facing this challenge by taking part in international associations such as The Global Oil and Gas Industry Association for

Environmental and Social Issues (IPIECA) and initiatives like the Oil and Gas Climate Initiative (OGCI), through working groups dedicated to the low-emissions pathway scenarios of IPIECA and the low-emissions opportunities of OGCI. These long-term models and scenarios are being explored jointly with other sector companies. This is a complex analysis, as it depends on different regions of the world and the type of products that are included in the equation.

Repsol believes that these new scenarios offer a significant opportunity for innovation and investment in low greenhouse gas-emission solutions.

Demand for natural gas will increase because it is a "clean fuel" compared to coal. Emissions of CO<sub>2</sub> per energy unit account for approximately half of those related to coal, not including the performance gap between the technologies associated with these fuels in electricity generation.

The shift from coal to natural gas fuels offers a major opportunity to achieve large-scale reductions of CO<sub>2</sub> in a cost-efficient manner: that is, at a lower cost for society, where a structured transition to a low-emissions future is the most efficient way forward.

Carbon Capture, Use and Storage (CCUS) is a factor to be taken into account in the CO<sub>2</sub> emissions reduction policy in Repsol's value chain. The Company supports the deployment of these technologies, working to allow projects to be technically and economically feasible, sustainable and socially acceptable.

In addition, with a medium-term view, Repsol is continuously monitoring trends and the latest technologies being developed in renewable energies, investing in sustainable mobility and contributing to emissions reductions through production and research and development into biofuels and advanced fuels. Through the fund OGCI - Climate Investments, Repsol, in coalition with other Oil & gas companies, will continue to invest in low-emissions projects and technologies. It will support projects where a collective effort is the key to achieving synergies and successful results. OGCI will invest €1,000 million over ten years for this purpose.

**\$40/t CO<sub>2</sub>**  
Internal CO<sub>2</sub>  
price to be  
reached by  
2025

Repsol has been a part of this initiative along with nine other leading sector companies, to collaborate in climate action sharing best practices and technological solutions.



OGCI  
OIL AND GAS CLIMATE INITIATIVE  
<https://www.oilandgasclimateinitiative.com>

### Principles for Responsible Investors (PRI) Methane Initiative

for the sharing of best practices in management of methane emissions.



Link to PRI

Also, the Energy Ventures and Technology units invest in diverse areas of knowledge such as biofuels, graphene, electric mobility, among others (see section 6.5).

### Risk management

It is essential to integrate energy and carbon management in the business model and in the risk management system. Climate change is other variable to be taken into account in the strategic decision-making.

Repsol has an Integrated Risk Management System (see Appendix II) in place, enabling the Company to identify, manage and control risks arising from climate change.

Repsol operates in areas with strict legislative requirements for energy and carbon (approximately 60% of the direct emissions of CO<sub>2</sub> come from its units in Europe, the US and Canada). Pursuant to the Paris Agreement, countries' commitments will have a significant impact on climate policies. More specifically, the following **legislative risks** are worthy of note:

- In Europe, the 2020 Energy and Climate package, current in force, includes a number of key directives, notably the Directive that regulates the Emissions Trading System (EU-ETS).

Specifically, the EU-ETS scheme affects our refineries and chemical facilities in Europe.

To mitigate these impacts, Repsol is reducing its CO<sub>2</sub> emissions through energy efficiency actions, which avoided 4.5 million tons of GHG emissions annual run rate in the 2006-2017 period. Precisely, Repsol has issued a green bond of €500 million applied to the 2014-2020 period in energy efficiency projects in its Refining and Chemical facilities.

Repsol is not only working to improve the energy efficiency of its production processes, but also in the manner it produces energy. Accordingly, the company is generating the electrical energy and the steam needed by its industrial processes through cogeneration facilities, which have a quite significant presence in Spain.

The 2020 Energy and Climate package also includes the Directive on Renewable Energies that will involve, among other things, incorporation by the year 2020 of up to 8.5% of biofuels in automotive fuels. This percentage will be increased by the additional incorporation of the Fuel Quality Directive.

- Legislation on the promotion of clean and efficient road transport vehicles sets a specific average emissions target for the fleet of vehicles marketed by automotive companies. In particular, light vehicles have to reduce their emissions from 130 gr of CO<sub>2</sub>/km in 2015 to 95 gr of CO<sub>2</sub>/km by 2020. Repsol has a flexible business model that enables it to tackle these shifts in demand.

Thus, Repsol has invested in its Refining business to adopt an advanced scheme in its complexity and flexibility to enable it to complete in future demand scenarios. In addition, the Company also identifies opportunities, supports projects and implements initiatives in renewable energy for transport, biofuels or use of automotive LPG, among others.

- Outside Europe, and in Canada specifically, it is important to consider the implementation of the Pan-Canadian Framework on Clean Growth and Climate Change, in which the federal government has set a carbon price pathway that will reach CAD\$50/ton in 2022.

Repsol is working to minimize **physical risks** and the magnitude of potential impacts of climate change in natural resources, facilities and in the climate phenomena to which the Company is exposed: drought, flooding, temperature change, etc.

To cite just one case of analysis, Repsol operates in areas that may be affected by the water stress, which would affect the correct operation of our facilities. In particular, the lack of water could cause a disruption of production. Thus, Repsol is developing adaptation plans aimed to anticipate and mitigate such situations as much as possible.

Lastly, risks are analyzed in the category of **reputation or market** risks in order to establish how changes affect consumer behavior and other

### Methane Guiding Principles

Which addresses the guiding principles of proper methane management in terms of measurement, mitigation and transparency in the report among others.



variables that may affect the company.

A shift in consumer behavior could result in a decrease in demand for automotive and industrial fuels. To mitigate this effect and anticipate such changes, Repsol is investing in projects of innovation and technology (see section 6.5, *Innovation and Technology*).

### Objectives and metrics

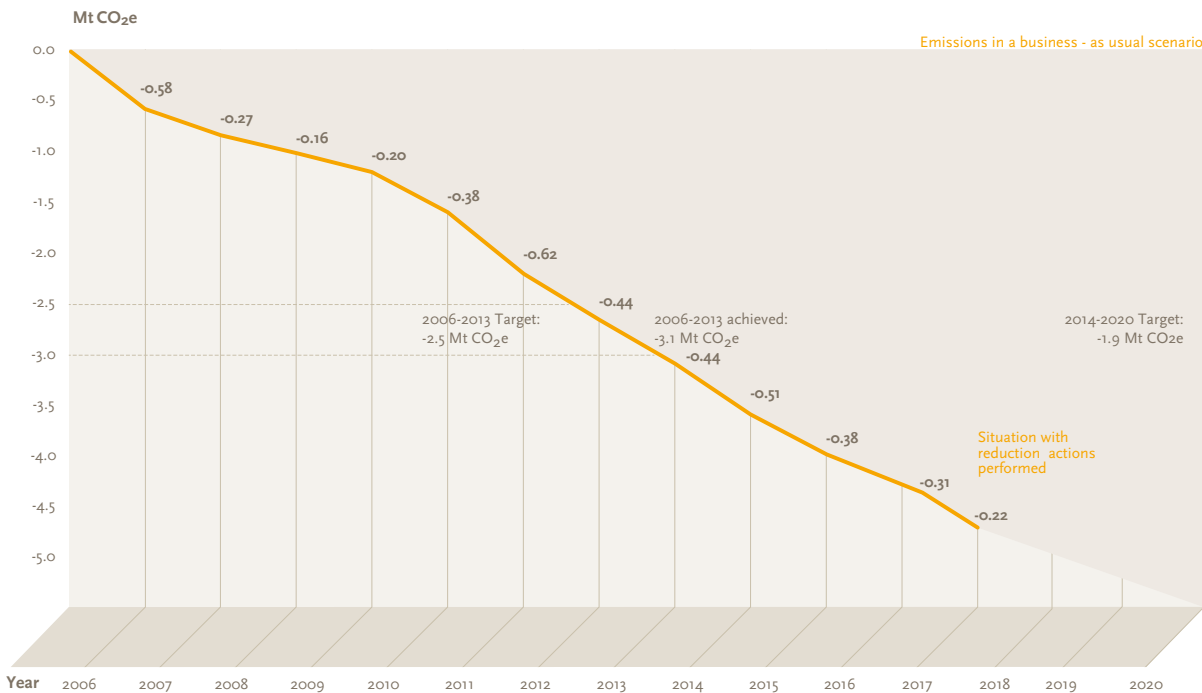
Repsol's commitment to climate change is articulated through its carbon strategy and the target of avoidance 1.9 million tons of CO<sub>2</sub> emissions annual run rate by 2020 starting in 2014. In 2017, Repsol is continuously improving and taking actions that avoided, so far 216 kt of CO<sub>2</sub> emissions, which means that since 2014, a reduction of nearly 74% of the target set for the entire period was met.

**GSP**

**2020**

**Target:**  
Avoidance of 1.9 Mt of GHG emissions by 2020.

### GHG emissions reduction (Millions of tons)

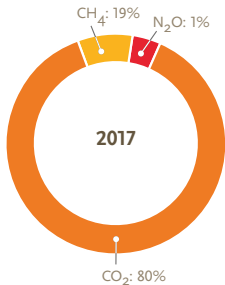


**€37.5 million**  
invested in reduction actions in 2017

**↓ 1.4 Mt**  
GHG avoided between 2014 and 2017

**↓ 4.5 Mt**  
GHG avoided between 2006 and 2017

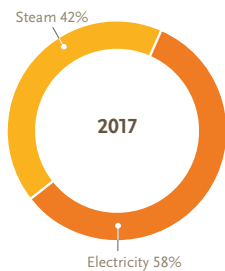
Scope 1



Our emissions

	Downstream								Total			
	Upstream			Refining		Chemical		Others <sup>(4)</sup>				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub> N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub> N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub> N <sub>2</sub> O			
Scope 1 <sup>(1)(2)</sup>	10.58 Mt			8.97Mt		3.34 Mt		0.02 Mt		<b>22.9 Mt</b>		
	60%	40%	0,2%	97%	1%	1,9%	98%	1%	1,2%	99%	0,03%	0,7%
Scope 2 <sup>(1)(3)</sup>	54 kt			139 kt		155 kt		40 kt		<b>388 kt</b>		
Scope 3 <sup>(5)(6)</sup>										<b>2017</b>	<b>2016</b>	
Indirect CO <sub>2</sub> emissions associated with purchasing hydrogen (Mt)										0.67 <sup>(1)</sup>	0.63	
Indirect CO <sub>2</sub> emissions associated with purchasing goods and services (excluding hydrogen) (Mt)										7.84	6.94	
Product transport and distribution (Mt) <sup>(7)</sup>										0.52	0.61	
CO <sub>2</sub> emissions derived from product sales (Mt) <sup>(8)</sup>										149	146	

Scope 2



(1) Data being verified during the preparation of this report. About 96% of the company's total direct emissions (scope 1) will be verified under international standard ISO 14064-1. Once verification is complete, it will be available on repsol.com.

(2) Scope 1 (direct emissions deriving from Company activity).

(3) Scope 2 (indirect emissions related to purchase from third parties of electrical energy and steam).

(4) Includes LNG, LPG, lubricants and marketing.

(5) In terms of scope 3 emissions, the following indirect CO<sub>2</sub> emissions are considered significant: those associated with the purchase of goods and services; those associated with the transport and distribution of products and those arising from the marketing of these products, which are the most significant.

(6) CO<sub>2</sub> emissions included in Scope 3 in 2017 relate to an external energy content of approximately 2.2 million TJ, the same as in 2016.

(7) These emissions have been calculated with the factors provided by the UK Department for Environment, Food & Rural Affairs (DEFRA) for road transport of goods. These factors include the part of the trip made by the truck when empty. In the specific case of rail transport, only diesel locomotive voyages have been included, which account for 40% of such voyages, thus excluding the remaining 60% of electrical locomotives, according to the study published by the Rail Transport Observatory in Spain.

(8) These emissions have been calculated using the methodology published by CDP, following the production method, which includes production from Exploration and Production (crude, natural gas and liquefied natural gas) and LPG sales, naphta, gasoline, kerosene, gasoil, fuel oil and coke produced in our refineries. Emissions deriving from chemical products are not included, as the final figure reported in this category is not significant. To avoid double accounting, we subtract the amount of crude produced in Exploration and Production that is subsequently processed in our refineries.

Energy consumption

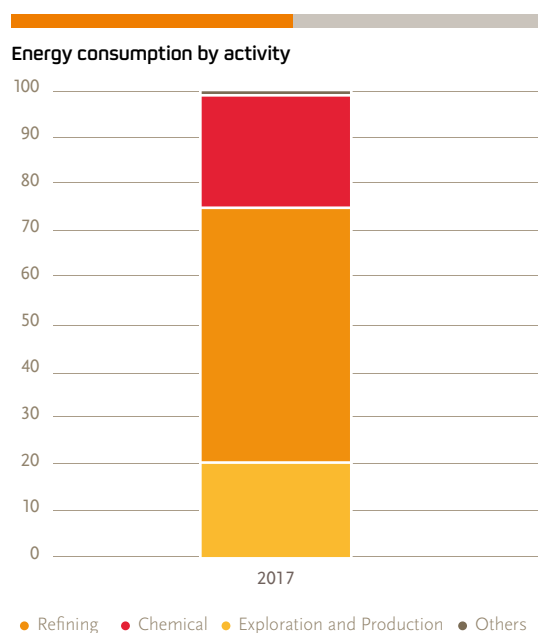
In 2017, Repsol carried out investment and operational improvements in all operations. This enabled the Company to save approximately 4.3 million GJ.

Internal energy consumption	2017 <sup>(1)</sup>	2016
Fuel (million of toe)	5.07	5.06
Electricity purchased (MWh) <sup>(2)</sup>	0.72	0.93
Steam purchases (GJ) <sup>(3)</sup>	2.65	2.72

(1) Data currently being verified. Once verification is complete, they will be available on www.repsol.com.

(2) Includes electricity purchased for consumption.

(3) Includes steam purchased for consumption.



Source: International Energy Agency (IEA) and Repsol Research Unit

### Energy intensity

In the Oil & Gas sector, it is important to establish a clear distinction between Downstream and Upstream energy consumption owing to the difference between these operations. Energy intensity is calculated as energy consumption per ton of crude processed for the Refining sector. For Exploration and Production, this is calculated by barrel of oil equivalent (boe) produced.

	2017 <sup>(1)</sup>	2016
Energy intensity in Refining (GJ/t processed crude oil) <sup>(2)</sup>	2.86	3.03
Energy intensity in Exploration and Production (GJ/boe produced) <sup>(3)</sup>	0.298	0.381

- (1) Data currently being verified. Once verification is complete, they will be available on [www.repsol.com](http://www.repsol.com).
- (2) The indicator doesn't include the energy consumption of the crackers. The 2016 indicator has been calculated according to this criteria.
- (3) The figures have been calculated using gross production of the operated assets of the Company, as reported energy consumption includes 100% of consumption of such assets, irrespective of Repsol's percentage of them.

### Intensity of greenhouse gas emissions

The intensity of greenhouse gas emissions has been calculated including scope 1 and scope 2 emissions, in accordance with the foregoing.

	2017 <sup>(1)</sup>	2016
Intensity of greenhouse gas emissions in Refining (tCO <sub>2</sub> e/t processed crude oil) <sup>(2)</sup>	0.192	0.208
Intensity of greenhouse gas emissions in Exploration and Production (tCO <sub>2</sub> e/ thousands of boe produced) <sup>(3)</sup>	62.7	69.3

- (1) Data currently being verified. Once verification is complete, they will be available on [www.repsol.com](http://www.repsol.com). Local emissions factors have been used to calculate scope 2 emissions.
- (2) The indicator doesn't include the emissions of the crackers. The 2016 indicator has been calculated according to this criteria.
- (3) The figures have been calculated using gross production of the operated assets of the Company, as reported energy consumption includes 100% of consumption of such assets, irrespective of Repsol's percentage of them.

### Flared and vented hydrocarbon

In 2017, work continued to minimize the amount of hydrocarbon flaring and gas venting. It was sent a total of 0.29 million tons of gas for flaring, while in 2016 0.49 million tons were sent.

With respect to venting, a total of 3,52 million tons were vented. The majority of these emissions come from one of the assets of Malaysia, which has a high content of CO<sub>2</sub> (which is separated from the natural gas extracted), making energy reuse difficult. The Company is currently studying the best options for minimizing this venting. In 2016, 3,87 million tons of gas was vented.

New opportunities have been developed to reduce emissions from venting. Noteworthy of these was the replacement of pneumatic devices with use of new technologies, resulting in an approximately 8% reduction of our methane emissions in Canada. This strengthened our commitment to initiatives of which we are a member, such as the Climate & Clean Air Coalition-O&G Methane Partnership (CCAC-OGMP), Methane Guiding Principles and Principles for Responsible Investors - Methane Initiative (PRI).

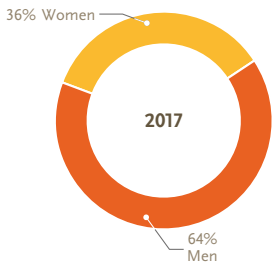
Repsol is part of the international Climate & Clean Air Coalition-O&G Methane Partnership of UN Environment for carrying out projects aimed at reducing methane emissions.

<https://www.oilandgasclimateinitiative.com>

Since 2016, Repsol is a part of the World Bank Zero Routine Flaring by 2030 initiative, to look for the most advanced technologies that minimize the routine gas flaring.

<https://www.worldbank.org>

Women in Repsol



## 6.2. People<sup>1</sup>

### 6.2.1. Our people

In Repsol we believe the talent of our people constitutes a competitive advantage because it ensures the company's future. That is why it is important to identify, retain and develop it. It is key for achieving the company's objectives with outstanding performance and results, and therefore Repsol offers employees a distinctive value proposition that is reflected in our **People Management Policy<sup>2</sup>**.

To face new sector challenges and achieve the Company's objectives, Repsol has worked on streamlining its workforce following the acquisition of ROGCI, maintaining the same employment levels even though the organizational efficiency process, as set out in the 2016-2020 Strategic Plan, is still underway (ending in 2018). At year-end 2017, Repsol had 25,085 employees, compared to 25,469 in 2016. The average age was 42.6 (40.2 for women and 43.8 for men). In 2017, a total of 3,157 new employees<sup>3</sup> joined the Company, compared to 2,445 in 2016.

The streamlining of the organization continued during the year and, along these lines, the Corporate Executive Committee approved a series of changes in the management team. The total reduction in this group was of 30 executives. These changes have strengthened the balance in the relationship model between the corporation and the Businesses.

1. All the data in this chapter, except sections where it is stated otherwise, refer to the number of employees that belong to companies in which Repsol establishes people management policies and guidelines, irrespective of the type of contract (fixed, temporary, partially retired, etc.). Information relating to 2016 has been recalculated using this new criterion to make it comparable, as the data previously reported reflected the FTE's (Full-time Equivalents). That is, they were weighted by the percentage of effective time of employment. In 2017, the Societat Catalana de Petrolis SA (Petrocat) is excluded, and the 2016 figure is adjusted as noted.

2. Our people policy can be found at [www.repsol.com](http://www.repsol.com).

3. Only fixed or temporary employees with no prior working relationship with the Company are considered to be new hires. Some 31% of new employees in 2017 and 43% in 2016 had permanent contracts. The figures for 2017 relate mainly to new hires in Peru.

## A renewed value proposal

Throughout 2017, the Company updated its attributes as employer, improving the employee value proposition on the basis of **five pillars** that differentiate and position Repsol vs. other companies.

### 1. Company attributes

Respect for people and preservation of the environment are the basis for all the Company activities. Repsol keeps working toward becoming an efficient company to ensure that it is best prepared to meet the challenges that lay ahead, with a focus on value generation; agile, flexible and innovative, capable not only of adapting to the future, but of creating it; performance oriented; with inspiring leaders that develop talent; integrated and inclusive, as a reflection of the society where we belong, and a benchmark of excellence in corporate governance.

### 2. Culture

Cultural evolution is a key factor for the Company. For this reason, Repsol is committed in 2018 to improving and achieving a 70% average of positive answers in group level surveys assessing its six cultural dimensions. Decision making, leadership, global management, results orientation, people development and collaboration. Periodic culture surveys are conducted among a representative sample of employees and help monitor progress in key behaviors, that is, progress toward working in a different way. The results provide the keys on where to place the focus in achieving the desired culture, which will ensure the success of the transformation and make the results sustainable over time.

In line with the actions committed in the Global Sustainability Plan (GSP) approved by the Corporate Executive Committee in 2017, The **Diversity and Work-Life Balance Committee**, who is chaired by the company senior executives, has renewed their activity. The Committee is composed by directors of different nationalities, areas and businesses that represent the different realities in which the organization operates.

The committee's objective is to set new goals to foster work-life balance and diversity. Five lines of work have been established for identifying and leading initiatives with internal objectives related to the following: different abilities, gender, age, cultural diversity and flexibility work-life balance.

**GSP**

**2020**

**Target:**  
Improve employees' rate of satisfaction.

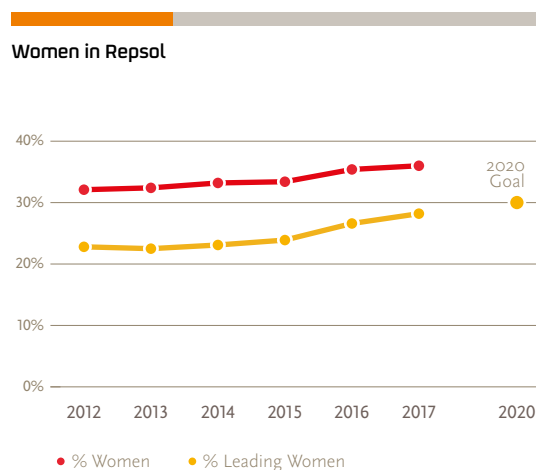
**25,085**  
Staff

The GPS sets out the objectives for 2020 with respect to integration of people with disabilities, gender diversity and flexibility and work-life balance.

Regarding **disableable people**, Repsol also has an integration plan for this collective, which covers all areas of the organization. As of December 31, 2017, Repsol had 576 persons with disabilities, representing 2.3% of the staff. In Spain, the Company surpassed the requirements of the General Law on Disability (LGD) in 2017 reaching 2.6% of the staff 489 employees hired directly.

Integration	2017	2016
No. of employees with disabilities in Spain	492	499
No. of employees with disabilities in the rest of the world	84	87
Total no. of employees with disabilities	576	586
No. of new employees with disabilities	37	13

With regard to **gender diversity**, the percentage of women continues to increase in all groups and businesses. Repsol commitment is for 30% of leadership positions to be held by women in the year 2020. For the purposes of measurement, an organizational diagnosis was conducted on gender diversity throughout the Repsol value chain.



Gender indicators <sup>(1)</sup>	2017	2016
% women in the Company	36.0	35.4
% women among new hires	50.0	52.8
% of women in worldwide leadership positions <sup>(2)</sup>	28.2	26.6
% women in leadership positions in Spain <sup>(2)</sup>	33.1	31.9
% of women in worldwide management positions <sup>(3)</sup>	35.7	35.6
% women in management positions in Spain <sup>(3)</sup>	38.5	33.4

(1) Gender indicators are calculated including employees managed with effective time of employment in excess of 20%.

(2) Executives and leaders (exempt positions).

(3) Positions of responsibility (exempt positions).

The Company has employees in 37 countries, of 84 different nationalities, and has over 1,799 employees working outside their home country. The value contributed by this **cultural diversity** is increasingly apparent throughout the Company.

The table below details the countries that have the greatest number of nationalities among their employees (excluding those of their own country):

Destination country	2017	2016
Spain	58	60
Canada	25	21
United States	24	22
Algeria	18	17
Vietnam	16	11
Malaysia	13	11
Portugal	12	15
Singapore	12	8
Brazil	10	13
Norway	10	10
Libya	8	1
Russia	8	8
Indonesia	7	7
Peru	7	7
Venezuela	6	6
Bolivia	6	5
Holland	6	5
Ecuador	4	4
Colombia	3	4
Trinidad and Tobago	2	7
Angola	1	3

In Spain, Repsol, S.A. is a company that has received the "Equality at the Company" Seal of Distinction from the Spanish Ministry of Health, Social Services and Equality.

GSP

 20  
20

**Target:**

Exceed legal obligations in integration of people with disabilities.

Employees in  
**37**  
countries  
from 84  
different  
nationalities

GSP

 20  
20

**Target:**

Achieve a 30% of women in leadership positions.

**SPG**  
**a**

**Ambition:**  
Make a commitment to people and drive their development.

In **flexibility and work-life balance**, Repsol is a company recognized for promoting new ways of working that enhance the balance between one's personal and professional lives. The teleworking program is one of the most successful and highly rated programs among employees.

Teleworking indicators	2017	2016
No. of teleworkers worldwide	2,003	1,811

In 2017, Repsol reviewed the minimum requirements worldwide for work-life balance (marriage, maternity, paternity, breastfeeding leave and death of a family member) to adapt them to the Company's new reality, in line with the practices and customs and legislation of each country where Repsol is present.

**3. Compensation and performance evaluation**

Repsol has assumed a commitment with its employees to provide them with total rewards schemes that ensure external competitiveness and internal fairness, based on meritocracy, and that assess individual performance, cooperation and teamwork.

Repsol's total rewards model includes fixed compensation, benefits, and yearly and multi-year variable compensation.

Compensation	2017	2016
Average staff costs per employee (thousands of euros) <sup>(1)</sup>	71.6	76.0

(1) Among the accumulated managed FTE 's. Personnel expenses include social security costs and other expenses except severance pay, director's remuneration and travel expenses of effective time of employment.

Repsol had 26,644 FTE 's and 24,216 managed FTE 's as of 31th decembre 2017.

FTE 's (Full-Time Equivalent 's) <sup>(1)</sup>	2017	2016
Total FTE 's at December 31	26,644	26,877
Managed FTE 's	24,216	24,532
Non-managed FTE 's	2,428	2,345
Accumulated managed FTE 's	24,664	26,444

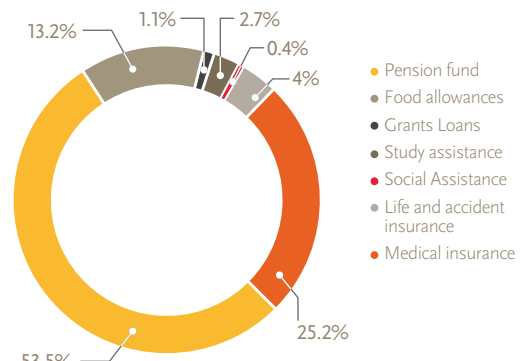
(1) Unlike the number of employees, FTE 's is calculated based on the percentage of occupation of each employee. Societat Catalana de Petrolis, S.A. (Petrocat) is included as managed FTE 's.

Repsol is committed to a flexible compensation system applicable to a majority of its companies that can meet the needs of each employee, such as the Share Purchase Plan and other products such as child care, medical insurance and additional contributions to the pension plan.

In 2017, total spending on employee benefits<sup>2</sup> was €102.6 million, compared to €122.5 million in 2016.

Repsol has a model of performance and merit-based annual variable remuneration. This model requirements evaluates achievement of company objectives, unit objectives and the individual objectives of each employee, and among them, it separately evaluates the How (performance) and the What (results).

**% distribution of social benefits by type**



**4. Professional development**

One of the main pillars of the Company's policy on talent management is to have a development model that is attractive and offers opportunities for professional growth.

In 2017, Repsol implemented a new model of professional development with clear and transparent criteria that strengthens integration by unifying the models in place at ROGCI and REPSOL. The model fosters meritocracy by setting out criteria for promotion and meeting the needs of the Company.

1. For further information, see Note 28.4 of the consolidated financial statements.

2. Expense of employees of managed FTE 's (includes Societat Catalana de Petrolis, S.A.).

It also enables differentiated career development for both technical and management profiles, boosts leadership as an instrument of cultural change and offers opportunities for development through mobility, training and promotion while taking into account the interests of individuals.

**Mobility** through different roles fosters learning and professional development through the acquisition of experience in different functions and/or functions of greater complexity. Mobility is playing a critical role in the implementation of organizational changes, where the challenge is to identify the best profiles for each position in the organization.

Mobility	2017	2016
Number of assignments	3,214	2,878
% of women (of number of assignments)	43%	39%

Repsol has also organized temporary assignments in some areas of the Company that have strengthened employees' development and cultural integration.

The Company maintains a complete and up to date **training** schedule in order to improve its employees skills throughout their professional careers.

Continuous improvement of knowledge, skills and aptitudes is key for fostering personal development.

Training	2017	2016
Investment per employee (€)	519	490
Total investment in training (million euros)	12.4	11.9
Hours of training per employee	40	41
Dedication rate <sup>(1)</sup>	2.34%	2.25%
% of employees receiving training <sup>(1)</sup>	94.5%	86.2%

(1) Corresponds to the % of annual working hours dedicated to training. It is calculated based on the accumulated average FTE's, over managed employees with a working day of over a 20%, excluding Societat Catalana de Petrolis, S.A.

In 2017, the team leaders program was renewed in adaptation to the new model of professional progression, which accompanies the development of Repsol leaders throughout their career in the company, thus making the most of internal skills and knowledge.

For the purpose of continuing to strengthen the Company's international culture, Repsol has continued to increase the foreign language training, and broadening the range of available online training, thus allowing a larger number of employees to access these learning activities.

Repsol encourages its employees to be active agents in their development via systems of feedback,

coaching, mentoring, constant exchange of knowledge and training.

Repsol also remains committed to the incorporation of **young talent**. The Company has adapted to the current environment its Masters programs and is receiving university students and occupational students on internships.

Young talent	2017	2016
New professionals completing the Master program of the Company	52	75
University internship agreements to consolidate training	444	423
Medium and higher level vocational training internships <sup>(1)</sup>	100	109

(1) These figures include students from medium and higher level vocational training cycles, with a high percentage of these joining Repsol's workforce through various job vacancies. In 2017, Repsol continued the commitment it had assumed with the FP Dual program.

In 2017, 742<sup>1</sup> employees were promoted, of which 38% were women. Promotion criteria include performance, potential and development. 99.0% of total employees integrated in the new progression model was evaluated with respect to their stage of development (in terms of the degree of maturity required in their professional role) and 99.6% were evaluated in terms of their potential (employee's capacity to take on greater responsibilities).

## 5. Leadership

Repsol leaders must be an example of values and conduct for those around them, in the development of talent, management of their teams, and in the achievement of results in an efficient manner. They must also inspire and boost the team to their maximum potential, as they are the main drivers of the transformation the Company is undertaking.

Repsol has reviewed the leadership profile required, and used a 180° evaluation to measure how well its leaders fit that profile. This methodology incorporates the viewpoint of individuals, the team and of the leader themselves, and it is critical for reinforcing its management style. In 2017, 100% of the executives and 99% of the area leaders were evaluated in this way, and the methodology will be applied to the other team leaders in 2018. As a result of the evaluation process, global and individual action plans were launched.

1. In 2017 promotions are considered raising of professional role, regarding the new professional progression model. In 2016, the reported data is higher due to the existence of another model with a greater number of categories.

GSP



**Ambition:**

To establish solid relationships based in recognition, trust, mutual respect and shared value through active dialogue with communities.

This renewed value proposal, based on these five pillars, helped reduce the total turnover rate compared to 2016. The voluntary turnover rate that has remained stable at the same levels in recent years.

Retaining talent	2017	2016
Total turnover rate <sup>(1)</sup>	9%	13%
Voluntary turnover rate <sup>(2)</sup>	4%	4%
Total executive turnover rate <sup>(3)</sup>	11%	22%

- (1) Corresponds to the total turnover rate of permanent employees out of the total number of employees at year-end.
- (2) Corresponds to the voluntary turnover rate of permanent employees out of the total number of employees at year-end.
- (3) Corresponds to the total turnover rate of executives out of the total number of executives at year-end.

**Collective bargaining**

Repsol strives for continuous and constructive dialogue with the employees' representatives. This is one of the essential elements of its People Policy.

In November of this year, the Company signed the Ninth Framework Agreement for a majority of the Repsol Group companies in Spain in which it holds a majority of the share capital or exercises industrial and labor management. The agreement is valid until the end of 2019.

This agreement is aligned with the business model, which is focused on the creation of value. It emphasizes the conditions that can activate the organization in a way that everyone will contribute to achieving common objectives in a sustainable manner over time.

The Framework Agreement consolidates the priorities and people management principles of the Company: quality employment, promoting professional opportunities for persons with different abilities, the linking of variable remuneration to the Company's objectives and achievements, linking of the salary review due to changes in the CPI to the Company's net income, fostering of equal opportunities, work-life balance, and professional development and constant learning.

**6.2.2. Respect for human rights and community relations<sup>1</sup>**

Repsol has an international presence and, very often, in highly sensitive social, political and cultural settings. The Company continues to implement the commitments it has undertaken in its Human Rights and Community Relations Policy, which is aligned with the United Nations Guiding Principles for Business and Human Rights.

**Repsol responsibility: respect and remedy**

The Company uses all the means at its disposal to prevent its activities or decisions from having adverse impacts on human rights, and will do all it can to repair the damage when such impacts occur.

Repsol's vision is to establish and maintain sound relations with 100% of the communities in the area of influence of its projects and assets. Relations based on recognition, trust, mutual respect and shared value.

In 2017, the Company defined this vision as the starting point for its roadmap. It has conveyed this commitment by reviewing the internal rules that regulate its processes and activities as the first phase of this transition from reactive strategies of conflict resolution to preventive management based on risks, impacts and opportunities. For this reason, in 11 especially important countries in social matters, 11 workshops were conducted, with the participation of nearly 200 people, to shore up the management of risks, impacts and social opportunities, and to consolidate a network of professionals who manage these relations with communities.

Nevertheless, 100% of significant operations manage opportunities and risks by taking into account at least one of the following mechanisms: development mechanisms, impact assessments, or the participation of stakeholders. All the impact assessments performed in 2017 included social and human rights issues.

GSP



**Targets:**

Strengthen management of social risks and impacts in critical operations and contribute to local socio-economic development. Ensure that grievance mechanisms are effective in all critical operations.

1. For further information on the community relations model, see [www.repsol.com](http://www.repsol.com).



## Operational level grievance mechanisms

Answering the grievances, concerns and complaints of local communities helps anticipate and respond to potential disagreements that may affect the activities of the Company. The nature of such mechanisms is special and unique in each setting.

In 2017, the Company received 82 grievances related to human rights through 14 grievance mechanisms in 7 countries. Some 68 were resolved and 14 are still being handled.

## Security and human rights

Repsol is a signatory to the Voluntary Principles on Security and Human Rights (VPSHR) initiative, which is aimed at ensuring the security of the operations in sensitive and conflict zones through working processes that uphold respect for human rights.

Repsol demands from private security firms that employees rendering services in its facilities should have training or take courses in human rights. In addition, in some countries like Colombia and Peru, the public security forces receive specific training in human rights.

Human rights	2017	2016
Number of employees trained in human rights (online)	519	1.307
Number of training hours in human rights (online)	1.040	2.614
Number of cases of violations of indigenous people's rights <sup>(1)</sup>	-	-
Number of involuntary resettlements	-	-
Contracts with security firms that include human rights clauses (%)	100	100
Contracted security personnel trained in human rights (%)	98 <sup>(2)</sup>	90
Security providers evaluated according to human rights criteria (%)	100	100

(1) There have been no incidents related to violations of indigenous peoples rights reported to the whistleblower channel of the Company.

(2) The increase is due to consideration of employees and contracted personnel training.

## 6.3. Safe operation<sup>1</sup>

In order to ensure that Repsol facilities are safe, and to protect the parties involved, the correct identification, assessment, and management of the risks associated with industrial processes and assets is critical.

Risks are assessed throughout the assets' life cycles, applying the best international standards in their design and strict maintenance and operating procedures, aimed to prevent incidents affecting the industrial processes involved. In addition, the new regulations on the Management of Safety and Environmental Incidents were approved. They substituted the previous standards on the Incidents Management and Management of improvement actions and lessons learned, and the Basic Rules Standard, and the global incident recording tool was also replaced.

This new approach enables Repsol to assess the seriousness of both real and potential consequences, thus facilitating management of each risk. It also encompasses quite unlikely risks that may, nevertheless, have very serious consequences for people, the environment, or the Company's facilities or reputation.



1. The figures and indicators in this section have been calculated in accordance with corporate standards that set out the criteria and common methodology to be applied in Safety and Environment (S&E). As a general rule, (S&E) information includes 100% of the data from companies in which Repsol holds a controlling interest or control over operation. Specifically, with regard to security, data is provided on contractors that provide services under a direct contract.

**GSP**

**a**

**Ambition:**  
Guarantee people's security with full respect for human rights.

**GSP**

**2020**

**Targets:**  
Implement 100% of the actions set out in the Implementation Plan according to the VPSHR in priority countries.

**GSP**

**a**

**Ambition:**  
0 accidents.

# 0 fatalities in 2017

## Process safety

**Process safety** is a key element in safety on which Repsol has been working for years, with a proactive safety plan called SMARTkeys. It is a set of initiatives that focus on process safety that is people, processes and plant-centered, thus helping Repsol keep risks under control and adequately managed.

The Company tracks its performance following the definitions established by IOGP<sup>1</sup>, API<sup>2</sup> and CCPS<sup>3</sup>, which are sets of international best practices in the field. The Company highlights that process accidents decreased by 4.6% in 2017 from the previous year, also surpassing the annual target.

Process safety indicators <sup>(1)</sup>	2017	2016
PSIR <sup>(2)</sup> TIER 1 + TIER 2	0.62	0.65

(1) A process safety accident is one in which the first line of control has been breached, with the following happening simultaneously: i) A chemical product or process is involved ii) It occurs at a specific location: the incident takes place at a production, distribution, or storage facility, at an auxiliary services facility (utilities) or pilot plant related to the chemical process or product involved and iii) It gives rise to an unplanned or uncontrolled release of material, including non-toxic and non-flammable matter (e.g. vapor, hot water, nitrogen, compressed air or CO<sub>2</sub>), with certain levels of consequence. The process safety accident will be classified as Tier 1 or Tier 2 according to the defined thresholds.

(2) PSIR: *Process Safety Incident Rate*

1. IOGP: International Oil and Gas Producers.  
 2. API: American Petroleum Institute.  
 3. CCPS: Center for Chemical Process Safety.

## Occupational safety

Repsol continues to work on reducing **occupational safety**.

Occupational safety indicators <sup>(1)</sup>	2017	2016
Lost time injury frequency rate (LTIFR) <sup>(2)</sup>	0.71	0.69
Lost time injury frequency rate for company employees	0.78	0.73
Lost time injury frequency rate (FR) for contractor staff	0.65	0.66
Total Recordable Incident Rate (TRIR) <sup>(3)</sup>	1.43	1.46
No. of company employee fatalities	0	0
No. of contractor staff fatalities	0	2
Number of training hours	200,080	211,182

(1) Repsol's corporate regulations set out a common methodology and criteria for recording incidents, which is complemented by an incident management indicator guide.  
 (2) Lost Time Injury Frequency Rate: number of lost time injuries and accidents per million work hours.  
 (3) Total Recordable Incident Rate: sum of accidents, lost work day cases, restricted work day cases and medical treatment cases, per million work hours.

Further, as shown in the above table, the LTIF remained virtually the same as the previous year, as the number of incidents with lost days decreased by 7% and worked hours by 10%. However, the TRIR decreased by 2% from the previous year due to a 14% decrease in incidents without lost days and a 7% decrease in incidents with lost days. This indicator includes fatalities and incidents both with and without lost days. The company has set TRIR targets since 2014.



## Prevention and response to environmental incidents

Robust safety management minimizes the probability and consequences of spills. The company works in three phases: i) prevention of spills, ii) early detection and iii) emergency management.

Spills <sup>(1)</sup>	2017	2016
Number of hydrocarbon spills	17	11
Volume of hydrocarbon spills (t)	85	40

(1) Indicators were calculated for hydrocarbon spills greater than 1 barrel in size that reached the environment (volume of the substance that reached the natural environment: soil, surface or underground waterways, etc.).

In 2017, there were two significant spills<sup>1</sup>. One of 46.35 tons of B5 diesel fuel in the Marketing Peru business, as a result of the derailment of a train transporting the product, and another of 15.84 tons of crude in the Exploration and Production business, due to a leak. In both cases, there was no contamination of agricultural lands or water sources. In Peru, the transporter took appropriate measures to remedy the affected area, and Repsol took additional measures in its contractual relationship with the transporter.

When a spill occurs, the company activates its emergency response mechanisms and subsequently implements new preventive actions to prevent recurrence.

## Development of a safety culture

The safety culture is an inseparable part of the organizational culture, which is underpinned by the same value and is manifested in common behavior and attitudes. The Company is committed to comprehensive approach:

- Definition of its own model of culture that spells out the desired attributes and related working practices (developed in collaboration with the ICSI -*Institut pour une Culture de Sécurité Industrielle*-).
- Deployment and dissemination of the model.
- Evaluation, identification and measurement with local focus to determine areas of improvement.
- Definition of cross and facility/asset focused improvement plans.

1. Significant spill Repsol reports significant spills in accordance with the criteria in GRI-G4, Oil and gas sector disclosures.

Repsol has developed an evaluation methodology of safety culture based on questionnaires, interviews, focus groups and on-the-job support to assist in identifying strong and weak points. The results enable the development of improvement plans and identifying of cross-cutting projects that can help the organization as a whole advance towards excellence.

Diagnostics have been carried out in LPG (Spain), in the Bolivia business unit (E&P), in the area of Chemicals in Sines, (Portugal) and Puertollano, (Spain) and in the Cartagena, A Coruña and Puertollano refineries in Spain. Workshops have also been conducted in Norway, Canada and the US in order to disseminate the model and detect the main areas of improvement.

### Good Practices

#### Nuevo Mundo Base Camp, Peru

The ship carrying fuel to the camp is escort (in a journey of almost 700 km) with another ship with anti-spill equipment, during the flooding period of the rivers Urubamba and Ucayali.

Review of fuel stocks and necessities in the field, for the prioritizing of fuel inflows during the river flooding times. Hence, the number of fuel shipments via river transport was reduced.

The performance of statistical analyses of the growth of internal/external corrosion in transmission pipes in order to prevent spills.



GSP

2020

**Target:**

Implement circular economy projects with a positive impact on society.

## 6.4. Environment<sup>1</sup>

Repsol develops its activities consuming only the resources that are indispensable for generating the most efficient energy with the minor least possible impact.

## The circular economy: our roadmap

The circular economy is one of the levers Repsol must rely on to contribute to the success of its sustainability model in the efficient use of

### Spheres of circularity

#### 1. Redefining raw materials

Inclusion of alternative raw materials in the production of the Company's products.

- Examples: use of CO<sub>2</sub> to manufacture plastics.
- Streams of external waste as a raw material for refinery processes.



#### 5. New services and products

Search for new business opportunities.

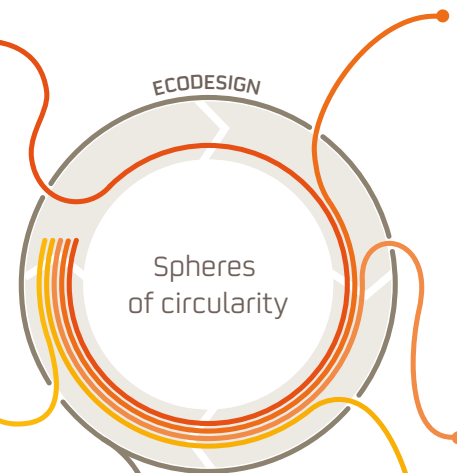
Example: corporate car-sharing based on renewable electricity.



#### Ecodesign

Development of more sustainable products in terms of their production, use or end of life.

Example: 100% recyclable asphalts.



#### 2. Efficiency and innovation in the processes

Maximizing the water reused, minimizing the water discharged and increasing energy efficiency.

Example:

- Use of municipal water in refining.
- Alternative uses of water in *Upstream* production.
- Decontamination of drilling residues and diesel recovery.



#### 3. Redefining waste

Harness waste as a raw material, product or energy.

Example:

- Recovery of hydrocarbon mud from the TAR plant in the coker unit.
- Use of potassium adipate as a fertilizer.
- Production of biodegradable plastics.



#### 4. Reconsidering the value chain

Search for new business opportunities.

Example: use of products from pyrolysis of plastics from dumps for chemical recycling.



#### Impact points

Products Processes Services



#### Vectors

Water Energy Raw mat. Waste



1. The figures and indicators in this section have been calculated in accordance with corporate standards that set out the criteria and common methodology to be applied in Safety and Environment (S&E).

As a general rule, (S&E) information includes 100% of the data from companies in which the Company holds a controlling interest or control over operation.

natural resources, with criteria of maximum efficiency, maximum transparency and the minor environmental impact. Repsol's circular economy strategy was approved by the CEO in December 2016, and its implementation began in 2017.

The activities currently under way and their progress are shown below:

- Generation of a business network:
  - Collaboration with 46 external companies that may contribute to the definition and implementation of projects.
  - Active participation in 10 national and international circular economy working groups (CEOE<sup>1</sup>, Chamber of Commerce, COTEC<sup>2</sup> CEPS<sup>3</sup>, the World Economic Forum, Plastics Europe, the European Commission, etc.).
  - Establishment of an internal professional network with experts from different businesses and areas of the Company comprising more than 70 people.
  - On October 23, 2017, Repsol became a signatory to the Circular Economy compact<sup>4</sup>.
- Conception, promotion and execution of projects:
  - Generation of new circular projects in the fields of water, waste and raw material.
  - Execution of 36 projects with external partners.
  - Preparation of circular initiatives catalog (CIC) with 120 initiatives for working in the coming years.

Repsol will also continue to deepen its search and implementation of innovative projects designed for efficient use of natural resources that meet criteria of maximum efficiency, maximum transparency and the least environmental impact, through a collaborative economy.

1. Spanish employers' association.

2. COTEC foundation for innovation.

3. Fundación Centro de Estudios Políticos y Sociales.

4. The Compact is part of the development of a Spanish circular economy strategy led by the Ministry of Economy, Industry and Competitiveness and the Ministry of Agriculture and Fisheries, Food and Environment, with the aim of involving the main economic and social actors in Spain in the transition to a new economic model. At the date of this document, 151 institutions and companies had signed the compact.

## Water

Water is a scarce commodity that is essential for the production of energy, an activity in which the Company must compete with many other users. Ensuring a sufficient supply of quality water is critical for sustaining the operations of its facilities. Repsol's GSP targets include the development of water action plans in Refining, Chemicals and E&P to ensure excellent management of this vital resource.

Industrial facilities require water to refrigerate, produce steam, as a raw material in processes, and for other uses such as fire-prevention or cleaning. Conventional E&P assets require fresh water for the employees who live in camps where the company operates, and also for hydraulic fracturing (fracking) in shale gas assets<sup>5</sup>.

The main challenges for our businesses are as follows:

- Finding water alternatives that will ensure supply. For shale gas assets, the amount of water used is assessed in order to seek out groundwater aquifers; reuse of waste water; recirculation of flow back water and application of best technologies for water treatment. With respect to protection of groundwater aquifers, every wellbore has an engineered steel casing system that is cemented externally to prevent communication between the wellbore and different groundwater aquifers. The integrity of casing pipes are checked both before and after fracture operations. Potable water wells are much shallower than shale gas reservoirs and are typically located at a depth of 50 - 100 meters, which is far less than that of shale gas formations, which are normally several kilometers below the surface. For this reason, the probability of water contamination is remote.
- Becoming competitive in the generation of Company products, reducing the tons of water used per barrel processed to improve operational efficiency.

5. Hydraulic fracturing fluid is comprised of 99.5% water and sand, and 0.5% of other chemicals. The chemical classifications and the concentrations of ingredients used in the hydraulic fracturing activity are disclosed in: <http://fracfocus.ca> and <http://fracfocus.org>.

GSP

a

**Ambition:**  
Neutral environmental impact in natural resource management.

**28%**

reused water as against withdrawn water

## Water

For further information on water, see [www.repsol.com](http://www.repsol.com)

**GSP**

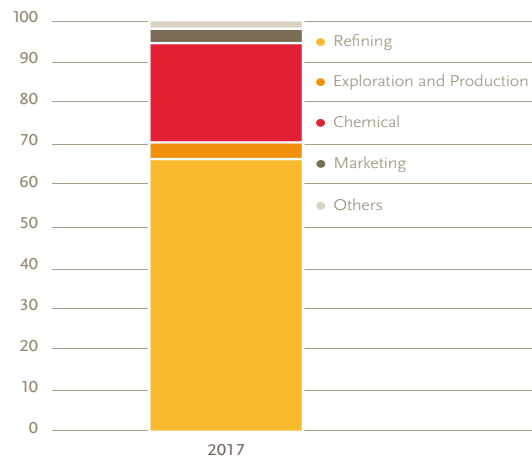
**2020**

**Target:**  
Develop initiatives that optimize the use of fresh water and reduce the impact on the effluent.

- Adapting management of discharges to increasingly restrictive regulatory limits and company standards. Industrial facilities in Spain and Portugal are carrying out specific actions and investments to adapt to the new best available practices (BREF). In addition, all E&P assets are compliant with minimum common requirements, namely the Environmental Performance Practices (EPP) relating to the quality of the discharges from their sanitary effluents and production water, their environmental impact and the prohibition of practices that may result in contamination of underground soil and water.

The main fresh water sources, by business, are the public network (66.2%), surface resources (28.5%), and, to a minor extent, underground aquifers (5.3%).

**Water withdrawal by activity**



Water management	2017	2016
Fresh water withdrawn (kilotons)	53,497	52,022
Recycled water (kilotons) <sup>(1)</sup>	14,995	10,292
Water discharged (kilotons) <sup>(2)</sup>	33,450	42,250
Hydrocarbons in water discharged (metric tons)	166	245
Water withdrawn in Refining/processed crude oil (tons) <sup>(3)</sup>	0.74	0.82

- Increase in recycled water is mainly due to estimation and measurement improvements in Repsol's industrial facilities.
- Decrease in water discharged and hydrocarbons in water discharged is due to the fact that Repsol does not operate the assets of Trinidad and Tobago (TSP) and the alignment of the consolidation criteria of the assets of Talisman Legacy to Repsol standards.
- The Refining activity is the most intensive in the use of fresh water. Water withdrawn per ton of crude processed in our refineries has decreased by 10%.

**GSP**

**2020**

**Target:**  
Minimize the generation of waste and improve its management.

**Waste**

Repsol is working to improve waste management throughout the lifecycle of our processes. In 2017, the Company reduced hazardous waste led to elimination (including landfill) by 11,369 tons and specific improvement steps were taken in management of mud and drill cuttings in the Upstream business.

In addition, new initiatives are being supported and analyzed with different waste managers within a collaborative economy approach in order to generate innovative opportunities to improve waste management in prevention, reuse, recycling, energy recovery and the disposal thereof. Minimizing the volume of waste sent to landfill sites is consistent with the objectives of the circular economy.

Waste management <sup>(1) (2)</sup>	2017	2016
Hazardous waste (metric tons)	40,065	56,920
Non-hazardous waste (metric tons)	352,148	217,552

- Additionally, waste related to drilling muds should be considered, amounting to 146,892 and 169,372 tons in 2017 and 2016, respectively.
- The increase observed in 2016 over the previous year is due to an increase in land management activities.

**Good Practice**

**Waste management optimization program in Canada business unit**

Increase economic efficiency and environmental performance in waste management is a priority in drilling activities. The drilling team of the Canadian business unit has made significant advances in this regard along two areas:

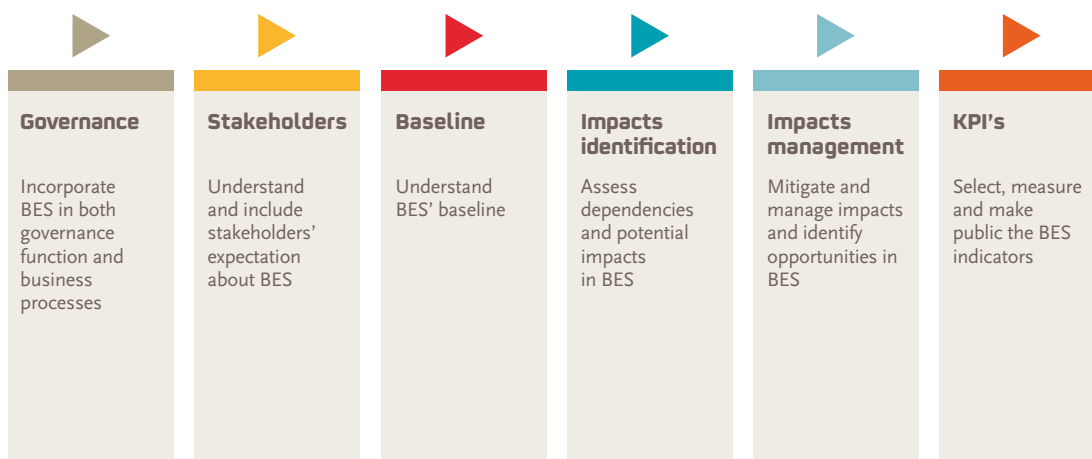
- Greater extraction of liquid through a second centrifuging, which generates a more solid waste, decreases the volume of sawdust necessary to solidify it and minimizes the volume sent to landfill.
- Greater recovery of mud present in waste, thus reducing the amount of mud sent to the landfill and increasing its rate of reuse.

## Preserve Biodiversity and Ecosystem Services (BES)

Repsol is committed to mitigating potential impacts on biodiversity and the resources it provides (ecosystem services) in its planning and execution of projects and operations. To do so, it is guided by the following United Nations principles for sustainable development in carrying on its activities:

- Preventing, minimizing and restoring the environmental impact in all its operations, and especially in sensitive, protected or biologically diverse natural spaces.
- Integrating biodiversity and protection of ecosystem services in the Company's management systems and decision-making processes by including environmental and social assessments.
- Taking part in projects of research, conservation, education and awareness-raising.



### Management model BES (Biodiversity and Ecosystem Services)



  In 2017, implementation of this methodology in the assets operated and projects from the old Legacy Talisman society of Canada, USA, Malaysia and Vietnam.

  Environmental Management Strategy of the Sagari pipeline construction project in the 57 lot of Peru.

  Acquisition and interpretation of satellite images in the Caipendi Area of Bolivia.

  Publication of the book "Machiguenga, Una reserva para todos". Investigation of the Machiguenga Communal Reserve related to flora and fauna species and ecosystem services, an area of great biological value in Peru, carried out with the support of scientists, local communities and the National Service of Protected Natural Areas by the State – (SERNANP by its Spanish acronym).

PGS

a

**Ambition:**

Drive technological innovation as a lever of transformation towards sustainable business models.

## 6.5. Innovation and technology

### Innovation

For Repsol, and even more so in the current environment of uncertainty and volatility, innovation in management is the key to speeding up decision-making and creating and developing opportunities. To drive forward these processes of innovation and improvement, the company has a network of facilitators whose objective is to support business and areas to generate a work environment that encourages collaboration, and the generation of ideas, the transfer of good practices and continuous improvement. These facilitators accompany organizational or project teams in the application of these methodologies.

The efforts carried out in 2017 focused on different lines of work:

- Incorporation of new ways of working. Through different dynamics, teams are given responsibility, commitment and alignment is generated and/or solutions are generated for complex challenges, in a way that is agile and that brings together all involved parties. These methodologies have been applied not only to traditional challenges, but to initiatives of the high-impact Transformation Program due to their cross-cutting impact, such as the Corporate Business Relationship Model or the Control Model Optimization.
- Promotion of continuous improvement programs as a fundamental element in our management system for aligning day-to-day operations with the Company's strategy, by means of a cultural change aimed to maximize value contribution in a sustainable way. In 2017, new dynamics of daily improvement were incorporated in industrial facilities in both the Refining and Chemicals businesses, while work continued on the optimization of processes along the same lines as in previous years. In these dynamics, all individuals take part in identifying and executing improvements related to their work environment. It is this engagement that adds sustainability to the improvement.
- Capitalization of knowledge through the sharing of experiences and collective learning

is a key factor for the competitiveness of our Company. Communities of practices promoted by businesses are based on a successful model for channeling and fostering networked by learning and digitalization of knowledge.

These efforts have materialized in the accompaniment of more than 100 working teams that have achieved tangible results and created a network of facilitators consisting of more than 100 people.

### Technology

The world is in the midst of a process of change and transformation in which the development of new technologies, their transfer and implementation are a guarantee that Repsol can offer quality products and services in the present, and also prepare for the future.

The development of R&D projects, the creation of basic knowledge to then scale it to new technologies being implemented and the collaborative work in network are some of the keys in Repsol's innovation strategy. In addition, Repsol considers it is critical to capture, incorporate and co-create the innovation developed in the external technology and entrepreneurial ecosystem.

To achieve its objective, Repsol works within an integrated model. Through a process of technology scouting in the academic environment and of R&D in technology partners and start-ups, a Company technology portfolio is built including R&D projects developed either internally or externally and projects that require investments in start-ups.

#### R&D projects

In 2017, further advances were made in the development of state-of-the-art technologies in hydrocarbon **exploration and production** and mainly in the deployment phase of technologies in company projects. As examples of new technology achievements, the Sherlock project completed installation of all capacities in digital petrophysics for hydrocarbon storage, characterization, and Pegasus has now accomplished its first artificial intelligence prototype for acquisition of assets



and optimization of development plans. The *Thor Hammer* project has begun the deployment of its geo-mechanical tools for the optimization of unconventional assets. Lastly, the Horus Project successfully completed its concept test, involving nano-sensors embedded in drilling cement to monitor wells' integrity, among other achievements.

Regarding **refinery** technology, processes have been designed in laboratories and pilot plants of the Repsol Technology Center that have been successfully implemented in our industrial facilities to improve their efficiency. Noteworthy is the knowledge developed to exploit the processing of opportunity crude oil, allowing for adjusting processes to the supply of such crude, while products are adapted to market demand. Also, prototypes have been developed that allow for offering products with a high technology load, such as smart asphalt, or lubricants designed to save fuel in state-of-the-art engines. In the industrial area, and within the strategic lines set out by the company, it should be pointed out the technology supporting decision-making based on advanced simulation and artificial intelligence.

New energy models are being assessed within the company, and the Technology Center has emerged as a testing ground for pilot projects. Its mission is to validate systems aiming to the establishment of a new commercial line for the company.

In R+D for **new energies and materials**, the first steps have been taken in advanced biology for real-scale hydrocarbon bioprospecting and the exploration of ways to apply biotechnology in our present processes and products.

Also, R&D projects are being undertaken for the next generation of batteries for electric vehicles development. The aim is to replace today's lithium-ion batteries, in a clear effort to maintain the company's position as a major actor facing the future electrification of transport. These projects are carried out in partnership with international leaders, and they give the scientists of the Company the opportunity to take part in a high potential petrochemical developments.

With regard to advances in materials, testing has begun on customers of polyol technology for evaluation in the market. Also, a number of projects have been launched in alignment with circular economy policies that support different lines of the Chemicals business in order to offer ever more

sustainable products. The development of materials for the automotive market is one of the most promising lines in our business orientation.

Repsol's goal is to market the intellectual property generated by the company, whether developed internally or purchased, that may have market value, provided such externalization does not involve a loss of know-how and or competitive edge for Repsol. One of the projects being marketed is HEADS, a system for the early detection of underwater hydrocarbons developed jointly with Indra.

Repsol's R&D investment has amounted to €72 million.

KPIs	2017	2016
R+D Investment (million euros) <sup>(1)(2)</sup>	72	78
No. of external scientific collaboration agreements	52	98
Projects supported by the Spanish government	6	10
Projects supported by the EU	8	11

(1) Indicator calculated in accordance with the Group's reporting model described in Note 5, "Segment Reporting," of the financial statements.

(2) Amounts calculated using the guidelines established in the Frascati Manual of the OECD and the EU Industrial R&D Investment Scoreboard presented annually by the European Commission.

All this activity is led by the Repsol Technology Center, the scientific heart of the company, which is located on a campus of more than 192,000 m<sup>2</sup> and has more than 56,000 m<sup>2</sup> of built-up space of facilities and laboratories, bringing Repsol international renown for its technology.

#### Investments in start-ups (venture capital)

In 2017, the new Repsol operational model for corporate venture capital was defined. It comprises five-year funds of investment in start-ups with the objective of enabling the early incorporation of new technologies and business models to the activities of the Company. For the 2016-2020 fund, Repsol has committed to making a contribution of €85 million. In 2017, the fund had €7 million invested.

The new operational model is focused on six search fields to incorporate external innovation in Repsol.

It currently holds eleven stakes and joint development projects in the fields defined in the model.

In addition to direct investments in start-ups, Repsol takes part, along with its partners, in OGCI **Climate Investments** (OCGI-CI), a vehicle for channeling \$1,000 million investment committed over ten years to develop and accelerate the commercial rollout of innovative technologies of low greenhouse gas emissions. In 2017, the first

investments were made in this vehicle: Solidia Technologies, a US company that can produce cement in a way that generates lower emissions; Achates Power, a company that is developing more efficient vehicle engines; and a project that aims to design a large-scale gas-fueled electrical plant with carbon capture and storage, including the industrial capacity to capture CO<sub>2</sub>.

In 2017, Repsol has continued co-investing with CDTI in Spanish technology SMEs through the INNVIERTE program.

## To capture innovation in Start-ups



### WHAT'S IN IT FOR REPSOL?

- Quick access to new technologies and business models
- Adaptation of technology developed in a start-up ecosystem to the needs of the O&G industry (Oil & Gas)
- Stating at the forefront of technological development and generating synergies with other players in the industry

### WHAT'S DOES REPSOL OFFER THE START-UPS?

- The opportunity to test its technology and/or business model on the Company's assets and businesses
- Access to technical expertise and industry knowledge
- Access to Repsol's sales channels and customers

### 1. WHAT IS IT ALL ABOUT?

Investing in start-ups that develop innovative business models or technology and promoting their implementation at Repsol

### 2. OBJECTIVE

Helping to create a competitive advantage for Company undertakings by investing in new innovative companies in order to speed up the development and implementation of new technologies and business models on behalf of Repsol. These activities complement the Company's internal R&D capacities

### 3. BUSINESS CHALLENGE

Identifying and prioritizing challenges and continuous updates

## 6.6. Responsible tax policy

### Tax policy: evaluation and monitoring

The Group's tax policy, approved by the Board of Directors of Repsol, S.A., is aligned with the company's mission and values, and with its long-term business strategy, and can be summarized as follows:

"The Repsol Group is committed to managing its tax affairs through applying best tax practices and acting transparently, paying taxes in a responsible and efficient manner, and promoting cooperative relations with governments, avoiding significant risks and unnecessary disputes."

Following approval of the tax policy by the Board of Directors, multiple actions have been taken that are directly inspired by the **five principles** set out in the tax policy, and that reflect compliance thereof by the Group.

### Tax contribution and impact

Taxes have a significant impact on the Group's **results**. Repsol is subject to various types of income tax in the countries where it operates. Each tax has its own structure and withholding rate. The tax rates applicable to profits on production of hydrocarbon (Upstream activities) are usually higher than general rates. In some cases, profits are not only taxed in the country where they are earned but also in the country where the companies that own the operations or their parent companies are domiciled, wherein cases of double taxation may arise.

Additionally, Repsol is subject to other taxes that reduce its profits and, particularly, its operating results. This is the case of taxes on hydrocarbon production (royalties and similar), local taxes and fees, employment taxes and social security contributions, etc.

## Five Tax policy Principles

### 1 Responsible compliance

- Application of the Spanish Code of Good Tax Practices.
- Streamlining of Group's corporate structure, not using tax havens or non-transparent structures.
- Transfer prices in line with value creation and principle of full competition.
- First submission of country-by-country report (CBC) to the Spanish tax agency (AEAT).
- Implementation of immediate reporting system with Spanish tax agency (AEAT).

### 2 Tax efficiency and upholding the company interest

- Tax planning aligned with Business and oriented toward legitimate optimization.
- Application of tax benefits in accordance with letter and spirit of law and accessible to all economic operators (R%D deductions, freedom of amortization, capitalization reserve, etc.).

### 3 Prevention of significant tax risks

- Incorporation of tax risks to Group's comprehensive risk management system. Satisfactory definition and audit of the key controls in the tax area.
- Reporting to Board of Directors of tax strategy and management during year.
- Conclusion of amicable proceedings and agreements with tax administrators in different matters.

### 4 Transparency

- Leaders in Spain in transparency and tax responsibility according to studies by different social analysis observatories.
- Incorporation of tax objectives to Repsol Global Sustainability Plan.
- Member of B-Team working group and signatory of group's good tax governance principles.
- Active dialogue with NGOs.
- Publication of tax payments by country.

### 5 Cooperative relations

- Voluntary submission to Spanish tax agency of 2015 and 2016 tax transparency report.
- Participation in joint work forums with authorities (Spain, Portugal, Singapore, United Kingdom, Netherlands). Signatories to Good Tax Practices in Spain.
- Participation in the pilot program of the International Compliance Assurance Programme ICAP (BEPS initiative).
- Members of tax forums of the EU, OECD and the UN.

GSP

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**Ambition:**  
Achieve public recognition as a responsible and transparent company in tax matters.

### Responsible Tax Policy

The Group has a specific section on its corporate website with information on its tax policy and strategy, which is available at [www.repsol.com](http://www.repsol.com)

In 2017, the **tax impact** on net income was as follows:

Item	2017		2016	
	Amount	Rate	Amount	Rate
Income tax	1,122	37.9% <sup>(1)</sup>	238	14.4%
Total tax burden <sup>(2)</sup>	2,118	53.5% <sup>(3)</sup>	1,066	43.1%

Sign convention: (+) tax expense; (-) tax income

(1) Income tax/net income before tax

(2) Total tax burden includes: Income Tax + taxes and contributions that are deducted from the operating result.

(3) Total tax burden/net income before tax.

In 2017, Repsol paid more than €11,979 million in taxes and similar public charges<sup>1</sup>, and filed more than 54.000 tax returns.

In order to enable monitoring and analysis of the Group's **tax contribution**, taxes paid are segmented into those that involve an actual expense for the company, reducing its results (for example, corporate income tax, tax on production, social insurance payable by the company) and those that do not reduce results because they are withheld or passed on to the final taxpayer (such as value-added tax, tax on the sale of hydrocarbons, withholding taxes, etc.). We classify the first group under "Tax burden" and the second under "Taxes collected."

#### Taxes effectively paid in 2017, by country

Million euros	Tax burden			Taxes collected				Total 2017	Total 2016
	Corporate income tax	Other	Total	VAT	TH <sup>(1)</sup>	Other	Total		
Spain	566	400	966	2,480	5,019	295	7,794	8,760	8,962
Portugal	48	11	59	281	806	18	1,105	1,164	1,126
Italy	0	3	3	(14)	109	1	96	99	171
Holland	59	0	59	0	0	0	0	59	90
Norway	0	1	1	27	0	21	48	49	44
United Kingdom	0	9	9	(6)	0	20	14	23	2
Rest	1	1	2	3	0	0	3	5	5
<b>Europe</b>	<b>674</b>	<b>425</b>	<b>1,099</b>	<b>2,771</b>	<b>5,934</b>	<b>355</b>	<b>9,060</b>	<b>10,159</b>	<b>10,400</b>
Peru	27	77	104	287	172	22	481	585	520
Brazil	0	163	163	1	0	30	31	194	103
Colombia	27	2	29	(1)	0	20	19	48	39
Bolivia	5	8	13	20	0	5	25	38	79
Venezuela	16	12	28	3	0	7	10	38	25
Ecuador	7	4	11	2	0	4	6	17	19
T&T	0	39	39	(47)	0	4	(43)	(4)	(1)
Rest	0	0	0	0	0	0	0	0	-
<b>Latam &amp; Caribbean</b>	<b>82</b>	<b>305</b>	<b>387</b>	<b>265</b>	<b>172</b>	<b>92</b>	<b>529</b>	<b>916</b>	<b>784</b>
Indonesia	184	0	184	3	0	5	8	192	136
Malaysia	2	176	178	(12)	0	15	3	181	141
Russia	9	63	72	7	0	8	15	87	65
Vietnam	15	13	28	0	0	2	2	30	28
Singapore	0	0	0	10	0	1	11	11	6
Rest	0	0	0	0	0	5	5	5	15
<b>Asia and Oceania</b>	<b>210</b>	<b>252</b>	<b>462</b>	<b>8</b>	<b>0</b>	<b>36</b>	<b>44</b>	<b>506</b>	<b>391</b>
US	0	48	48	0	0	28	28	76	89
Canada	1	27	28	7	0	39	46	74	64
<b>North America</b>	<b>1</b>	<b>75</b>	<b>76</b>	<b>7</b>	<b>0</b>	<b>67</b>	<b>74</b>	<b>150</b>	<b>153</b>
Libya	196	28	224	0	0	1	1	225	1
Algeria	14	2	16	0	0	5	5	21	28
Rest	0	0	0	0	0	2	2	2	7
<b>Africa</b>	<b>210</b>	<b>30</b>	<b>240</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>248</b>	<b>36</b>
<b>TOTAL</b>	<b>1,177</b>	<b>1,087</b>	<b>2,264</b>	<b>3,051</b>	<b>6,106</b>	<b>558</b>	<b>9,715</b>	<b>11,979</b>	<b>11,764</b>

(1) Hydrocarbon tax. It includes what is received through the logistic operators when the Company is the ultimate responsible for the payment.

1. Only taxes actually paid during the year are counted; hence taxes accrued during the period but that will be paid in the future are not included. Refunds from previous years are not included.

## Group presence in tax havens

In accordance with its tax policy, Repsol refrains from the use of opaque or artificial structures that aim to conceal or reduce the transparency of its activities. Repsol is committed to not having a presence in tax havens, unless it is for legitimate business reasons.

In the event it should have a presence in a tax haven, the following is guaranteed: (i) authorization by Board of Directors of the incorporation or acquisition of a company, along with periodic reporting on activity; (ii) strict compliance with regulations governing the pursuit of its business activities; (iii) application of the Group's general standards and procedures for management and control; and (iv) full transparency and cooperation with relevant authorities in supplying any information requested on the business activities carried on.

For the purposes of defining tax havens, the definition provided in Royal Decree 1080/1991 of July 5 will be used as the benchmark. In addition the Group carries out exhaustive monitoring of current international initiatives on the subject and their possible impact on the definition of the concept of tax haven and, therefore, the potential expansion of the listing to other countries or territories (list of the EU's non-cooperative tax jurisdictions<sup>1</sup>, prepared by the Economic and Financial Affairs Council (ECOFIN) of the European Union).

The company is actively working to reduce its already limited presence in territories classified as tax havens or that are regarded as non-cooperative by tax authorities. In recent years, Repsol has significantly reduced its presence in these territories from more than 40 companies to a negligible level, as described below.

With respect to the Spanish list of tax havens, as of December 31, 2017, Repsol has no active controlled company with its registered address and tax residence in such territories.

Nevertheless, the following must be noted:

- The Group holds two controlled entities domiciled in a tax haven that are inactive and/or in the process of liquidation.
- The group holds minority, non-controlling interests in three companies located in tax havens.

Repsol's presence in these territories is not an attempt to reduce the transparency of our activities or engage in illicit or undesirable practices, but is related to appropriate purposes aligned with conventional sector standards.

Attached hereto is a list of Repsol Group companies resident in tax havens at December 31, 2017 (Spanish listing) with a breakdown, for information purposes, of certain economic figures of these companies:

### Repsol's presence in tax havens according to Spanish listing

Company	Jurisdiction	Participation	Status	Total income (€ million)	Profit before tax (€ million)	Nominal income tax rate	Corporate income tax accrued (€ million)
Greenstone Assurance Ltd. <sup>(1)</sup>	Bermuda	100%	Inactive	0.03	(0.11)	0%	0.00
Branch in Liberia of Repsol Exploración Liberia B.V. <sup>(2)</sup>	Liberia	100%	Inactive	0.50	(0.38)	25%	0.00
Oleoducto de Crudos Pesados (OCP) Ltd <sup>(3)</sup>	Cayman Islands	29.66%	Active	3.52	3.22	0%	0.00
Oil Insurance Ltd. <sup>(4)</sup>	Bermuda	5.81%	Active	36.39	10.19	0%	0.00
Transasia Pipeline, Co. <sup>(5)</sup>	Mauritius	15%	Active	0.04	(0.34)	15%	0.00

Sign convention: positive sign indicates revenue/profit; negative sign indicates expense/loss.

(1) Insurance company whose current purpose is limited to liquidating risks assumed in the past. Currently in run off.

(2) Permanent establishment in Liberia of Repsol Exploración Liberia B.V., which previously carried out oil & gas exploration activities in Liberia. Presently inactive, now in the process of de-registration.

(3) A company that includes an international association agreement (joint venture), to channel the stake in an Ecuadoran operating company that manages oil activity infrastructures (Oleoducto de Crudos Pesados). Figures considered according to Repsol's stake.

(4) Mutual insurance companies of the Oil & Gas sector that covers Group risks from Bermuda, a typical jurisdiction for reinsurance activity of Upstream business assets; Figures for 2016, the latest data available. Figures considered according to Repsol's stake.

(5) Joint venture to channel the stake in an Indonesian operating company that manages oil activity infrastructures. Amounts for the year 2015.

1. It should be noted that this list of countries and territories is a dynamic list that does not have a regulatory status, but that will certainly influence and guide Spanish legislators when in their future reviews of the list contained in Royal Decree 1080/1991.

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### Target:

Eliminate presence in tax havens (except for unavoidable and legitimate business reasons) and streamline corporate structure.

Repsol has no companies domiciled in countries or territories classified by Spanish law as nil-tax jurisdictions other than those mentioned above.

Also, for illustrative purposes, below is a list of Group companies based in territories classified as non-cooperative tax jurisdictions on the aforementioned EU list.

**Repsol's presence in non-cooperative tax jurisdictions on EU list**

Company	Jurisdiction	Participation	Status	Total income (€ million)	Profit before tax (€ million)	Nominal income tax rate	Corporate income tax accrued (€ million)
Branch in Trinidad & Tobago of BP Amoco Trinidad & Tobago LLC <sup>(1)</sup>	Trinidad and Tobago	30%	Active	451.82	-63.10	57.25%	-16.22
Repsol Angostura Ltd. <sup>(2)</sup>	Trinidad and Tobago	100%	Active	2.68	-25.34	55%	3.82
Branch in T&T of Repsol Exploración Tobago, S.A. <sup>(3)</sup>	Trinidad and Tobago	100%	Active	0.08	0.02	55%	0
Repsol Exploration Namibia Pty, Ltd. <sup>(4)</sup>	Namibia	100%	Inactive	0.46	0.26	35%	0.09

Sign convention: positive sign indicates revenue/profit; negative sign indicates expense/loss.

- (1) Branch in Trinidad and Tobago of a US joint venture between Repsol and the BP Group that holds exploration and production licenses in the country. Figures considered according to Repsol's stake.
- (2) Company incorporated in Trinidad and Tobago whose business is the provision of corporate services to Group companies.
- (3) Branch in Trinidad and Tobago of a Spanish company that current holds a stake in exploration assets in the country.
- (4) Inactive company incorporated in Namibia that previously held several exploration blocks (currently abandoned).

**6%** ↓

**Net corporate reduction in 2017.**

**Corporate streamlining**

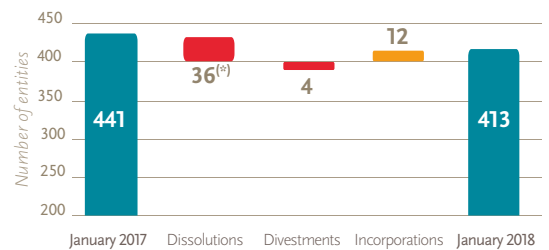
Maintenance of a simple and easily manageable corporate structure is an objective of the Repsol Group.

Accordingly, it would be useful to outline the efforts made in 2017 toward streamlining the corporate structure.

Although it is well known, we should mention that the acquisition of the Talisman Group entailed substantial work in this regard. It required the integration of an intrinsically complex structure that encompasses more than 200 entities in 25 different jurisdictions.

Throughout 2017, significant progress was made in streamlining the Group's corporate structure, the main highlights of which were as follows:

**(Net) reduction of entities in 2017**



(\*) Out of the 36 dissolutions, 1 of them corresponds to a company domiciled in a tax haven and 18 in controversial territories, from a tax perspective.

This net reduction (6%) contributes to achieving the Repsol Group's objective of maintaining a transparent corporate structure, while projecting a unified and uniform image and strengthening the company's market position with a unique identity.

## 6.7. Ethics and compliance

Repsol has procedures and a global framework in place to ensure the appropriateness and observance of all its obligations, whether internal or external, in every regulatory area. The Company's Compliance function helped strengthen the global compliance culture and improve identification, monitoring and support in management of ethics and conduct risks.

### Ethics and conduct code

Repsol has a Board of Directors-approved **Ethics and Conduct Code** that applies to all Repsol directors, executive personnel and employees, regardless of the type of contract governing their professional or employment relationship. The Code establishes a framework of reference to understand and put into practice the behavior and expectations the company places in each of them, under the guidance of the values of the Group. In 2017, a dissemination plan was launched, including a specific training program for all employees on the Ethics and Conduct Code. The Ethics and Conduct Code is available at [www.repsol.com](http://www.repsol.com).

The Company has an **Ethics and Compliance Channel** ([ethicscompliancechannel.repsol.com](http://ethicscompliancechannel.repsol.com)) that is accessible 24 hours a day, 7 days a week and is managed by an external supplier. The channel allows employees or any third party to report, with absolute confidentiality, queries and possible breaches of the Ethics and Conduct Code or the Crime Prevention Model.

### Fight against corruption and bribery

In order to prevent corruption and bribery, Repsol's **anti-corruption policy** enshrines the company's commitment to carrying out all its activities in accordance with current legislation wherever it operates, and to reject all forms of corruption. The Company also has a Crime Prevention Model and an internal investigations procedure that implements the crime prevention model and response mechanisms for potentially unlawful conduct attributed to Group companies, with the aim of preventing the risk of occurrence of such

conduct. During the year, a Crime Prevention Manual was designed to explain what conduct is prohibited, and what Repsol expects from all its employees in this regard, with the aim of completing existing rules and regulations and improving their dissemination and comprehension. The mission of the Ethics and Compliance Committee is to manage monitoring and compliance system of the Repsol Group's Ethics and Conduct Code, and it is also Repsol's Crime Prevention Body for the purposes of the Crime Prevention Model.

Ethics and compliance	2017	2016
Number of employees trained online in Ethics and Conduct Code <sup>(1)</sup>	11.296	2.483
Number of communications received through the ethics and compliance channel	45	32
Number of corruption mitigation controls	306	229
Number of audit projects related to compliance of the Ethics and Conduct Code <sup>(2)</sup>	31	22
Number of ICFR controls related to mitigation of fraud	990	800
Number of serious and very serious incidents due to breach of the Ethics and Conduct Code:	192	124
Written warnings	13	20
Work and salary suspensions	133	102
Resignations	46	2
Number of dismissals due to breach of the Ethics and Conduct Code	91	60

(1) Includes anti-corruption training.

(2) Generally, in all Internal Audit projects matters related to compliance of the Ethics and Conduct Code (ECC) are reviewed, although specific reviews of ECC-related or corporate social responsibility-related matters were conducted in 31 projects in 2017.

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#### Target:

100% of employees informed on what is expected of them in the prevention of and fight against corruption.

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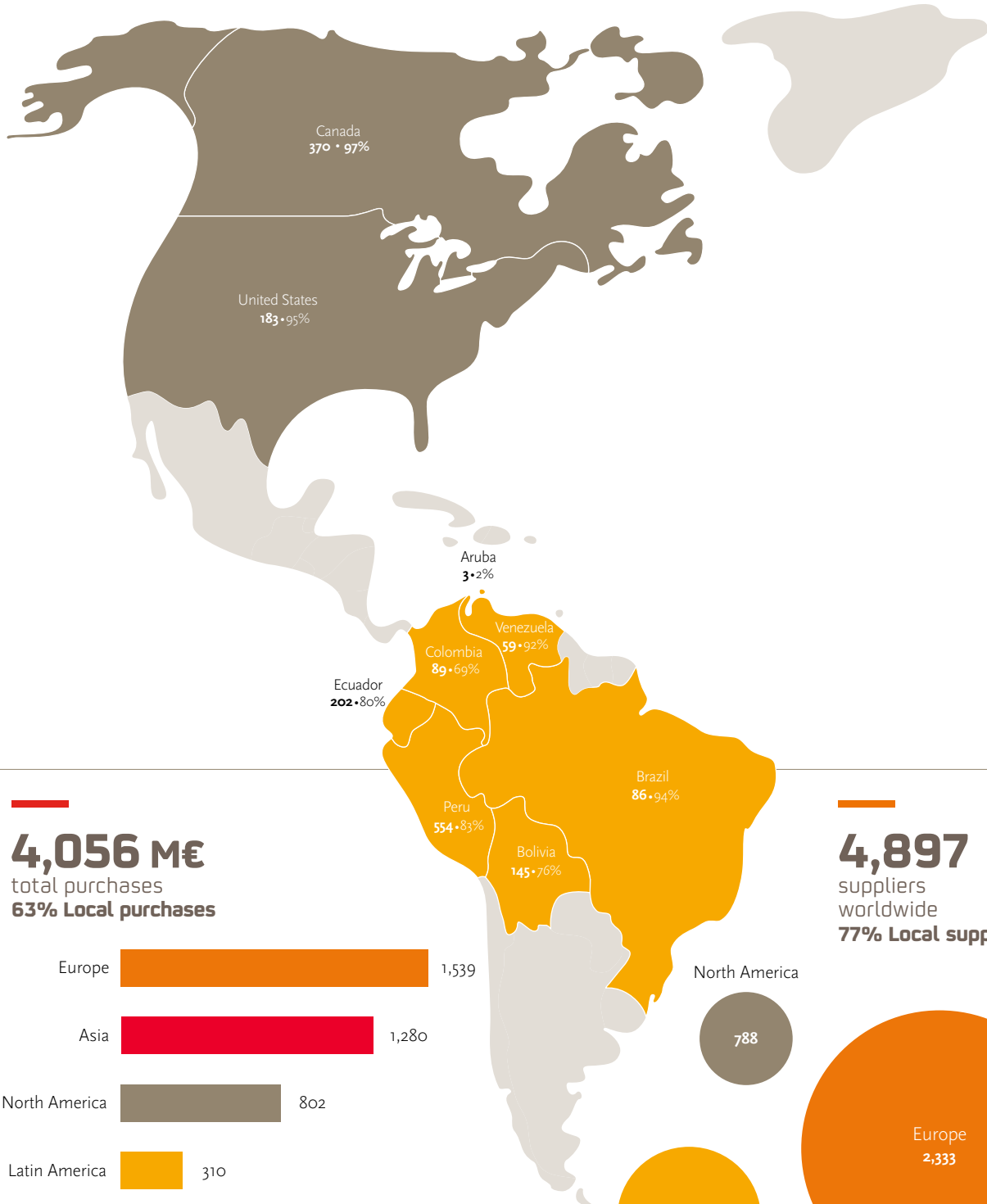
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#### Ambition:

No cases of corruption.

## 6.8. Supply Chain<sup>1</sup>

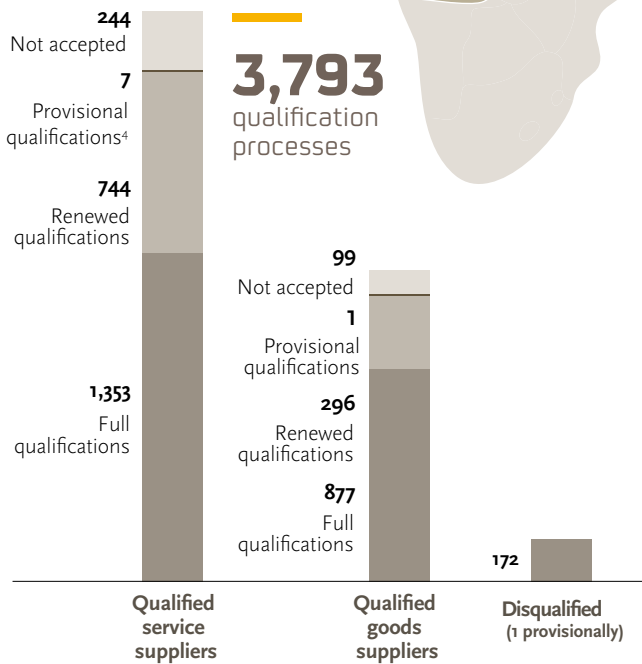
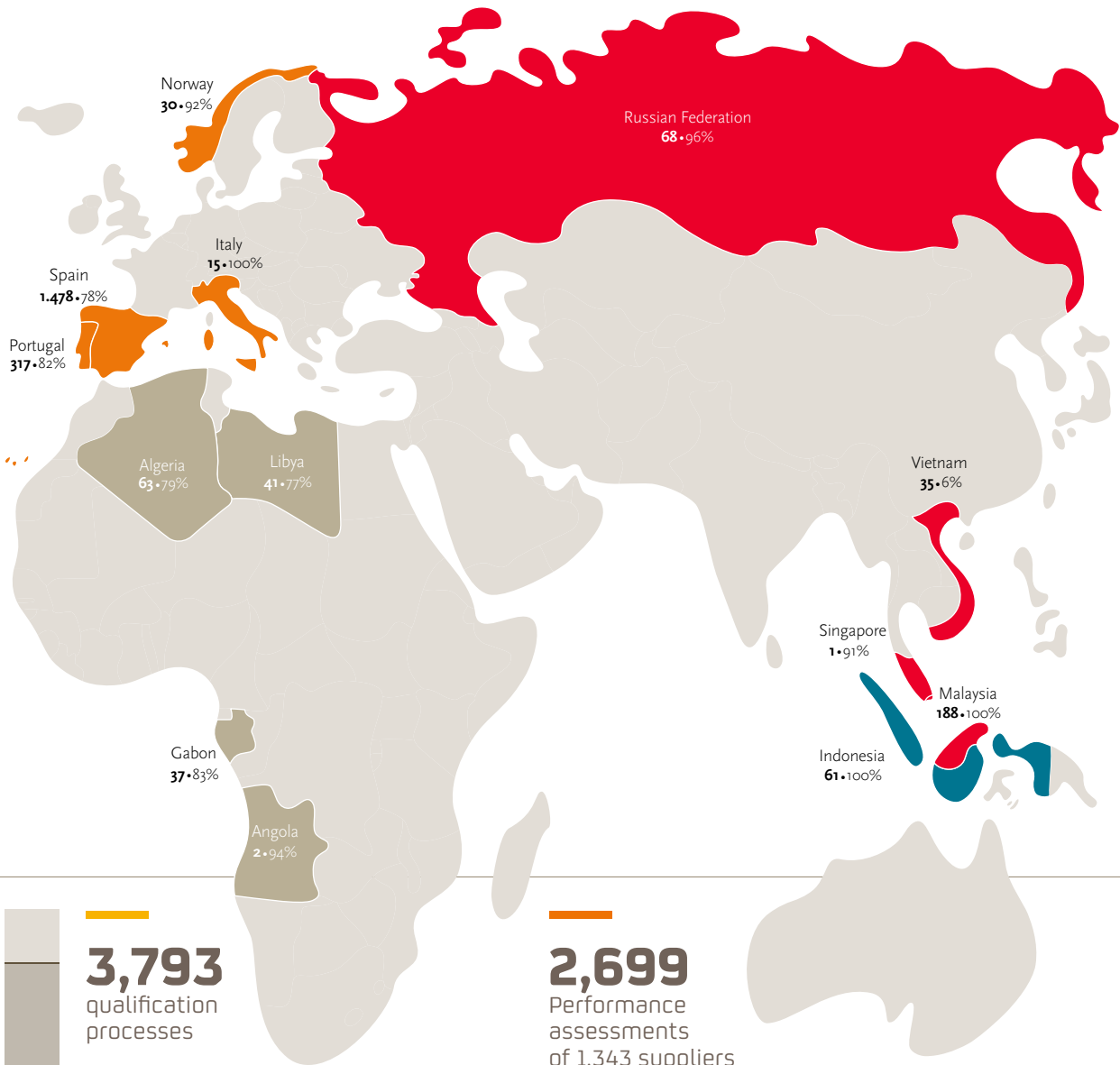
A responsible management of the supply chain is one of the fundamental factors on Sustainability, as it presents specific risks and is linked to the generation of employment and local economic development. It constitutes one of the most important expectations of the communities where the Group operates.



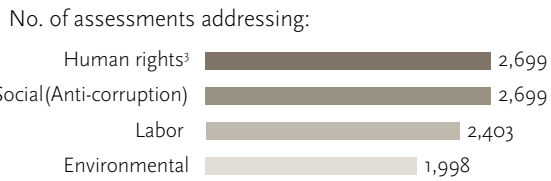
1. This information has been prepared considering only the purchases the Group makes (excluding crude oil, gas and materials) via formal procurement processes managed by the central procurement unit and that represent the most relevant purchases and most important contracts, of the highest volume. See further information in Appendix IV.

2. Repsol considers "local suppliers" as companies established or nationalised under the laws of the country in which Repsol undertakes operations as part of which the supply will be made or service provided.





**2,699**  
Performance assessments of 1,343 suppliers



**100%**  
of new suppliers examined in accordance with human rights, social, labor and environmental criteria

**24**  
rating audits  
**2** Social audit

**100%**  
of contracts include human rights, anticorruption and environmental clauses

**0**  
breaches of contract

3. In 2017, as part of qualification and audit processes, no supplier has been identified that breached the rights of freedom of association or collective bargaining of its employees, that has participated in child labour or that has submitted its employees to forced labor in any way.

4. A provider may be assigned a "Provisional qualification" when it is detected that it fails to meet a minor requirement.

## 7. Outlook

**3.9%**   
 Spanish GDP  
 in 2018

### 7.1. General outlook

#### Macroeconomic outlook

World economic growth has been strengthening recently, and this is expected to continue into 2018. The latest forecasts of the International Monetary Fund (IMF WEO Update, January 2018), estimates 2018 global growth at 3.9%, after 3.7% in 2017 and 3.2% in 2016.

It is worth noting that because the recovery is synchronized by regions, it is more robust as it is also catalyzing international investment and trade. The rebound in the advanced economies is occurring against a backdrop in which tax policy has become more expansive, and the balance sheets of private sector actors is healthier. In addition, with inflation levels still low, monetary policies are expected to remain accommodative, with only a very gradual normalization. Accordingly, growth in the advanced economies, which apparently averaged 2.3% in 2017, is expected to continue in 2018, on the back of the US tax reform.

The Spanish economy continues to grow at robust rates (3.1% in 2017). The European Commission and the IMF are forecasting a moderate slowdown of economic growth for 2018 of about 2.5%, given the uncertainty deriving from political instability in Catalonia. However, rising exports and the recent robustness shown by the economy mean that the favorable momentum may continue, with possible upside surprises.

Emerging economy growth is expected to accelerate, going from 4.7% in 2017 to 4.9% in 2018. This upturn is occurring against a backdrop of: stabilization of the Chinese economy, (ii) recovery of commodity prices and (iii) capital inflows. In addition, Brazil and Russia, countries of weight, have begun to leave behind their own crises.

#### Macroeconomic forecasts, key figures

	Real GDP growth (%)		Average inflation (%)	
	2018	2017	2018	2017
World economy	3.9	3.7	3.3 <sup>(1)</sup>	3.1
Advanced countries	2.3	2.3	1.9	1.7
Spain	2.4	3.1	1.5	2.0
Emerging countries	4.9	4.7	4.5	4.1

(1) Data from IMF (*World Economic Outlook October 2017*).

Source: IMF (*World Economic Outlook Update January 2018*) and Repsol Research Unit.

Overall, risks to world growth have decreased recently. However, the improving economic outlook has been accompanied by increasing geopolitical tensions, such as the advance of North Korea's nuclear program, the Brexit process and the worsening of the political situation in Catalonia.

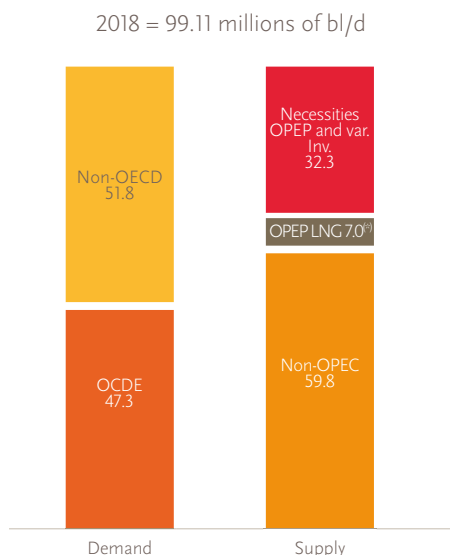
#### Energy sector outlook

##### Short term energy sector outlook

In the short term, according to the International Energy Agency (IEA), the balance between supply and demand for oil will be determined mainly by an agreed reduction in OPEC production and some non-OPEC countries. On the non-OPEC side, the International Energy Agency (IEA) is expecting a recovery in their production for 2018 of about +1.7 million barrels a day bbl/d, nearly all of which would be supplied by the US (+1.35 million bbl/d) and much more modest contributions from Canada and Brazil. On the OPEC side, the market is keenly watching for fulfillment of the commitments to a production cutback, which would have a direct effect on crude oil prices.

The increase in demand would again be driven by non-OECD countries, with expected growth for 2017 off +1.27 million barrels a day; while in OECD countries, the change will be virtually zero. This scenario involves a reduction of 600 thousand barrels a day in OPEC crude oil needs and inventory changes of up to 32.3 million barrels a day. In short, the AIE expects a deficit market globally for 2018, with a fall in global inventories of about 100 thousand bbl/d on average.

### Short-term outlook for the global supply demand balance



Source: IEA and Repsol Research Unit

(\*) Natural gas liquids in the OPEC which are not taken into account in the production cuts.

With regard to the **movement of crude oil prices** in the short term, the analyst consensus points to an average Brent crude price for 2018 and 2019 of \$58 and \$64/bbl, respectively.

With regard to the **movement of gas prices** in the short term, the adjustment of the balance begun in 2017 is expected to continue into 2018 and 2019. Here, the key will be the performance of production in an environment where the recovery in crude prices may lead to larger volumes of gas associated to oil production. Hence, if the growth in the production of dry gas outstrips demand this year (i.e., domestic plus exports), the price could fall from the past year.

In spite of doubts about production trends, on the demand side, strong growth of exports is expected (both of liquefied natural gas - LNG - and gas via pipeline). In 2018 and 2019, both the liquefaction capacity due to the commissioning of new export terminals (Cove Point, Elba Island, Freeport and Cameron LNG) and the capacity of gas via pipeline to Mexico will continue to increase. New industrial plants (petrochemicals, fertilizers and methanol) are also expected to commence operations, particularly from 2019. Also, the climate should be more favorable to the consumption of gas (a colder winter and warmer summer than last year). These factors helps push prices upward.

### Long-term energy sector outlook

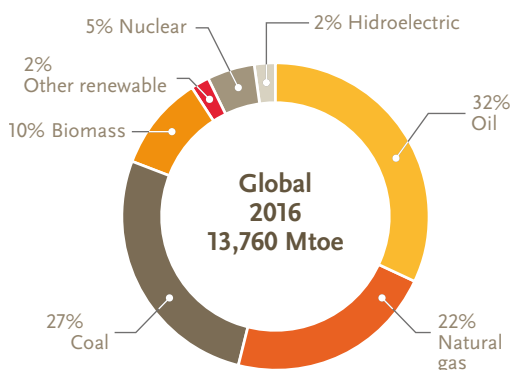
On a global scale, hydrocarbons contribute more than half of the primary energy consumed. Specifically, 32% of global primary energy consumption is derived from oil, which is the most commonly used energy source.

No major changes are expected in the coming years. According to the International Energy Agency (IEA), in the baseline scenario of its World Energy Outlook 2017, oil will contract by four percentage points in the 2040 entry matrix compared to 2016. For its part, natural gas will reach a 25% share of the estimated total energy demand of 17,584 million tons of oil equivalent.

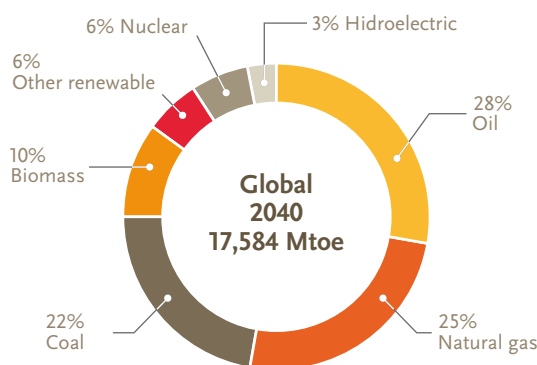
3% ↑

Natural gas in the energy matrix in 2040 vs 2016

### Long-term outlook of world primary energy matrix



Source: IEA and Repsol Research Unit



Source: IEA and Repsol Research Unit

## 7.2. Outlook for business

In October 2015, Repsol presented its Strategic Plan for the 2016-2020 period, in which the Company undertook to capitalize on the growth achieved through its fulfillment of the objectives set out in the previous Strategic Plan.

The robustness of our business model has proved itself throughout 2017. This was the case in figures and results, and in the change being undergone by the Company owing to the rollout of the Transformation Program, which is in line with the objectives of the 2016-2020 Strategic Plan.

The Efficiency Program, launched under the framework of the Strategic Plan and which applies throughout the Company, has exceeded expectations, surpassing and bringing forward to 2017 the objective that had been set for the year 2018. The program incorporates savings in Capex and Opex that, along with synergies from integration with ROGCI, contributed more than €2,400 million. Therefore, Repsol looks forward to the coming years with substantial strength built on solid pillars of efficiency and profitability, which is the basis for future growth.

After two years of work to meet the challenge of value creation and boosting resilience, as set out in the 2016-2020 Strategic Plan, in 2018 the company will have fulfilled its primary objectives and it will be ready to redefine and present a new future project.

In Repsol, we are going to keep working on the essential mainstays, such as efficiency and resilience, and we will rely on new levers, essential in today's world, such as Digitalization and Technology, in order to achieve sustainable growth.

Digitalization will lead us to promote new forms of working to earn profits and gain efficiencies with a tangible impact on Company results, and where new technologies will play a fundamental role. The future requires agility and efficiency, and our Technology strategy will allow us to have the best alliances and partners in innovative disciplines, giving support to businesses to improve their competitiveness in the medium and long term.

Regarding our businesses, in 2018, the Exploration and Production area will remain focused on our three core regions: North America, Latin America and Southeast Asia, regions with high organic development potential, combined with the better performance in Libya, the recent launch of the Reggane and Sagari projects and the increase in

fields in Norway, will keep production volumes above 700,000 barrels/day in 2018.

In 2018, our organic investment is expected to be around \$2,800 million with the aim of developing our productive assets and opening new avenues for future growth. The investment effort by country will be concentrated especially in Canada, USA, Trinidad, Vietnam, Brazil, Malaysia, Algeria, Bolivia, Venezuela, UK, Indonesia, Colombia, Peru and Libya.

And, additionally, this will be performed without increasing the price above which crude oil generates a positive cash flow, increasing the return on average capital employed (ROACE).

The greater degree of efficiency in the Exploration and Production area will be supplemented by the strengths shown by the Downstream area, which has continued to reaffirm the benefits Repsol has gained as an integrated company.

Our current refining system, following the investments made in the Cartagena and Petronor refineries, and the corresponding improvement in the global margin, have been key to placing Repsol at the head of the integrated European companies in terms of efficiency. The targets set for 2018 are:

- In refining and chemical facilities, increased plant reliability and orientation, via the Efficiency Program, toward the reduction of energy costs and CO<sub>2</sub> emissions, which will maintain the continuous improvement of margins;
- Maximize business value of Marketing and consolidate competitive position, streamlining operations and developing new markets.
- Develop new growth opportunities while bearing in mind the quest for continuous improvement in efficiency and cost containment.

In addition, in 2018 the focus will stay on efficiency in corporate areas, with shared service centers established, processes automated such as to contribute to the profitability of the entire organization.

In the expected price environment, and owing to the integration of our businesses, digitization and technology, among other factors, Repsol expects it will generate sufficient cash to fund its investment needs, remunerate its shareholders and reduce its debt.

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# Appendix

# 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<sup>1</sup> 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<sup>2</sup>, and the reader should therefore consider them in addition to, but not instead of, the latter.

APM 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.

### Alternative performance measures

For further information,  
[www.repsol.com](http://www.repsol.com).

## 1. Financial performance measures

### Adjusted net income

**Adjusted net income** is the key financial performance measure which Management (the Corporate Executive Committee, 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<sup>3</sup> 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 is adequately reflected.

Adjusted net income is calculated as the **Result from continuing operations at Current Cost of Supply** (Current Cost of Supply or CCS<sup>4</sup>) net of taxes and the result from investments minority interests. It does not include certain income and expense (**Special Items**), and the **Inventory effect. Financial income** corresponds to the adjusted net income under "Corporate and other."

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

#### Inventory effect

This is the difference between the **Result from continuing operations at 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, in that for the Result from continuing operation at CCS, 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, considering the significant variations arising in the prices of inventory between periods.

The 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 between said cost and its market value.

1. See Note 4, "Segment reporting," in the consolidated financial statements.

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 12 "Investments accounted for using the equity method" and Appendix I "Main companies comprising the Repsol Group at December 31, 2017" of the consolidated financial statements, where the Group's main joint ventures are identified.

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 an 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. As a result of the foregoing, Net Income does not include the so-called Inventory Effect.

## Special items

Significant items of which separate presentation is considered convenient to easily monitor the ordinary management of business operation. 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" includes the cumulative **special items** for 2017 and 2016. We present below the special items for the fourth quarter of 2017 and 2016.

Million euros	Fourth Quarter	
	2017	2016
Divestments	(72)	104
Workforce restructuring charges	(12)	(22)
Impairment	(612)	(400)
Provisions and other	377	99
<b>Total</b>	<b>(319)</b>	<b>(219)</b>

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

Million euros	Fourth Quarter											
	Adjusted Result		Adjustments									
			Joint Arrangements reclassification		Special items		Inventory Effect <sup>(2)</sup>		Total Adjustments		IFRS-EU profit/loss	
2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	
Operating income	807 <sup>(1)</sup>	564 <sup>(1)</sup>	(257)	214	120	(478)	209	193	72	(71)	879	493
Financial result	(17)	70	76	(63)	(103)	47	-	-	(27)	(16)	(44)	54
Income from equity affiliates - net of taxes	128	77	376	(135)	(1)	-	-	-	375	(135)	503	(58)
<b>Profit before tax</b>	<b>918</b>	<b>711</b>	<b>195</b>	<b>16</b>	<b>16</b>	<b>(431)</b>	<b>209</b>	<b>193</b>	<b>420</b>	<b>(222)</b>	<b>1,338</b>	<b>489</b>
Income tax	(208)	(3)	(195)	(16)	(336)	(90)	(52)	(50)	(583)	(156)	(791)	(159)
<b>Net income from continuing operations</b>	<b>710</b>	<b>708</b>	-	-	<b>(320)</b>	<b>(521)</b>	<b>157</b>	<b>143</b>	<b>(163)</b>	<b>(378)</b>	<b>547</b>	<b>330</b>
Income attributable to minority interests	(7)	(10)	-	-	1	3	(3)	(6)	(2)	(3)	(9)	(13)
<b>Net income from continuing activities attributable to the parent</b>	<b>703</b>	<b>698</b>	-	-	<b>(319)</b>	<b>(518)</b>	<b>154</b>	<b>137</b>	<b>(165)</b>	<b>(381)</b>	<b>538</b>	<b>317</b>
Profit from discontinued operations	-	-	-	-	-	299	-	-	-	299	-	299
<b>TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY</b>	<b>703</b>	<b>698</b>	-	-	<b>(319)</b>	<b>(219)</b>	<b>154</b>	<b>137</b>	<b>(165)</b>	<b>(82)</b>	<b>538</b>	<b>616</b>

(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" of the income statement under IFRS-EU.

Million euros	At December 31											
	Adjusted Result		Joint Arrangements reclassification		Special items		Inventory Effect <sup>(2)</sup>		Total Adjustments		EU-IFRS profit/loss	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Operating income	3,214 <sup>(1)</sup>	2,067 <sup>(1)</sup>	(610)	98	42	(448)	143	194	(425)	(156)	2,789	1,911
Financial result	(356)	(315)	126	(68)	(82)	149	-	-	44	81	(312)	(234)
Income from equity affiliates- net of tax	323	371	580	(177)	1	-	-	-	581	(177)	904	194
<b>Net income before tax</b>	<b>3,181</b>	<b>2,123</b>	<b>96</b>	<b>(147)</b>	<b>(39)</b>	<b>(299)</b>	<b>143</b>	<b>194</b>	<b>200</b>	<b>(252)</b>	<b>3,381</b>	<b>1,871</b>
Income tax	(738)	(164)	(96)	147	(350)	(323)	(36)	(51)	(482)	(227)	(1,220)	(391)
<b>Net income from continuing operations</b>	<b>2,443</b>	<b>1,959</b>	-	-	<b>(389)</b>	<b>(622)</b>	<b>107</b>	<b>143</b>	<b>(282)</b>	<b>(479)</b>	<b>2,161</b>	<b>1,480</b>
Income attributed to minority interests	(38)	(37)	-	-	1	4	(3)	(10)	(2)	(6)	(40)	(43)
<b>Net income from continuing activities attributable to the parent</b>	<b>2,405</b>	<b>1,922</b>	-	-	<b>(388)</b>	<b>(618)</b>	<b>104</b>	<b>133</b>	<b>(284)</b>	<b>(485)</b>	<b>2,121</b>	<b>1,437</b>
Profit from discontinued operations	-	-	-	-	-	299	-	-	-	299	-	299
<b>TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY</b>	<b>2,405</b>	<b>1,922</b>	-	-	<b>(388)</b>	<b>(319)</b>	<b>104</b>	<b>133</b>	<b>(284)</b>	<b>(186)</b>	<b>2,121</b>	<b>1,736</b>

(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" of the income statement under IFRS-EU.

## EBITDA:

**EBITDA** is defined as "Earnings Before Interest, Taxes, Depreciation, and Amortization," and 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 average costs (AWC). In cases in which the **result from continuing operations at current cost of supply (CCS)** is used, it is considered **EBITDA at CCS**.

	Fourth Quarter							
	Group Reporting Model		Joint arrangements reclassification and others		Inventory effect		EU-IFRS <sup>(1)</sup>	
	2017	2016	2017	2016	2017	2016	2017	2016
Upstream	1,086	637	(483)	(241)	-	-	603	396
Downstream	964	1,094	(3)	(4)	-	-	961	1,090
Corporate and other	(42)	(63)	(11)	(8)	-	-	(53)	(71)
<b>EBITDA</b>	<b>2,008</b>	<b>1,668</b>	<b>(497)</b>	<b>(253)</b>	-	-	<b>1,511</b>	<b>1,415</b>
<b>EBITDA CCS</b>	<b>1,799</b>	<b>1,475</b>	<b>(497)</b>	<b>(253)</b>	<b>209</b>	<b>193</b>	<b>1,511</b>	<b>1,415</b>

(1) Corresponds to "Profit before tax" and "Result adjustments" on the consolidated Cash Flow Statement prepared under IFRS-EU.



At December 31								
	Group Reporting Model		Joint arrangements reclassification and others		Inventory effect		EU-IFRS <sup>(1)</sup>	
	2017	2016	2017	2016	2017	2016	2017	2016
Upstream	3,507	2,072	(1,459)	(796)	-	-	2,048	1,276
Downstream	3,386	3,367	(12)	(12)	-	-	3,374	3,355
Corporate and other	(170)	(213)	1	-	-	-	(169)	(213)
<b>EBITDA</b>	<b>6,723</b>	<b>5,226</b>	<b>(1,470)</b>	<b>(808)</b>	<b>-</b>	<b>-</b>	<b>5,253</b>	<b>4,418</b>
<b>EBITDA CCS</b>	<b>6,580</b>	<b>5,032</b>	<b>(1,470)</b>	<b>(808)</b>	<b>143</b>	<b>194</b>	<b>5,253</b>	<b>4,418</b>

(1) Corresponds to "Profit before tax" and "Result adjustments" on the consolidated Cash Flow Statement prepared under IFRS-EU.

## 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.

NUMERATOR	2017	2016
<b>Operating profit EU-IFRS</b>	<b>2,789</b>	<b>1,911</b>
Joint Arrangements reclassification	610	(98)
Special items	(42)	448
Income tax <sup>(1)</sup>	(873)	(340)
Share of profit (loss) of entities accounted for using the equity method - net of dividends	323	371
<b>I. ROACE result at average weighted cost</b>	<b>2,807</b>	<b>2,292</b>

DENOMINATOR	2017	2016
Total equity	30,063	31,111
Net financial debt	6,267	8,144
<b>Capital employed at year end</b>	<b>36,330</b>	<b>39,255</b>
<b>II. Average capital employed<sup>(2)</sup></b>	<b>37,793</b>	<b>39,818</b>
<b>CCS ROACE (I/II)</b>	<b>7.4%</b>	<b>5.8%</b>

(1) Does not include income tax corresponding to financial results.

(2) 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 flow generated**.

**Free cash flow** measures cash flow generation from operating and investment activities, and is quite useful 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 stock. This APM measures the funds generated by the Company before financial transactions (mainly from debt issuance and repayments).

The following is a reconciliation of **free cash flow** and **cash flow generated** with the consolidated statements of cash flow prepared under IFRS-EU:

	Fourth Quarter					
	Adjusted cash flow		Joint arrangements reclassification and others		EU-IFRS cash flow statement	
	2017	2016	2017	2016	2017	2016
I. Cash flows from / (used in) operating activities	1,929	1,402	(84)	246	1,845	1,648
II. Cash flows from / (used in) investing activities	(1,045)	29	157	(482)	(888)	(453)
<b>Free cash flow (I+II)</b>	<b>884</b>	<b>1,431</b>	<b>73</b>	<b>(236)</b>	<b>957</b>	<b>1,195</b>
<b>Cash generated</b>	<b>683</b>	<b>1,314</b>	<b>298</b>	<b>206</b>	<b>981</b>	<b>1,520</b>
III. Cash flows from / (used in) financing activities and others <sup>(1)</sup>	(894)	(85)	(50)	190	(944)	105
<b>Net increase / (decrease) in cash and cash equivalents (I+II+III)</b>	<b>(10)</b>	<b>1,346</b>	<b>23</b>	<b>(46)</b>	<b>13</b>	<b>1,300</b>
Cash and cash equivalents at the beginning of the period	4,830	3,572	(242)	(185)	4,588	3,387
Cash and cash equivalents at the end of the period	4,820	4,918	(219)	(231)	4,601	4,687

	At December 31					
	Adjusted cash flow		Joint arrangements reclassification and others		EU-IFRS cash flow statement	
	2017	2016	2017	2016	2017	2016
I. Cash flows from / (used in) operating activities	5,506	3,832	(393)	58	5,113	3,890
II. Cash flows from / (used in) investing activities	(2,946)	491	157	(100)	(2,789)	391
<b>Free cash flow (I+II)</b>	<b>2,560</b>	<b>4,323</b>	<b>(236)</b>	<b>(42)</b>	<b>2,324</b>	<b>4,281</b>
<b>Cash flow generated</b>	<b>1,391</b>	<b>3,211</b>	<b>(229)</b>	<b>(33)</b>	<b>1,162</b>	<b>3,178</b>
III. Cash flows from / (used in) financing activities and others <sup>(1)</sup>	(2,658)	(2,174)	248	132	(2,410)	(2,042)
<b>Net increase / (decrease) in cash and cash equivalents (I+II+III)</b>	<b>(98)</b>	<b>2,149</b>	<b>12</b>	<b>90</b>	<b>(86)</b>	<b>2,239</b>
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	4,820	4,918	(219)	(231)	4,601	4,687

(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”, the cash deposits of immediate availability contracted with financial institutions and undrawn long- and short-term committed credit lines at year end under facilities

granted by financial institutions which may be drawn down by the company in installments, the amount, and the remaining terms of the agreement.

	At December 31					
	Group Reporting Model		Joint arrangements reclassification and others		EU-IFRS	
	2017	2016	2017	2016	2017	2016
Cash and cash equivalents	4,820	4,918	(219)	(231)	4,601	4,687
Undrawn credit lines	2,503	4,429	-	-	2,503	4,429
Cash deposits of immediate availability <sup>(1)</sup>	231	-	-	-	231	-
<b>Liquidity</b>	<b>7,554</b>	<b>9,347</b>	<b>(219)</b>	<b>(231)</b>	<b>7,335</b>	<b>9,116</b>

(1) New component. In a market situation with high levels of liquidity and negative remuneration rates, Repsol has contracted in this quarter time deposits but with immediate availability that have been recorded under the heading “Other current financial assets” in Consolidated Financial Accounts (see Note 7) and that do not meet the criteria to be classified as cash and cash equivalents.

## 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 that which corresponds to joint ventures or other companies whose operations are generated as such.

	Fourth Quarter					
	Group Reporting Model		Joint arrangements reclassification and others		EU-IFRS <sup>(1)</sup>	
	2017	2016	2017	2016	2017	2016
Upstream	677	164	(32)	(77)	645	87
Downstream	349	(42)	(1)	(163)	348	(205)
Corporate and other	11	(15)	3	(5)	14	(20)
<b>Total</b>	<b>1,037</b>	<b>107<sup>(2)</sup></b>	<b>(30)</b>	<b>(245)</b>	<b>1,007</b>	<b>(138)</b>

	At December 31					
	Group Reporting Model		Joint arrangements reclassification and others		EU-IFRS <sup>(1)</sup>	
	2017	2016	2017	2016	2017	2016
Upstream	2,072	1,889	(324)	(565)	1,748	1,324
Downstream	757	(496)	(2)	1	755	(495)
Corporate and other	27	(1,893)	3	6	30	(1,887)
<b>Total</b>	<b>2,856</b>	<b>(500)<sup>(2)</sup></b>	<b>(323)</b>	<b>(558)</b>	<b>2,533</b>	<b>(1,058)</b>

(1) This corresponds to “Proceeds from divestments” and “Payments on investments” on the consolidated statement of cash flows prepared under IFRS-EU, and does not include items corresponding to “Other financial assets”.

(2) Gross capital expenditure amounted to 2,936 million euros in 2017 (1,093 million euros in Q4).

### 3. Financial position measures

#### 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 net market valuation of financial derivative (ex -

exchange rates). It also includes the net debt corresponding to joint ventures and other companies operationally managed as such.

	Reporting Model Group		Joint arrangements reclassification <sup>(1)</sup>		EU-IFRS balance sheet	
	Dec-17	Dec-16	Dec-17	Dec-16	Dec-17	Dec-16
<b>Non-current assets</b>						
Non-current financial instruments <sup>(2)</sup>	360	424	1,560	657	1,920	1,081
<b>Current assets</b>						
Other current financial assets	254	52	3	1,228	257	1,280
Cash and cash equivalents	4,820	4,918	(219)	(231)	4,601	4,687
<b>Non-current liabilities<sup>(3)</sup></b>						
Non-current financial debt	(7,611)	(9,540)	(2,469)	58	(10,080)	(9,482)
<b>Current liabilities<sup>(3)</sup></b>						
Current financial liabilities	(4,160)	(4,085)	(46)	(2,824)	(4,206)	(6,909)
<b>Items not included on the balance sheet</b>						
Net mark to market valuation of financial derivatives (ex: exchange rate) <sup>(4)</sup>	70	87	-	-	70	87
<b>NET DEBT</b>	<b>(6,267)</b>	<b>(8,144)</b>	<b>(1,171)</b>	<b>(1,112)</b>	<b>(7,438)</b>	<b>(9,256)</b>

(1) Mainly includes the net financing of the Repsol Sinopec Brazil Group, broken down in the following sections:

*December 2017:* (cash and cash equivalents of €28 million and non-current financial liabilities as a result of an intra-group loan of €2,624 million, less a €275million third-party loan).

*December 2016:* (Cash and cash equivalents of €43 million and current financial liabilities as a result of an intra-group loan of €2,942 million, less €344 million 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 different from 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.

	Net Debt		Joint arrangements reclassification and others		Figure according to EU-IFRS balance sheet	
	Dec-17	Dec-16	Dec-17	Dec-16	Dec-17	Dec-16
Current financial liabilities	(4,133)	(4,061)	(2,670)	(2,824)	(6,803)	(6,885)
Net valuation at the market rates of financial derivative, such as current exchange rate	(9)	7	-	-	(9)	7
<b>Current gross debt</b>	<b>(4,142)</b>	<b>(4,054)</b>	<b>(2,670)</b>	<b>(2,824)</b>	<b>(6,811)</b>	<b>(6,878)</b>
Non-current financial liabilities	(7,542)	(9,452)	155	57	(7,388)	(9,395)
<b>Non-current gross debt</b>	<b>(7,542)</b>	<b>(9,452)</b>	<b>155</b>	<b>57</b>	<b>(7,388)</b>	<b>(9,395)</b>
<b>TOTAL GROSS DEBT</b>	<b>(11,684)</b>	<b>(13,506)</b>	<b>(2,515)</b>	<b>(2,767)</b>	<b>(14,199)</b>	<b>(16,273)</b>

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.

**Hedging instruments** correspond 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 sector companies.

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 handle its current debt using its existing liquidity.

**Interest cover** is calculated in the same way as debt interest (which comprises finance income and expense, see Note 22 "Finance income and expense" of the 2017 consolidated financial statements) divided by EBITDA. This ratio is a measurement that can determine the company's ability to cover interest payments with its EBITDA.

Million euros	Fourth Quarter					
	Group Reporting Model		Reclassification Joint Arrangements		EU-IFRS	
	Dec-17	Dec-16	Dec-17	Dec-16	Dec-17	Dec-16
Interest	82	98	(14)	(18)	68	80
EBITDA	2,008	1,668	(497)	(253)	1,511	1,415
<b>Interest cover</b>	<b>4.1%</b>	<b>5.9%</b>			<b>4.5%</b>	<b>5.6%</b>

Million euros	At December 31					
	Group Reporting Model		Reclassification Joint Arrangements		EU-IFRS	
	Dec-17	Dec-16	Dec-17	Dec-16	Dec-17	Dec-16
Interest	350	426	(63)	(73)	287	353
EBITDA	6,723	5,226	(1,470)	(808)	5,253	4,418
<b>Interest cover</b>	<b>5.2%</b>	<b>8.2%</b>			<b>5.5%</b>	<b>8.0%</b>

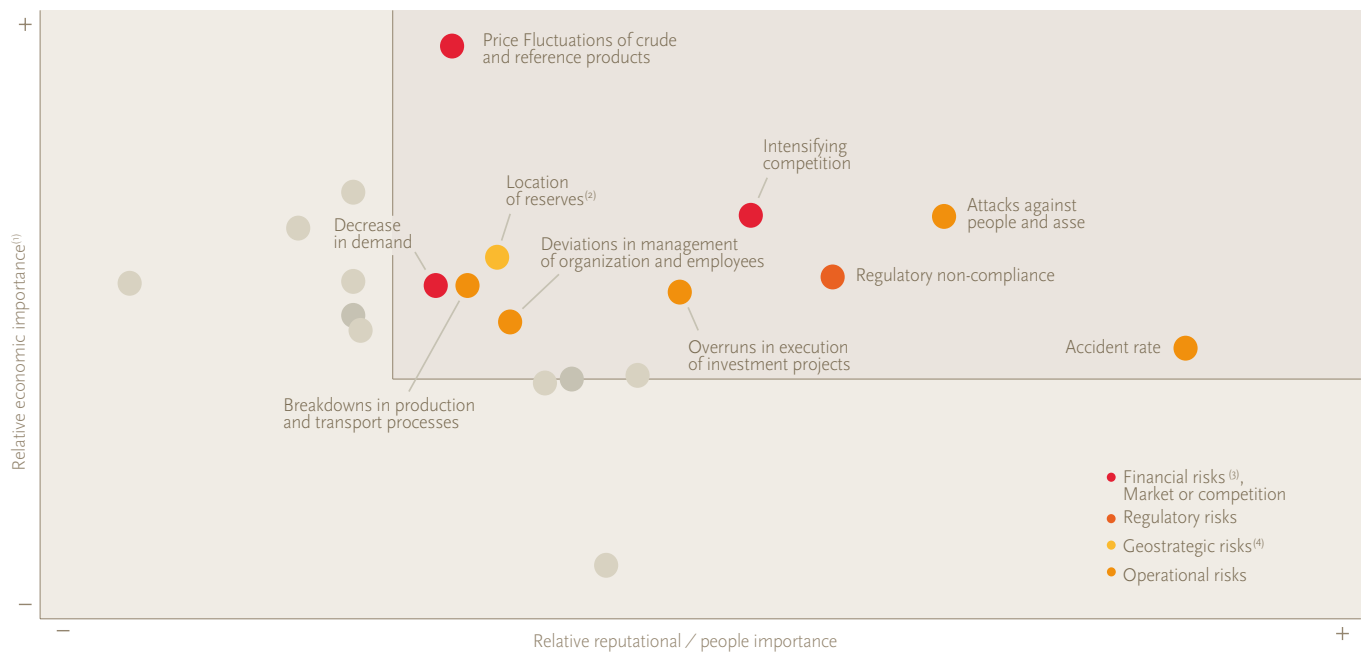
# Appendix II. Risk

## Risk management

As a global and integrated oil company, Repsol is exposed to different types of risk that may affect the future performance of the organization, and which must be mitigated in the most effective manner possible. For Repsol, the Risk Map is the centerpiece providing an overview of key risks with common metric, and identifying efficient mitigation measures,

identifying significant risks and classifying them by importance. To build it, the Company has a methodology for characterizing risks in a simple, understandable and robust manner and quantifying their potential economic, reputational and people impact in each business unit or area, and in Repsol as a whole, if they should materialize. The following are the Group's main risks in order of their relative economic and reputational/ personnel weight:

### Main Risks



NOTE: Appendix II, "Risk Factors" provides a detailed description current risk, as well as currently unknown. With regard to risks relating to administrative and legal proceedings or arbitration, see Note 16 "Litigation" and 23.4 "Government and legal proceedings with tax implications" of the consolidated financial statements.

- (1) Relative weight is measured in terms of loss at the 95th percentile (potential loss in scenario) according to distribution of probability of losses for each risk.
- (2) These mainly relate to arbitrary actions by governments or institutions in the form of tax and royalty increases, the establishment of production and volume limits for export, and mandatory renegotiations or cancellation of contracts.
- (3) For further information on the financial risks to which the Group is exposed, see Note 9 "Financial Risks".
- (4) See Note 21.3 "Geopolitical risks" of the Consolidated financial statements.

## Repsol's Integrated Risk Management System - (SGIR)

The Company has an organization, procedures and systems that allow it to reasonably manage the risks to which the group is exposed, as an integral part of decision-making processes in both corporate governance bodies and business management.

Repsol has an integrated risk management model designed to anticipate, manage, and control risks from a global perspective. The Integrated Risk Management System (SGIR in Spanish)

provides a comprehensive and reliable view of all risks that might affect the Company.

The SGIR relies on a Risk Management Policy and its principles are specified in the Integrated Risk Management Standard approved by the Company's Board of Directors. This management model is based on the ISO 31000 international standard and the Three Lines of Defense Model.

The fundamental pillars of the SGIR are:

- Senior Management leads integrated risk management.
- It is integrated with management processes of the Company, with the overall approach of the Risk Division.
- Businesses and corporate areas play a role in the implementation of the model as units with different levels of responsibility and specialization (risk management units, supervisory units and audit units) as well as the Risk Division, which governs and coordinates system.
- Assurance that all risks are managed in accordance with a common process of identification, assessment and treatment.
- Promotion of continuous improvement to gain efficiency and responsiveness.

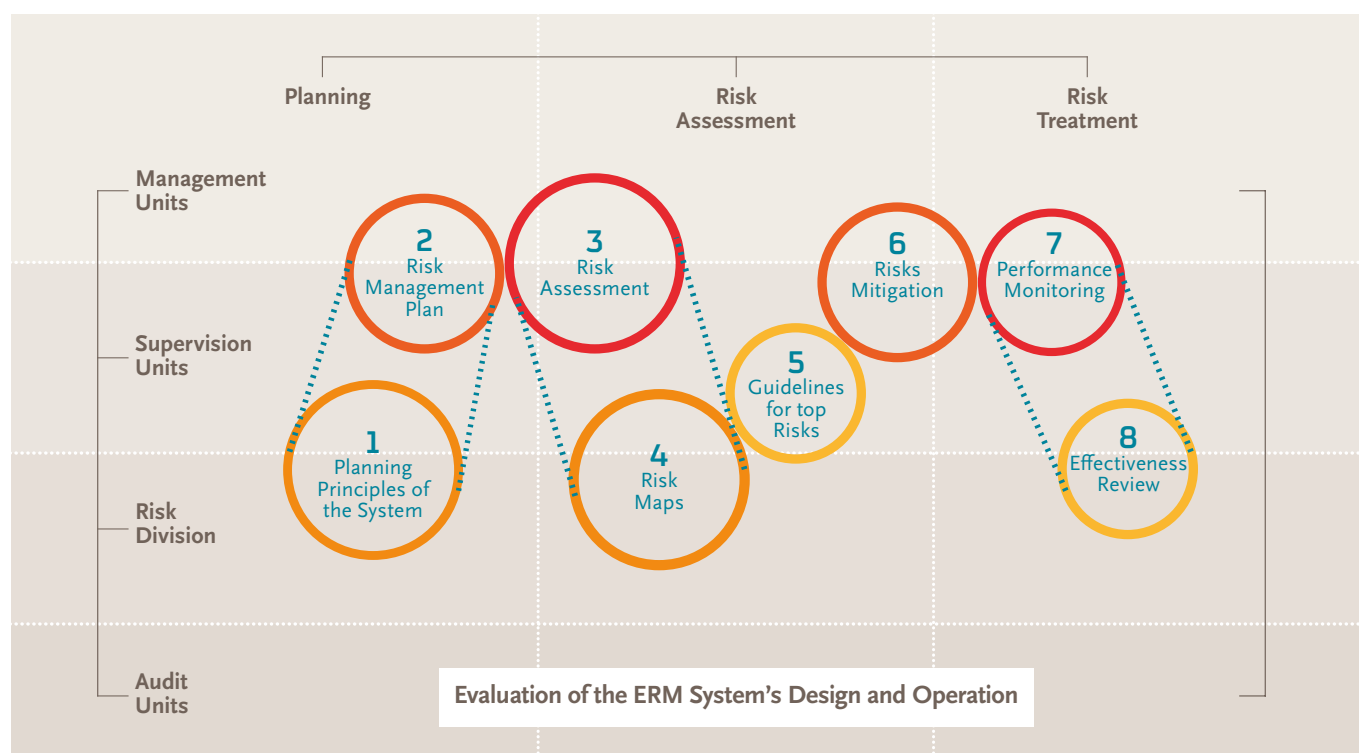
Another key element of risk management is the risk tolerance declaration, which is set out in the Policy along with the above principles. The declaration states that Repsol aspires to a low-to-medium risk profile that is appropriate for a global, integrated and diversified energy company. It also differentiates between risks to which the company wishes to expose itself within its overall tolerance threshold, and others that it seeks to reduce to levels as low as reasonably possible. The latter type would include accident, environmental, health, safety, ethics and conduct, reputation and compliance risks.

Repsol's Senior Management sees the SGIR not only as tool to define corporate strategy, but also to improve operations and approach critical situations with flexibility so as to strengthen the company.

### Internal Control System on Financial Reporting (ICFR)

The Repsol Group has a system of internal control system over financial reporting (ICFR) whose correct functioning can reasonably ensure the reliability of the Group's financial reporting. The ICFR model is based on the methodological framework of COSO 2013 (Committee of Sponsoring Organizations of the Treadway Commission) as set out in their report Internal Control-Integrated Framework, which provides an integrated framework for internal control over financial reporting that is designed to ensure that transactions are recorded faithfully, in conformity with the applicable accounting framework, providing reasonable assurance in the prevention or detection of errors that might have a material impact on the information contained in consolidated financial statements. The Audit and Control Managing Division annually evaluates the design and functioning of the Group ICFR and draws conclusions on its effectiveness.

## Repsol's Integrated Risk Management System (SGIR)



## 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, such as those listed below.

### Strategic and operational risks

#### Uncertainty in the current economic landscape

Against a backdrop in which global growth is consolidating and perspectives have improved, short-term economic risks have eased and balanced out. However, this process has been accompanied by increasing geopolitical tensions, such as the advance of North Korea's nuclear program, the Brexit process, and the aggravation of the political situation in Catalonia.

To date, markets have exhibited a very limited reaction to these geopolitical tensions. Even so, some of these events could end up having a greater impact, especially those related to Brexit and North Korea. If political tensions in Catalonia persist, it could have a greater impact on investor confidence, which would generate an increase in Spain's cost of financing and a weakening of the country's growth. The Trump administration also has the potential for becoming a destabilizing factor for markets. This is due both to the possible turn toward protectionist policies and/or financial deregulation, or due to advances in the investigation on links to Russia. In Europe, the electoral results in Germany and, especially, in Netherlands and France, have shown limited support for the anti-EU movement and reduced political risk. But the upcoming approval of the labor law reform in France and the elections in Italy could still generate instability.

In addition, there are still major uncertainties in the global economy arising from the difficulties in managing various economic transitions that are taking place simultaneously. First, the necessity for China to move towards a new, more sustainable development model taking into account the country's high levels of debt. Secondly, the normalization of monetary policy in the advanced economies, which has included unconventional policies for the first time. The third transition is the adjustment of the basic products cycle.

With the recent OPEC meeting of November 30, 2017, which decided to extend to the end of 2018 the production cutback agreements in order to backstop prices, the future of the market appears to be more balanced. However, there are factors that may add uncertainty to the market; but given the scale of

OPEC's output cut of 1.2 million bl/d, and of the non-OPEC countries' cut of 0.6 million, the adverse impact will tend to be low. These factors include: i) lower-than-expected demand from emerging countries; ii) a quicker-than expected response to non-conventional US shale to the expected price rise; iii) a very low level of fulfillment by OPEC and non-OPEC countries of their individual commitments to production cutbacks. The risk of a surprising increase of production in Libya and Nigeria has almost completely disappeared for 2018. These countries had been excluded from the production cutback agreements, although in the latest OPEC meeting they committed to not exceeding in 2018 their maximum production levels of 2017.

#### Climate change<sup>1</sup>

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.

Also, following the Paris Agreement, country's commitments under their respective National Determined Contributions (NDC) will have a significant impact on climate policies. The agreement is undoubtedly another step toward a low-emissions economy in which a more sustainable model of company will be crucial.

Repsol's assets are subject to risks arising from physical changes caused by climate change, and risks deriving from the rising level of the sea, changes in precipitation patterns, changes in extreme temperatures or droughts, or even more frequent occurrence of extreme meteorological phenomena (cyclones, hurricanes, etc.). Repsol is present in areas that are liable to suffering these effects.

Further, a change in consumers' behavior as they seek out less carbon-intensive products could also affect Repsol's competitiveness if it fails to adapt to these changes.

Repsol, and the oil and gas industry, are exposed to adverse trends of opinion that may affect the share price. Initiatives that promote disinvestment in fossil fuel extraction companies to reduce the impact of their products on climate change may affect the shareholding base of the company.

Repsol cannot predict the exact impact that the described risks may have on its activities, the income from its operations or the financial position of the Repsol Group, or its competitiveness.

<sup>1</sup> For further information see section 6.1 of this document.



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

World oil prices have fluctuated widely in recent years, and are driven 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 Repsol's profitability, the value of its assets and its plans for investment, which may be altered as a result of delays. 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 comprehensive state regulation and intervention. This is the case in Upstream activities, such as the award of exploration and production permits, the imposition of specific drilling and exploration obligations, restrictions on production, price controls, divestments of assets, foreign currency controls, and the nationalization, expropriation or cancellation of contractual rights.

Likewise, in Downstream, oil refining and petrochemical activities, 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 cannot foresee the exact scope of changes to such laws or their interpretation, which could adversely affect its business, results and financial position.

### 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 safety thereof.

Additionally, following the acquisition of ROGCI, the company increased its activity in non-convention hydrocarbons. From an environmental standpoint, concern over the environmental 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.

Repsol cannot predict the exact scope of the changes in environmental and safety regulations, or how they will be interpreted or if certain policies will be implemented. Any regulatory change could cause an adverse impact on the Repsol Group's operations, the income from its operations and financial position.

### Operating risks of Repsol's activities

Repsol's activities are generally exposed to specific risks, many of them beyond Repsol's control. Such risks relate to production and facilities, transport, management of operations, supply of products and services, natural disasters, organizational and employee management.

#### **Hydrocarbon exploration and production (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 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. It should also be noted that any form of transport of oil products always has inherent risks: by road, rail or sea transport, or by pipeline, oil or another hazardous substances could leak; this poses a significant risk due to the potential impact a spill could have on the environment and on people, especially considering the high volume of products that can be carried at any one time. Should these risks materialize, Repsol may suffer major losses, interruptions to its operations and harm to its reputation.

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. Repsol's ability to acquire or discover new reserves is, however, subject to a number of risks. For example, drilling may involve negative results, not only with respect to dry wells, but also with respect to wells that are productive but do not produce sufficient net revenues to return a profit after drilling, operating and other costs are taken into account. In addition, Repsol generally faces intense competition in bidding for exploratory blocks, in particular those blocks offering the most attractive potential reserves. Such competition may result in Repsol failing to obtain desirable production blocks, or otherwise acquiring them at a higher price, which could render subsequent production economically unviable.

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

#### **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, ducts, sea vessels, cistern trucks, service 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.

Downstream activities take place in a highly competitive environment. Refining and commercialization margins may be affected by a number of factors, such as low demand arising from a deterioration of the economic situation in the countries where it operates, the high price of crude oil and other raw materials, trends in production-related energy costs and other commodities, excess refining capacity in Europe, and the growing competition from refineries in areas such as Russia, the Middle East, East Asia, and the US, where production costs are lower. Commercial businesses compete with international hydrocarbons industry operators as well as with other non-oil operators (supermarket chains as well as other commercial operators) to acquire or open service stations. Repsol service stations mainly compete based on price, service, and the availability of non-oil products.

If any of the above risks materialize, the Repsol's business, results of operations and financial position could be significantly and adversely affected.

#### **Location of reserves**

Part of Repsol's oil and gas reserves are located in countries that are or could be economically or politically unstable<sup>1</sup>.

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

If any of the above risks materializes, the Group's business, results of operations and financial situation could be significantly and adversely affected.

1. For further information see note "Geopolitics risk" of the consolidated annual accounts.

## Estimations of oil and gas reserves

To estimate proved and unproved 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).

The accuracy of these estimates depends on a number of different factors, including: development activities and operations, including drilling, production testing and studies. After the date of the estimate, the results of activities may entail substantial upward or downward corrections based on the quality of available geological, technical and economic data used - including changes in hydrocarbon prices - and their interpretation and evaluation. Moreover, the production performance of reservoirs and recovery rates depend significantly on available technologies as well as Repsol's ability to implement them.

Therefore, 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. Any downward revision in estimated quantities of proven reserves could adversely impact company results, and would lead to increased depreciation, depletion and amortization charges and/or impairment charges, thus reducing earnings or shareholders' equity.

## Projects and operations in joint ventures and partnerships

Many of the Repsol Group's projects and operations are conducted through joint ventures and partnerships. 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, any of Repsol's partners or another member in a joint venture or associated company may fail to comply with its financial obligations, or they may commit another breach that could affect a project's viability.

## Acquisitions, investments and disposals

As part of Repsol's strategy, the company may engage in acquisitions, investments and disposals of ownership interests. There can be no assurance that Repsol will identify suitable acquisition opportunities, obtain the financing necessary to complete and support such acquisitions or investments, acquire businesses on satisfactory terms, or that any acquired business will prove to be profitable. In addition, 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 acquired operations, technologies, systems, services and products, and risks arising from provisions in contracts that are triggered by a change of control of an acquired company. 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 maintain existing relationships with its customers and partners.

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.

## Repsol's current insurance coverage may not be sufficient for all 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 conditions, and such prices may be lower than current prices in other regions of the world. In addition, excess supply conditions that exist in some regions cannot be utilized in other regions due to a lack of infrastructure and difficulties in transporting natural gas.

In addition, Repsol 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 and deliver gas to customers, which present a different type of risk to the Group as they are pegged to existing proven reserves in these countries. Should such reserves in these countries prove insufficient, Repsol might not be able to satisfy its obligations under these contracts, some of which include penalty clauses for breach of contract.

The above risks may adversely affect Repsol's business, results and financial position.

### **Cyclical nature of petrochemical activity**

The petrochemicals industry is subject to wide fluctuations in supply and demand, reflecting the cyclical nature of the chemicals market on a regional and global scale. These fluctuations affect the prices and profitability of petrochemicals companies, including Repsol. Repsol's petrochemicals business is also subject to extensive governmental regulation and intervention in such matters as safety and environmental controls. Any fluctuations and changes in regulations may have an adverse effect on the Repsol's business, financial position and results of operations.

### **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 arising in the ordinary course of business, in relation to which it is unable to predict the scope, subject-matter or outcome. Any present or future litigation involves a high degree of uncertainty and, therefore, the resolution of these disputes could affect the business, 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 economic or/and 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**

Repsol's Ethics and Conduct Code, which is mandatory for all Repsol directors, executives and employees, regardless of the type of contracting governing their professional or employment relationship, establishes the overall framework for understanding and putting into practice the conduct and expectations the company places in each of them, in line with the principles of loyalty to the company, good faith, integrity and respect for the law and the ethical values defined by the Group.

The Company's diverse models of compliance and control include controls aimed at detecting and mitigating significant aspects of compliance, such as improper conduct or breach of applicable regulations. Their occurrence could cause reputational damage to the Company, while resulting in 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 Company's activities, and attempts to reach agreements prove unsuccessful, Repsol may be affected by the publication of biased or manipulated information that generates opinion contrary to the company's activities.

This could result in an adverse impact on the social or media acceptance of Repsol's activities, leading to erosion of the Company's image as well as loss business opportunities in the area or country in question, with potential adverse effects on its business, financial position, and the result of its operations.

### **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. Note 9 "Financial risks" in the Group's audited consolidated financial statements analyzes the exposure to those risks and measures the impact they may have on those financial statements.

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.

In the case that Repsol were unable to meet its needs for liquidity in the future or had to incur increased costs to meet them, this could have an adverse effect on its business, financial position and results of operations.,

### **Credit risk**

Credit risk is defined as the possibility of a third party not complying with his 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. To this end, the Group has its own systems, in line with best practices, for constantly monitoring the creditworthiness of all its debtors and for determining the risk limits of third parties.

As a general rule, the Group considers a bank guarantee issued by financial entities to be the most suitable instrument of protection from credit risk. In some cases, the Group has taken out credit insurance policies to partially transfer to third parties the credit risk related to the trade of some of its businesses.

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. Any breach of payment obligations by Repsol's customers and counterparties, in the agreed time frame and form, could have an adverse effect on Repsol's business, results or financial position.

#### **Credit rating risk**

Credit rating agencies regularly rate the Group, and their ratings are based on external factors, such as the conditions that affect the oil & gas sector, the general state of the economy and the performance of the financial markets.

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 access of the Group to financial markets, increase the cost of any new finance, and have a negative effect on its liquidity.

See credit rating table in section 4 "Credit rating" in this document.

## Market risks

The Repsol Group is exposed to various types of market risk: exchange rate, commodity price and interest rate risk, which are described below:

- **Exchange rate fluctuation risk:** Changes in exchange rates may adversely affect Repsol's operational result and the value of its assets.

In general, this exposure to exchange rate risk stems from the existence in the Group companies of assets, liabilities and cash flows denominated in a currency other than the company's functional currency, with particular emphasis on the fact that: (i) Cash flows generated by oil, natural gas and refined product sales are generally denominated in United States dollars, (ii) A large portion of Repsol's assets and investments are also denominated in United States dollars.

Furthermore, it should be borne in mind that: (i) Cash flows from transactions carried out in the countries in which Repsol conducts its activities are exposed to fluctuations in currency exchange rates of the respective local currencies against the major currencies in which the commodities used as reference for the fixing of prices in the local currency are traded, (ii) Repsol's consolidated financial statements are expressed in euros and, consequently, the assets and liabilities of subsidiary investee companies with a different functional currency are translated into euros.

To mitigate exchange rate risks, and it deems appropriate, Repsol carries out investments or transactions in those currencies in which foreign exchange risk exposures have been identified and it can hedge the risk with derivative financial instruments in currencies where there is a liquid market and reasonable transaction costs.

Notes 9 "Financial risks" and 8 "Derivative and other transactions" in the consolidated financial statements

include additional details on the financial risks described in this section and the hedging transactions performed.

- **Commodity price risk:** In the normal course of operations and trading activities, the earnings of the Repsol Group are exposed to volatility in the price of oil, natural gas, and related derivative products (see the risk factors titled "*Fluctuations in crude oil and reference products' international prices and demand owing to factors beyond Repsol's control*" and "*Repsol's natural gas operations are subject to particular operational and market risks*" above). Note 8 "*Derivative and other transactions*" in the consolidated financial statements include additional details on the financial risks described in this section.
- **Interest rate risk:** The market value of the Group's net financing and net interest expenses could be affected as a consequence of changes in interest rates which could affect interest income and expenses of financial assets and liabilities tied to floating interest rates and the fair value of financial assets and liabilities tied to a fixed rate. Fluctuations in interest rates may also affect the value of assets and liabilities due to a change in the applicable cash flow discount rate, investments' profitability and the future cost of raising funds.

To mitigate interest rate risks, and when it deems appropriate, Repsol can hedge the risk with derivative financial instruments where there is a liquid market and with reasonable transaction costs.

Notes 9 "Financial risks" and 8 "Derivative and other transactions" in the consolidated financial statements include additional details on the financial risks described in this section and the hedging transactions performed.

# Appendix III. GRI indicators

## Part I. Profile

### Company profile

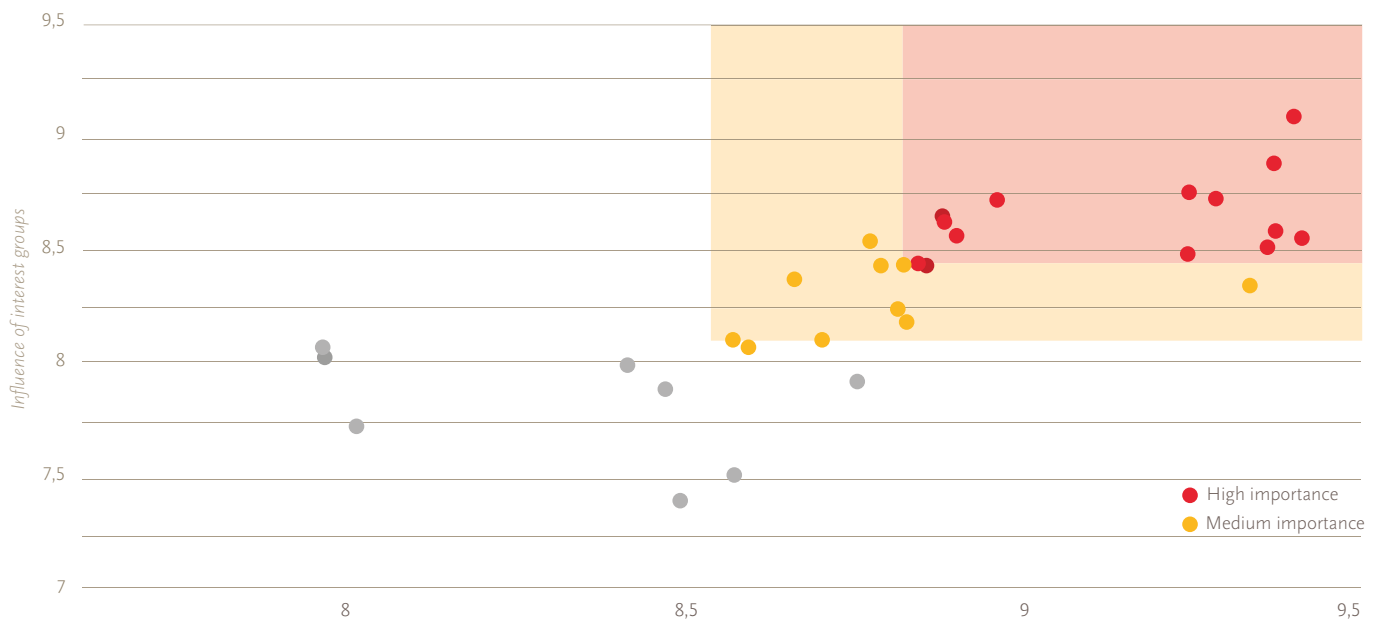
#### Materiality (G4-18 to 19) and stakeholders (G4-24 to 27)

Repsol has updated the materiality study carried out in 2016, which is based on online surveys for stakeholders to identify and prioritize economic, social and environmental issues that are deemed to have a high impact and importance. This year, the consultation was expanded, including customers within the

groups consulted in the previous study: employees, suppliers and contractors, investors, international bodies and representatives of civil society.

The following chart shows the results of the materiality study with regard to sustainability:

### Matters identified by the stakeholders



High importance figures represented are rated over 8.8 in the Repsol importance and over 8.4 in influence of stakeholders, on a scale from 0 to 10.

Aspect	IGI 2017 Chapter		
● Climate Change	Climate change	6.1	Climate change
● No discrimination, equality and diversity		6.2	People
● Human rights impact assessment (Due diligence)		6.2.2	Respect for Human rights and Community relations
● Human rights assessment and qualification (Supply chain)		6.2.2	Respect for Human rights and Community relations
● Stable working conditions	People	6.2.1	Our people
● Labor Relations		6.2.1	Our people
● Indigenous peoples' rights		6.2.2	Respect for Human rights and Community relations
● Economic and social development		6.2.2	Respect for Human rights and Community relations
● Community relations		6.2.2	Respect for Human rights and Community relations
● Accidentability			6.3
● Incidents, spills, leaks, explosions, etc	Safe Operation	6.3	Safe Operation
● Emergency response		6.3	Safe Operation
● Water management			6.4.
● Biodiversity	Environment	6.4.	Environment (Biodiversity)
● Gestión de residuos		6.4.	Environment (Waste)
● Innovatiónn	Innovation and Technology	6.5	Innovation and Technology
● Compliance	Ethic and Transparency	6.7	Ethic and Compliance
● Impacts and risks management		2.4	Gestión del riesgo
● Tax payment		6.6	Responsible tax policy
● Fight against corruption		6.7	Ethic and Compliance
● Qualification of Suppliers and contractors		6.8	Supply Chain
● Training and awareness on sustainability		6.	Sustainability
● Code of conduct		6.7	Ethic and Compliance
● Code of conduct for the supply chain		6.8	Supply Chain

## Matters identified by stakeholders consulted:

**Customers:** They choose according to “Product Quality,” “Price,” “Product availability,” and “Punctuality/delivery times.” They positively rate the service Repsol provides as a supplier and the quality of its products. The aspects to be improved are incidence management and product price.

**Employees:** They hope that necessary measures are taken to facilitate a participative dialogue, active listening and continuous cooperation. For this reason, employees are informed at all times of matters related to sustainability and the companies actions in this regard.

**Trade union organizations:** The company has channels of communication and dialogue with workers, and negotiating committees to discuss issues of interest and reach agreements. Repsol holds meetings through committees and commissions in order to monitor and guarantee collective bargaining agreements and pacts applicable in group companies. Noteworthy: the European Works Council of the Repsol Group stands out for their dialogue with workers’ representatives at an international level.

**Suppliers and contractors:** They strive to ensure Repsol shares best practices to improve its performance and be able to participate in bids and contract their services. They also request greater clarity in the information on their performance evaluations.

**Investors:** They demand from the company transparency on a continuous basis on its social, environmental and governance performance for decision making. Repsol engages in continuous communication and dialog with this group. The CEO of the Company, Josu Jon Imaz, directs and leads senior management roadshows to respond to their requests for information in this field. And for the second year, it led Sustainability Day, in its fourth edition. The total number of investors visited during the year represents 56% of the total socially responsible shareholders.

**International organizations:** They call upon companies to implement their recommendations and good practices. For instance, they should reduce their environmental impacts, seek out local opportunities through training or promoting employment, and collaborate with other companies or organizations. Repsol believes that companies play a significant role in helping drive progress toward sustainable development.

**Civil society:** They aim for companies to prevent and mitigate environmental and social impacts. They also expect companies to be more proactive and transparent in providing information on sustainability performance, and to engage in more dialog and collaboration with stakeholders. In addition to the sustainability information that Repsol discloses, all requests for information are answered and it participates in talks, congresses and debates on this subject.

## G4-10 Workforce by employment contract, employment types, region and gender

		2017	2016
<b>Number of employees by contract type and gender</b>			
Permanent Contract	Men	14,675	15,306
	Women	7,750	7,851
	Total	22,425	23,157
Temporary Contract	Men	1,597	1,388
	Women	1,063	924
	Total	2,660	2,312
<b>Total</b>		<b>25,085</b>	<b>25,469</b>

The number of employees was the same as in 2016. The ratio of employees with permanent contracts is lower due to the downsizing currently under way, which mainly affects this group of employees.

		2017	2016
<b>Number of fixed employees by job type and gender</b>			
Full time	Men	14,641	15,267
	Women	7,684	7,782
Part time	Men	34	39
	Women	66	69
<b>Total</b>		<b>22,425</b>	<b>23,157</b>

The data published reflect the number of fixed employees, irrespective of their percentage of employment.

		2017	2016
<b>Number of employees by region and gender</b>			
Africa	Men	150	126
	Women	26	22
	Total	176	148
Asia	Men	770	809
	Women	281	286
	Total	1,051	1,095
Europe	Men	12,325	12,491
	Women	6,291	6,200
	Total	18,616	18,691
Latin America	Men	2,164	2,234
	Women	1,658	1,624
	Total	3,822	3,858
North America	Men	861	989
	Women	556	623
	Total	1,417	1,612
Oceania	Men	2	45
	Women	1	20
	Total	3	65
<b>Total employees</b>	Men	16,272	16,694
	Women	8,813	8,775
<b>Total</b>		<b>25,085</b>	<b>25,469</b>



The reduction in employees has occurred mainly in the following regions: North America due to the downsizing of the Company and in Oceania, as the main activity of the Company has ended in Australia. In Africa, the increase in employees is due to the development of a number of assets, especially in Libya.

#### **G4-11 Percentage of total employees covered by collective bargaining agreements**

In Spain, 100% of Repsol employees are covered by the collective bargaining agreement of their company. However, there is a certain percentage excluded from the agreement in different fields, due to the individual contract in force for these groups.

According to currently available data, in countries other than Spain, the following employees are covered by collective bargaining agreements:

- **Brazil:** The Company collective bargaining agreement applies to local employees of Repsol Sinopec Brasil who render services in the country.
- **Norway:** 100% of the offshore employees are covered by union agreement, but no covered onshore staff.
- **Peru** (La Pampilla refinery): 43% of employees are covered by the company-wide collective bargaining agreement.
- **Portugal:**
  - At Repsol Portuguesa, S.A and Repsol Gas, S.A: 100% of employees covered by sector agreement.
  - At Repsol Polimieros, S.A.: the 2016-2018 company collective bargaining agreement applies to 98.5% of non-excluded employees.

## **Governance**

#### **G4-39 Indicate whether the Chair of the highest governance body is also an executive officer**

Antonio Brufau Niubó is the Chairman of the Repsol's Board of Directors. His position is non-executive, as his duties are institutional, with a key role in setting and overseeing the medium and long-term strategy, institutional relations with the authorities, shareholders and other stakeholders, and in overseeing management tasks.

Josu Jon Imaz was appointed CEO and member of the Delegate Committee of Repsol by virtue of a resolution of the Board of Directors on April 30, 2014, and was subsequently ratified and re-elected by the General Shareholders' Meeting of April 30, 2015. The meeting of the Board of Directors of April 30, 2015 resolved to vest all executive functions in the CEO, who chairs the company's three management bodies: Corporate Executive Committee, the Exploration and Production Executive Committee and the Downstream Executive Committee.

#### **G4-53 Mechanisms for seeking and taking into account the opinion of stakeholders regarding remuneration including, the results of votes on remuneration policies and proposals**

The Annual Report on the Remuneration of Repsol Directors is submitted to an advisory vote of shareholders. In the General Meeting of May 19, 2017, the report received wide support, as it was approved by a majority of the 97.09% of the capital attending the meeting.

Further, and with the aim of assisting shareholders in understanding the information in the official model of the Report on Remuneration, and to continue increasing the transparency of remuneration schemes, the Company also publishes a voluntary report on this topic that contains further information on the objectives and degrees of compliance of annual and multi-year variable remuneration of Executive Directors.

The General Shareholders' Meeting of May 19, 2017 also approved, with 95.9% of votes in favor, the new Remuneration Policy of Directors of Repsol, S.A. for 2018, 2019 and 2020. The policy contains, among other matters, forecasts on the partial payment in shares of multi-year variable remuneration and the policy on holding of shares.

#### **G4-54 and G4-55 Ratios for the compensation for the organization's highest-paid individual in each country of significant operations to the median compensation for all employees (excluding the highest-paid individual) of the same country**

Repsol analyzes wage markets in the countries and business sectors in which the Company operates and sets its internal objectives on the average wage position of its employees with these external market wage benchmarks. The criteria for establishing the sought-after wage positioning are generally similar in all employee and executive groups. Accordingly, with the compensation policy, in general terms, the data in the table are affected by the typical wage dispersion of the country and business sector in which the Company operates.

On an annual basis, the budgets for wage increases are decided by employee group, and criteria are established for maximum individual increases. The increase of the average wage of the entire workforce reflects the wage bills of the workforce of each professional group and the wage increase percentages applied to each group, both those approved by the company and those established through collective bargaining or by legal requirement. Further, the compensation of the highest-paid individual may also increase or decrease owing to variable components, which take on greater weight in positions involving higher responsibilities, even if the base wage remains unchanged.

The year 2017 continued to be marked by wage restraint. Combined with programs of workforce downsizing and divestments from non-core assets, this has resulted in negative increases in the average wage of all employees in some countries.

In Spain, as a result of the collective dismissal, there has been a decrease in both the workforce and average remuneration, and this is reflected in the increase on the ratio of compensation of the highest-paid individual. This effect is seen in both the figure for Spain and for Grupo Repsol, S.A.

Also in Brazil, North America and the southeast Asian countries, workforces have been streamlined, affecting highly qualified personnel. This has also caused a decrease in average remuneration and an increase in the ratio of compensation of the highest-paid individual.

In Ecuador, there was a considerable decrease in median compensation in 2017 due to the profit effect (distribution of business profit according to law), increasing the distance with the highest remuneration.

Country	Annual total compensation of the highest-paid individual <sup>(1)</sup> / median annual total compensation for all employees <sup>(2)</sup>	Percentage increase of annual total compensation of highest-paid individual / Percentage increase of median annual total compensation of all employees
Bolivia	2.34	1.08
Brazil	3.27	-1.06
Canada	14.45	-3.57
Ecuador	8.64	-0.08
Spain <sup>(3)</sup>	13.69	-0.68
United States	3.15	49.16
Indonesia	2.72	0.29
Malaysia	2.82	3.25
Peru	9.47	1.05
Portugal	4.59	3.49
Repsol S.A. <sup>(3)</sup>	28.43	-1.99

(1) The highest-paid individual has been identified without taking into account expatriate staff from other origins or employees who departed prior to December 31 of the year in question and the compensation corresponds with the amount effectively paid.

(2) Median annual total compensation for all employees has been considered as median annual cash compensation. The following items of personnel costs have been included: Base salary and fixed supplements, seniority, variable supplements, overtime and other remuneration

(3) Senior executives have been included in the line called "Group (Repsol, S.A.)" and are compared with the median compensation of all employees of the Group's parent company (Repsol, S.A.). Their functions are worldwide in scope and are not limited to any particular country in isolation. Senior management, for the purposes of this report, includes members of the Corporate Executive Committee receiving compensation for performance of executive duties, and not including any compensation received for performance of duties as a member of the Board of Directors of Repsol, S.A. or any of the subsidiaries.

## Part II: specific standard disclosures

### Economic Performance

Contribution to economic development where the company conducts its operations.

**G4-EC1: Direct economic value generated and distributed and G4-EC4: Economic aid granted by government entities**

Item	2017	2016
<b>Direct economic value generated (I)</b>	<b>42,613</b>	<b>36,815</b>
Sales and other operating income	42,378	35,679
Finance income	194	176
Gains on disposal of fixed assets	41	960
<b>Economic value distributed (II)</b>	<b>39,422</b>	<b>34,166</b>
Operating expenses (payments for raw materials, product components, facilities and services acquired; property rentals, license fees, facilitation payments, royalties, subcontracting of workers, employee training or protective equipment costs)	28,781	23,699
Salaries and employee benefits (except training)	1,880	2,488
Payments to capital providers (dividends to shareholders and interest payments to interest providers)	864	999
Public Administrations: Tax accrued in the year and included as expenses in the company's consolidated financial statements, including Corporate Income Tax and Excise Duties	7,897	6,960
Investments in communities (calculated by the CR area)	23	20
<b>Retained economic value (I-II)</b>	<b>3,168</b>	<b>2,649</b>
Economic aid granted by government entities (Subsidies received)	23	25

**G4-EC5 Ratio of standard entry level wage by gender compared to local minimum wage at significant locations of operation**

Country	Country minimum wage (local currency/month)	Repsol minimum wage (local currency/month)	Repsol/national minimum wage
Bolivia	2,000	11,912	5.96
Brazil	937	4,809	5.13
Canada	2,357	3,467	1.47
Ecuador	375	890	2.37
USA	1,257	3,268	2.60
Spain	708	1,206	1.70
Indonesia	3,355,750	11,520,600	3.43
Maylasia	1,000	3,816	3.82
Peru	850	850	1
Portugal	557	565	1.01

In accordance with Repsol's equal opportunities policy, wages are established for a position without taking into account the gender of the person holding the position, including entry-level wages.

Repsol's entry-level wages are above the local minimum wage.

**G4-EC6 Proportion of senior management hired from the local community at significant locations of operation**

Country	% of Executives, Managers and Technical managers from the local community in 2017	Country	% of Executives, Managers and Technical managers from the local community in 2017
Algeria	8	Indonesia	65
Bolivia	88	Libya	35
Brazil	56	Malaysia	72
Canada	61	Norway	70
Colombia	79	Peru	74
Ecuador	90	Portugal	94
USA	36	Russia	47
Spain	87	Venezuela	76
		Vietnam	30

Includes executives and technical managers excluded from the collective bargaining agreement in countries with more than 50 employees.

Repsol remains committed to, and continues to increase its management teams with individuals from the local community in most countries where it has a significant presence. This enhances the Company's cultural diversity, enabling it to better respond to the needs of the societies in which it is present, while also contributing to their development.

**G4-EC7 Development and impact of infrastructure investments and services supported y G4-EC8 Significant indirect economic impacts, including the extent of impacts**

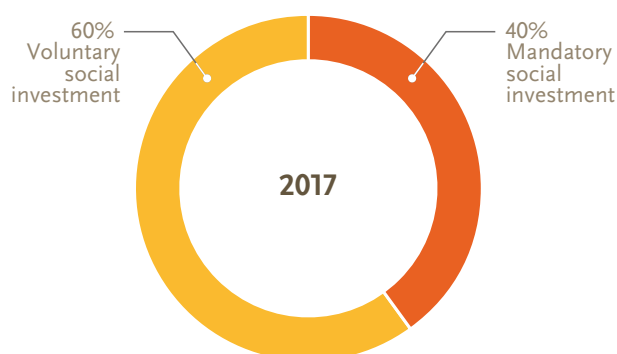
Repsol identifies and strengthens positive impacts and the shared value of regions where the Company is present as a result of a consensus with communities. The context determines the scope and configuration of the investment. A series of examples are offered below:

Country	Project
<b>Bolivia</b>	<i>"Construction of potable water system"</i> Project in collaboration with the autonomous municipal Government of Entre Rios carried out in Izarzama, Cochabamba district, to improve the quality of the potable water service for more than 7,000 people, pursuant to the needs expressed. This involves a reduction of the risks of contracting stomach and intestinal diseases from the water consumption and use. Investment: more than €12,000.
<b>Spain (Petronor)</b>	<i>"Social economy enterprise in primary sector"</i> Project that aimed at training unemployed people over the age of 45 in order to develop their professional career in the agro-fishing sector. The company made available to beneficiaries more than 35,000 m <sup>2</sup> of land for the production, transformation and marketing of agricultural products.
<b>Libya</b>	<i>"Support for the resilience of local communities"</i> The project is designed to provide basic services of health, education, energy and water access to the local communities in Ubari, Zintan, Zawiya and Rujban, or about 300,000 people in its area of influence. Investment: more than €3.6million.
<b>Malaysia</b>	<i>"Development of fishing skills"</i> With a contribution of €8,000, the program is focused on the socio-economic development of fishermen in Marang, Terengganu through activities of production and/or sale of fish, seafood and by-products.
<b>Papua New Guinea</b>	<i>"Organic Vegetable Farming"</i> Project in the area of influence of the Stanley gas project More than 120 people have benefited from the program, with an investment of €43,000, consisting of training in modern horticulture that will enable them to grow vegetables for both marketing and to improve diets in the area. The project also assisted in the creation of model farms with instruments and seeds, plants and planting materials.
<b>Peru</b>	<i>"Technical support for installation and maintenance of 300 ha of Cocoa"</i> Multi-year project (2014-2018) aimed at empowering the indigenous population of the Nuevo Mundo community through sustainable development in the region. Given the conditions of the area, focused on cocoa crops. In 2017, some €59,000 were invested, and more than 80 beneficiaries learned how to increase productivity through knowledge of good practices in the sector.

## Figures of social investment

In 2017, the social investment of the Repsol Group, including its two foundations, amounted to €39 million, of which €23.48 million consisted of voluntary contributions and €15.81 million were made under a legal or contractual obligation.

### Social investment



### Voluntary social investment

This includes the social programs Repsol carries out voluntarily, or which arise from voluntary agreements with communities.

#### Voluntary social investment (million euros)<sup>(1)</sup>

	2017	2016
Repsol	14.86	10.00
Repsol Foundations	8.62	9.83
<b>Total</b>	<b>23.48</b>	<b>19.83</b>

\* Does not include contributions to associations.

#### Voluntary social investment by type of contribution (million euros)

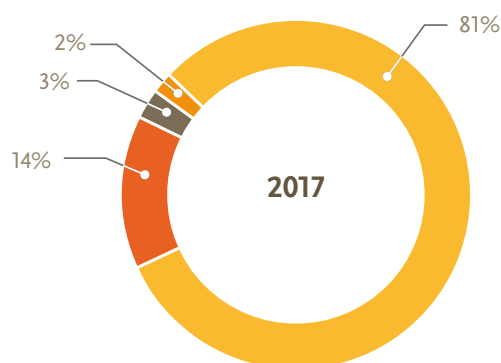
	2017	2016
Contribution in cash	22.21	18.27
Contributions in time	0.42	0.39
Contributions in kind	0.14	0.36
Management costs	0.71	0.81
<b>Total</b>	<b>23.48</b>	<b>19.83</b>

#### Voluntary social investment by type of project

	2017	2016
Increase and strengthen skills and knowledge within local communities.	18.44	13.69
Local development of business and opportunities for local suppliers	3.25	4.02
Development synergies of local infrastructures	0.58	0.50
Greater energy access	0.05	0.47
Preservation of local environment	0.55	0.59
Others <sup>(1)</sup>	0.61	0.56
<b>Total</b>	<b>23.48</b>	<b>19.83</b>

(1) Management costs not assigned to a specific Project €0.61 million.

### Voluntary social investment by project type



- Boosting and strengthening capacities and knowledge in local communities
- Local development of business and opportunities for local suppliers
- Synergies in development of local infrastructures
- Conservation of the local environment

#### Voluntary social investment by country (million euros)

	2017	2016
Algeria	0.12	0.01
Bolivia	1.81	1.49
Brazil	0.71	0.59
Canada	0.93	1.28
Colombia	1.14	0.89
Ecuador	1.12	1.31
Spain	9.22	10.64
United States	0.17	0.32
Indonesia	0.01	0.06
Libya	3.87	-
Malaysia	0.41	0.28
Norway	0.25	0.22
Papua New Guinea	0.18	0.04
Peru	1.80	1.77
Portugal	0.51	0.39
Russia	1.07	-
Venezuela	0.05	0.18
Vietnam	0.11	0.11
<b>Total</b>	<b>23.48</b>	<b>19.83<sup>(1)</sup></b>

(1) The total amount in 2016 includes €253,000 of investment in Trinidad and Tobago.

### Mandatory social investment

The Company makes contributions owing to legal or regulatory requirements, or stipulations set out in the operating contract. These contributions may be fully managed by the company – through social programs – or by a third party (such as the national hydrocarbon company, institution or government agency) to whom Repsol delivers the due sum.

Mandatory investment in 2017 amounted to €15.81million and was made in Brazil, Canada, Colombia, the United States and Venezuela.

Mandatory social investment by country (millions of euros)		
	2017	2016
Brazil	6.09	6.09
Canada	0.80	0.89
Colombia	0.03	0.76
Ecuador	0.36	0.92
United States	8.39	8.28
Indonesia	0.14	-
Venezuela	0.002	0.14
<b>Total</b>	<b>15.81</b>	<b>17.08</b>

### Management of the supply chain and its impacts where the company operates

#### G4-EN33 Significant actual and potential negative environmental impacts in the supply chain and actions taken

A total of 1,998 evaluations were made of environmental aspects on 965 suppliers. Some 40 evaluations on 36 suppliers were found with an environmental performance score below 5 out of 10. Negative scores are related to logistics contracts, and equipment installation and maintenance, among others. After the negative evaluations were identified, improvements were agreed with 100% of the suppliers.

No relationship was ended with a supplier for environmental reasons.

#### G4-LA15 Significant actual and potential negative labor impacts in the supply chain and actions taken

A total of 2,403 evaluations were made on safety issues on 1,195 suppliers. Some 93 evaluations on 71 suppliers were found with a safety performance score below 5 out of 10. Negative scores are related to equipment installation and maintenance work, and consulting services and IT systems, among others. After the negative evaluations were identified, improvements were agreed with 100% of the suppliers. No relationship was ended with a supplier for safety reasons.

#### G4-HR11/SO10: G4-HR11/SO10: Significant negative impacts in human/social impacts, real and potential, in the supply chain, and actions taken

A total of 2,699 evaluations were carried out related to management aspects on 1,343 suppliers (including human rights and social issues). Some 92 evaluations on 76 suppliers were found with a management performance score below 5 out of 10 (including human rights and social issues). Negative scores are related to equipment installation and maintenance contracts and waste transport and management. After the negative evaluations were identified, improvements were agreed with 100% of the suppliers.

No relationship was ended with a supplier for human or social rights reasons.

### Environmental performance

#### Energy efficiency and climate change

##### G4-OG2 and G4-OG3 Total amount of renewable energy generated

Repsol Energy Ventures has a ownership interest in the American company Power Inc. This company owns a patent for semi-submersible floating structures for offshore wind generation. In 2011, it installed the first full-scale prototype, called Windfloat, off the Portuguese coast. It was equipped with a 2MW Vestas wind turbine and generated more than 17 GWh until it was decommissioned in July 2016.

The next step is the installation off the Portuguese coast of three structures with a total power of 24 MW (Windfloat Atlantic project).

The project has a remuneration scheme approved by the Portuguese Government, and with from both the European Union, through the NER 300 program, and from the Portuguese Environmental Agency (APA). It has also been selected in the InnovFin Program of the European Investment Bank.

The investment in this project in 2017 has amounted to €0.3 million and the project is scheduled to commence operation in 2019.

## G4-EN7 Reductions in energy requirements of products and services

Repsol invests in sustainable mobility through projects of electric mobility, new systems of hybrid propulsion, and support for automotive gas.

### Electric-mobility

Since 2010, Repsol has promoted electric mobility through the company **IBIL**, which is a 50% investee of Repsol and the Basque Energy Agency (EVE), for a comprehensive energy charging service that is 100% renewable, with smart facilities and terminals and an infrastructure control center.

**IBIL** has installed 1,055 charging points, of which 25 are quick charge points in Repsol service stations. The Ministry of Agriculture and Fisheries, Food and the Environment selected Repsol's CLIMA electric car project, operated by IBIL, during the maximum eligible time period. Repsol is the first company in the history of such projects in Spain to verify a reduction in greenhouse gas emissions. This project promotes the use of electric vehicles through the acquisition of CO<sub>2</sub> reductions generated by the use of such vehicles. The first, second and third activity have been granted (2012 – 2017; 2013 – 2018; 2014 – 2019). The reduction in CO<sub>2</sub> greenhouse gases has been verified by an entity certified by the Ministry of Environment, and amounts to 848t of CO<sub>2</sub> to date.

Corporate **car-sharing** program with electric vehicles. In late 2016, autogas vehicles managed by **IBIL** were also added to the program. As part of the INNVIERTE<sup>1</sup> program.

The **Scutum** Project is a company that has been a Repsol investee since 2014. It designs, produces and sells electric motorbikes under the Silence brand name.

One of the competitive advantages of this company compared to others is its removable battery pack system, which has been patented throughout Europe, along with the industrial design of the electrical platform, which is adaptable to customer needs. Scutum's turnover has reached a total of 840 units of electric motorbikes sold.

It has opened a new motorbike assembly plant, with space for the assembly of electrical batteries. The company has continued to supply motorbikes to major corporate clients.

### Digitization in mobility

The **Westmartpark** project is a Spanish company that has set up and manages a network of low-cost collaborative parking where customers can park with savings of up to 50%, and owners of the spaces can monetize them during hours of off-peak use through an online platform and IoT technology sensors. The investment was made as part of the INNVIERTE program, with the CDTI.

The Drivesmart project is a Spanish company that owns the Drivesmart application which applies metrics of safe, social and sustainable driving. Through a user's smartphone, **Drivesmart** compiles and processes information on a person's driving style. The result is an objective measurement of the quality user's driving, and it fosters improvement. The investment was made as part of the INNVIERTE program, with the CDTI.

### New hybrid propulsion systems

**Serial hybrid propulsion system** that combines electric propulsion, an extended range system based on a gasoline engine, battery and the recovery of kinetic energy in braking and of thermal energy in exhaust gases. It offers a flexible alternative for meeting the challenges of mobility in urban environments for the light/medium-duty segment (3.5 – 6.5 tons). The project is being developed in a consortium with five other Spanish companies and in collaboration with a number of research institutes that are also Spanish. It tackles objectives of efficiency, low CO<sub>2</sub> emissions and of unitary, overall functionality. Funded by the CIEN program of the CDTI.

### AutoGas

**AutoGas** is the most widely used alternative fuel for vehicles because it enables fuel savings of up to 40%. Repsol currently has 767 AutoGas supply points and is gradually expanding this network.

There are already many manufacturers who market AutoGas vehicles, but many gasoline vehicles can also be adapted to AutoGas. AutoGas with bifuel vehicles are fitted with two tanks: one for gasoline and another for AutoGas, thus doubling the vehicle's autonomy. Their equipment and features are similar to vehicles using conventional fuels.

At Repsol we have taken a step further in the use of LPG. The company has launched a technology development project with the Spanish company Begas Motor S.L. to develop engines for heavy vehicles (buses) fueled with autogas (LPG), so that they can be certified as ECO vehicles. The project includes a pilot test in a public bus in the city of Valladolid.

Commercially, this will generate new business opportunities by clearing the way for new tenders for fleets fueled by LPG, and an expansion of the potential market of customers for goods transport.

(1) The conversion program with CDTI in Spanish technology SMEs.

### G4-OG14 Volume of biofuels produced and purchased meeting sustainability criteria

Repsol helps to reduce CO<sub>2</sub> emissions through the use of biofuels incorporated in gasoline and gasoil.

In addition, the Company is focusing on the promotion of projects of advanced biofuels (based on non-food raw materials, biomass) with a strong technological content and high reduction of the carbon footprint. The work is currently under way at the Repsol Technology Center.

To ensure the sustainability of biofuels, Repsol complies with international schemes that certify the traceability of raw materials which are incorporated throughout the production chain. In particular, Repsol is operating according to ISCC<sup>1</sup> schemes in all plants and industrial facilities.

The percentage of biofuels incorporated into gasoline and diesel fuel is higher than the limits mandated by law.

### CO<sub>2</sub> offsetting

Repsol offsets the carbon footprint of some of its activities and events.

The following table shows the tons offset and carbon credits purchased to compensate:

2017 event	Tons of CO <sub>2</sub> compensated
Shareholder Annual Meeting	49
Moto GP World Championship (participation of Repsol teams)	2,140
Organization and participation in the Spanish Speed Championship	353

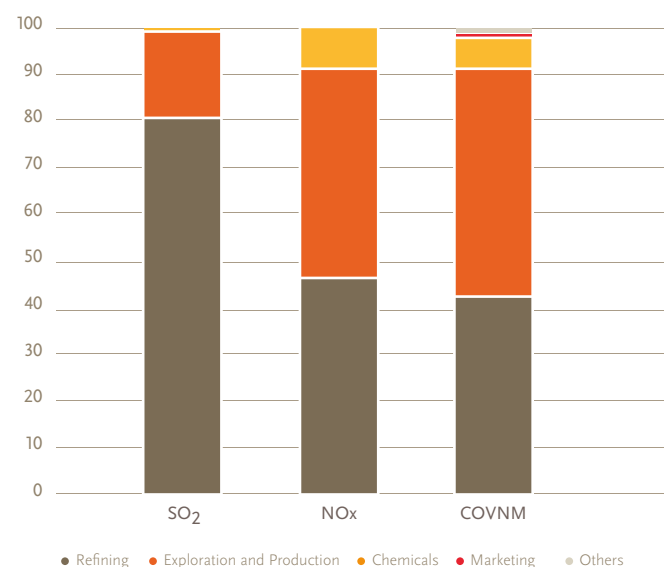
Repsol has verified with an independent entity the number of tonnes of CO<sub>2</sub> of each of the events.

1. International Sustainability & Carbon Certification.

## Non-GHG emissions

### G4-EN21 NO<sub>x</sub>, SO<sub>x</sub>, and other significant air emissions

#### Disclosure of major atmospheric emissions by activity



More than 80% of SO<sub>2</sub> emissions have occurred in the refineries of the Company.

### Intensity of significant air emissions

Atmospheric emissions per ton of processed crude oil in refineries and per barrel of oil equivalent (boe) in exploration and production assets are as follows:

Refining	2017	2016
Tons of SO <sub>2</sub> /thousands of tons of processed crude oil	0.477	0.563
Tons of NO <sub>x</sub> /thousands of tons of processed crude oil	0.252	0.314
Tons of COVNM/thousands of tons of processed crude oil	0.358	0.354

Exploration and production <sup>(1)</sup>	2017	2016
Tons of SO <sub>2</sub> /thousands of boe produced	0.030	0.026
Tons of NO <sub>x</sub> /thousands of boe produced	0.068	0.094
Tons of COVNM/thousands of boe produced	0.118	0.188

(1) The intensive figures have been calculated using gross production of the operated assets of the Company, as reported atmospheric emissions include 100% of emissions for such assets, irrespective of Repsol's percentage of them.



### G4-OG8 Benzene, lead and sulfur content in fuels

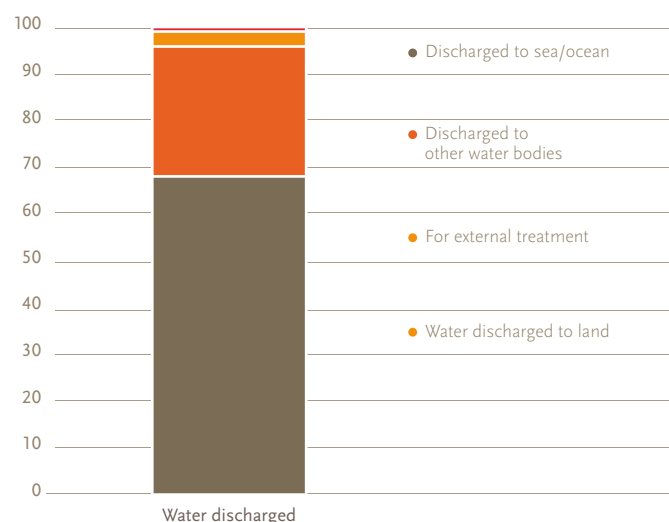
All the fuel the Company supplies to the market meets current quality specifications. In the refineries in Spain, it is applied the EN228 standard for gasoline and EN590 for gasoil. Under these specifications, gasoline and gasoil must be free of sulfur compounds (maximum 10 mg/kg) and have a low content of aromatic compounds (less than 1% v/v of benzene in gasoline), greatly helping to improve the environment by reducing emissions of volatile components. Repsol has improved its processes in order to achieve these objectives.

The Company also continues to enhance the quality of fuel in the La Pampilla Refinery of Peru with a project that will enable us to produce diesel and gasoline with 0.005% sulfur content. The new facilities are capable of desulfurizing the diesel produced in the refinery, and in 2018 the gasoline block will start up, which will enable us to produce gasoline with a maximum of 50 ppm sulfur and limit the content of other compounds, such as the aromatics, olefin and benzene.

## Water management

### G4-EN22 Total water discharges by nature and destination

#### Water discharged by destination



### Treatment of discharged water

The fluid effluents from the facilities of the Company are subjected to purification processes to minimize their environmental impact and ensure compliance with legal requirements. The type of wastewater treatment process is specific to the activity and the characteristics of the site. Treatment may be a physical-chemical

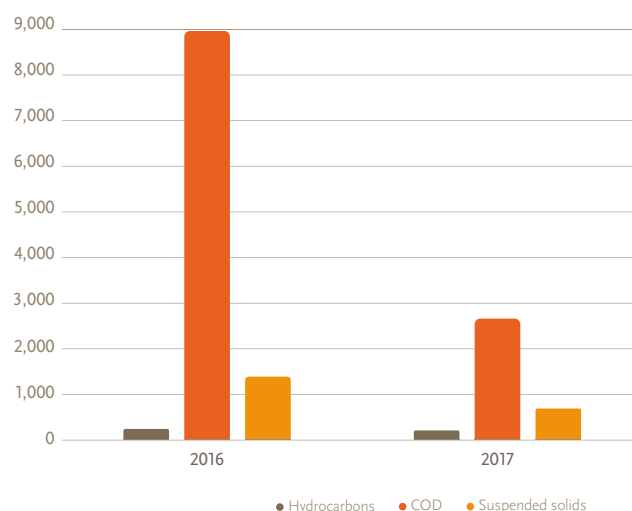
(primary) process, completed with a biological (secondary) process, or even include more advanced treatment (tertiary process) or other specific processes for contaminants that are non-degradable using non-conventional treatments.

Therefore 45% of water discharged undergoes advanced treatment processes, 29% undergoes secondary processes and the remaining 26% undergoes primary processes as the quality of the discharged water does not require more complex treatment.

### Main contaminants discharged

The main contaminants discharged in Repsol's facilities are: hydrocarbons, suspended solids, and organic matter likely to undergo oxidation, measured as chemical oxygen demand (COD).

#### Principales contaminantes vertidos



The decrease in the amount of contaminants discharged is due to the fact that Repsol no longer operates the Trinidad and Tobago asset.

#### Hydrocarbons discharged in 2017, by activity

Activity	Tons	%
Exploration and production	45	27%
Refining	102	61%
Chemicals	15	9%
Marketing	4	2%
Other	0	0%
<b>Total</b>	<b>166</b>	<b>100%</b>

### G4-OG5 Volume and disposal of formation or produced water

The following is the water produced and injected in the Company's exploration and production assets:

Water	2017	2016
Produced (thousands of tons)	60,255	68,313
Injected (thousands of tons)	55,231	52,191

## Waste management

### G4-EN23 Total weight of waste by type and disposal method

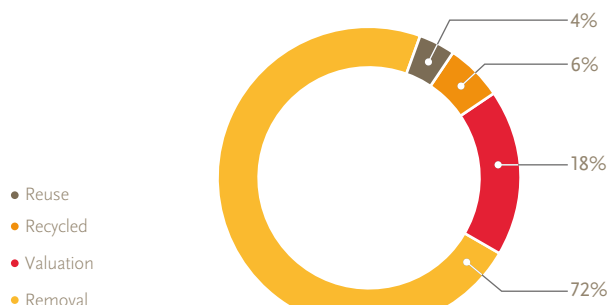
Disclosure of hazardous and non-hazardous waste per activity in 2017.

Activity	Hazardous waste (metric tons)	Non-hazardous waste (metric tons)
Exploration and Production	13,008	262,428 <sup>(1)</sup>
Refining	12,092	71,145
Chemicals	10,452	10,472
Marketing	4,176	5,336
Lubricants and Specialist Products	139	1,450
LPG	88	813
Other	111	503
<b>Total</b>	<b>40,065</b>	<b>352,148</b>

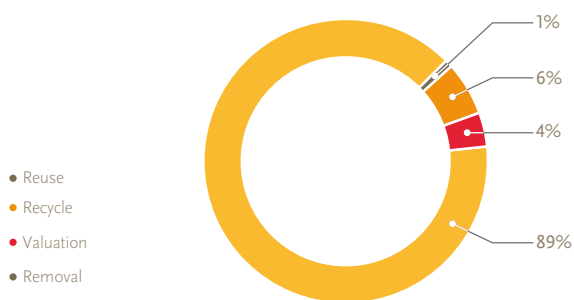
(1) Aproximately 90% of Upstream non-hazardous waste corresponds to remediation of contaminated lands in Canada, punctual activity not linked to ordinary activity.

The charts below report the actions carried out in 2017 for each category:

#### Hazardous waste management



#### Non-hazardous waste management



### G4-OG7 Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal

These data do not include the amount of waste generated in drilling activities, the figures for which are shown below.

	2017	2016
Water-based cuttings and fluids	86,265	131,240
Non water-based cuttings and fluids	60,627	38,132

Management of waste from drilling operations (cuttings and fluids) is regulated by the company's Environmental Performance Practices (EPP). These guidelines establish a set of standards applicable to all geographical areas in which the company operates and regardless each country's specific legislation.

## Biodiversity and ecosystem services

### G4-EN11 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

Repsol has an internal screening tool to assess potential overlapping of operating blocks with protected areas. The input data come from the Proteus consortium with the UNEP-WCMC, from where the World Database on Protected Areas (WDPA)<sup>1</sup> is obtained. The data is incorporated to the internal tool and taken into account as one of the criteria throughout the lifecycle of the Company's projects.

In addition, Repsol has implemented the IPIECA<sup>2</sup> and IOGP<sup>3</sup> management framework for biodiversity and ecosystem services (BES). The framework quantifies the risk to biodiversity (species and habitats) and to ecosystem services, and the data is added to the business case of each asset.

1. United Nations Environment Programme's World Conservation Monitoring Centre.

2. The Global Oil and Gas Industry Association for Environmental and Social Issues.

3. The International Association of Oil & Gas Producers.

The following assets are located in areas adjacent to protected areas and/or areas of major value to biodiversity:

Bolivia	Adjacent to a IUCN area Cat. Not reported/not assigned.
Ecuador	34% of Block 16 and 100% of the Tivacuno block are in IUCN Cat. II.
Peru	93% of Block 57 is in a Key Biodiversity Area and 15% in IUCN Cat. VI.

Although there is overlap in the areas under concession by the state (blocks), the facilities of the Company do not overlap with areas protected by the IUCN nor any international convention. Even so, due to the high biodiversity that exists in these three sites and as has been disclosed in recent years, a biodiversity action plan in each of these assets to avoid, minimize and restore the impacts is being implemented.

#### **G4-EN12 Description of significant impacts of activities, products and services on biodiversity on protected areas and areas of high biodiversity value outside protected areas**

Applying the mitigation hierarchy of potential impacts on biodiversity is fundamental for Repsol, which applies the IPIECA methodology BES Management Ladder. This methodology can be used to analyze the current situation of current exploration and production assets and projects and identify next steps to be taken. In addition, it is based on the study of the following areas: Integration of biodiversity and ecosystem services in management of the business, relations with stakeholders, construction of a biodiversity baseline, identification and management of potential impacts and selection of indicators.

Repsol has been working on the implementation of this methodology in operated assets and projects of ROGCI, mainly in Canada, the US, Malaysia and Vietnam. Throughout the year, an initial assessment was made in each business unit, asset and project. An analysis was made of the current status, with medium-term objectives set and an action plan developed to achieve them.

Repsol plans to submit a report in the upcoming SPE congress to be held in April 2018 in Abu Dhabi: "Biodiversity Management in an Oil and Gas Company: From Theory To Practice". The report aims to describe how biodiversity management has been put into practice in Repsol with the use of a simple, yet effective tool.

#### **G4-EN13 Habitats protected or restored**

Restoration is the third steps in the mitigation hierarchy. It consists of a process to assist in the recovery of an ecosystem that has been degraded, damaged or destroyed.

Repsol is implementing asset abandonment plans that ensure the restoration of habitats. An example of this is the restoration project being carried out in Block 57 (Peru), where the Company is monitoring the revegetation of the pipeline and the abandonment of the platforms.

These activities led to the presentation, in December 2016, of the book "Machiguenga, una Reserva para todos." The purpose of the book is to disseminate facts of interest about the biodiversity that is found in the Machiguenga Communal Reserve. They have become more widely known owing to the investigation carried out in Block 57 relating to the flora and fauna and ecosystem services of this area of great biological value. Since 2014, and as part of the Study of Biodiversity and Ecosystem Services of the Machiguenga Communal Reserve, Repsol is performing studies and research with the support of scientists, residents of local communities, and with the active participation of technicians from the National Service for State-Protected Natural Areas (SERNANP), which allowed for the gathering of information on diverse species, many of them of great importance for the knowledge and management of biodiversity.

#### **G4-EN14 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk**

Repsol participates in the Proteus Consortium, where the UNEP WCMC make available to participating extractive companies information related to the distribution of the species listed in the IUCN Red List of Threatened Species and the protected areas. Repsol uses this information as one of the criteria in its decision making.

In 2017, the Proteus Consortium began to include information related to Cultural World Heritage Sites, including 832 records of places of interest, based on the world heritage list arising from the 41st meeting of the World Heritage Committee in Krakow, Poland. Similarly, Repsol prepares environmental impact studies in all new projects, with the compilation of detailed information. Related to the presence of species in the territory. In this regard, it has the book created with the Smithsonian Institute that provides a catalog of indicator species of the largest habitats of the planet, thus enabling greater effectiveness in management of impacts.

The following table shows the number of species classified by the IUCN with a potential presence in the Company's Exploration and Production assets

<b>Number of species in areas affected by exploration and production operation<sup>(1)</sup></b>	
Critically endangered species	20
Endangered species	70
Vulnerable species	342
Endangered species	420

(1) The data reported includes species of Exploration and Production assets with activity in 2017.

**G4-OG4 – Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored**

To determine the performance of the Company in this field, Repsol measures series of indicators for the exploration and production business, resulting in the data shown in the following table:

	<b>Result (%)</b>
Centers where biodiversity-related risks have been assessed	100
Centers where biodiversity-related risks have been found	100 <sup>(1)</sup>
Centers in which the area of influence has been calculated	100
Centers with specific biodiversity management and ecosystem services	100
Degree of implementation of specific biodiversity management and ecosystem services	100

(1) The indicator is 100% under the assumption that all assets the Company operates have potential biodiversity-related risks.

**G4-EN26 - Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff**

Repsol has an internal screening tool to assess potential overlapping of the operated blocks with protected areas (see G4-EN14). The input data come from the Proteus Consortium, where the World Database on Protected Areas (WDPA) is obtained. The data is incorporated to the own internal tool and taken into account as one of the criteria throughout the lifecycle of projects. In addition, the methodology Repsol uses for the management of biodiversity and ecosystem services analyzes and quantifies risk to biodiversity (species and habitats) and to ecosystem services, and the data are integrated to the business case of each asset. Bodies of water and related habitats are not a separate case, and they are included in both the tool and in the methodology.

Specifically for offshore operations, Repsol is using the Ocean Data Viewer<sup>1</sup> (ODV), which publishes global databases on marine and coastal biodiversity (such as coral reefs, mangroves and seagrass beds). These databases are used for marine spatial planning, mapping of habitats and the analysis of biodiversity and ecosystems.

In addition, Repsol has internal requirements for Environmental Performance Practices (EPP) relating to the management of wastewater. In particular, the Company establishes water disposal plans (WDPs), where it assesses the impact of effluents on the environment where they are discharged and, in simultaneously, it uses the internal Repsol Water Tool (RWT) to identify the bodies of water involved, analyzes the risks and adopts mitigation plans.

1. UN Environmental World Conservation Monitoring Center facilita a través de su web una herramienta para acceder a una gama de datos que ayuda a la toma de decisiones sobre conservación marina. <http://unep-wcmc.org>

## Mitigation of the environmental impact of products and services

### G4-EN27 Extent of mitigation of the environmental impact of products and services

Repsol worked throughout 2017 on a number of technology development projects related to environmental sustainability, such as circular economy, climate change or resource management. For instance:

<b>Circular economy</b>	<p><b>BIBOP Project:</b> Research to increase the biodegradability of polyolefins through the use of peptide-based additives to facilitate disposal of plastic waste in the environment.</p> <p><b>MADRASS Project:</b> Research into a biotechnology solution to the sustainability challenge of polyurethane foam (PU) of the comfort sector. The aim is to develop a biology platform based on an microorganism, or consortium of microorganisms, capable of transforming these waste liquids from the lysis of PU foam (polyester urethane) into a product of value that can make the process cost-effective. Implementation of a solution would benefit other agents in the value chain such as makers of foam, waste managers and/or producers of fine chemicals and society at large and the environment, by reducing the amount of waste sent to dumps and CO<sub>2</sub> emissions resulting from the combustion of mattresses to produce energy.</p> <p><b>NEOSPOL Project:</b> Research on conversion of CO<sub>2</sub> to polymeric materials, which allows for replacement of raw materials of fossil origin. Applications explored allow for replacing other materials, while maintaining the benefits as new materials with distinct properties. Repsol is working on the development of polyol polycarbonate for polyurethane and polymer thermoplastic applications. To do so, it is developing specific catalysts, investing in more efficient processes and working to find new product applications, such as adhesives, elastomers, foam and coating, that have a smaller carbon footprint.</p>
<b>Climate change</b>	<p><b>LUXHOR Project:</b> Development of a photo-electrocatalytic system for converting solar energy into storable chemical energy, in what are known as processes of artificial photosynthesis. Based on water and carbon dioxide, low carbon footprint and high added-value products can be obtained with no external energy input other than sunlight. The idea, accordingly, is to develop an autonomous system that can generate hydrogen from water and high value-added products based on CO<sub>2</sub> products with a potential emissions reduction of up to 90%.</p> <p><b>POLARIS-POPC Project:</b> Development of a new product family based on propylene oxide (OP) and CO<sub>2</sub> for polyurethane applications with the company's own production process.</p> <p><b>Research to reduce the amounts of CO<sub>2</sub></b> currently emitted in E&amp;P assets, from the very stream of gas produced, from which must be separated in order to comply with the specifications of the gas. The following three options are envisioned: Use of CO<sub>2</sub> as a raw material for the production of fuel and other materials and chemical products, re-injection in crude oil fields to improve recovery (Enhanced Oil Recovery, or EOR), and geological storage in depleted gas fields among company assets. The initiative was supported by the OGCI.</p> <p><b>SynBioGas Project:</b> Research on the production of biofuels from the fermentation of gaseous streams from Repsol's industrial complexes (synthesis gas, carbon dioxide, sulfane, natural gas) or other sources (biogas). Achievement of expected results will have a significant impact in reducing the CO<sub>2</sub> emissions of the company's industrial complexes.</p>
<b>Resource management</b>	<p>Research into the use of technologies based on <b>electrogenic batteries</b> for treatment of wastewater from refineries and petrochemical plants. The advantage of this technology compared to current methods is the elimination of the organic load in less time and with less energy consumption and without producing sludge. In the Tarragona OPSM plants, pioneering technological solutions are being sought after for the control and limitation of the environmental impact of soil contamination by hydrocarbons. Solutions might include use of active barriers based on these bacteria that can limit on site the possible spread of hydrocarbon leaks, or the use of sensors based on these bacteria as an early warning system of leaks of hydrocarbons and related compounds.</p> <p><b>Research into the use of biological tools linked to DNA sequencing</b> as a tool capable of minimizing uncertainty and supporting decision-making in hydrocarbon exploration. The development of this microbiology and/or meta-genomic methodology is based on the fact that there is no completely sealed pool of hydrocarbons, because they can have small leaks. Such leaks migrate to the surface, thus creating the conditions for the differential growth of microorganisms in areas related to the existence of deep hydrocarbons.</p> <p><b>W4Shale Project:</b> Development of tools and methodologies to enhance the management of water (reduction of supplies, estimation of flow-back water, selection of treatments) in unconventional assets.</p> <p><b>HEADS Project</b> (Hydrocarbon Early Automatic Detection System): This is a system that can detect hydrocarbons in aquatic surfaces. HEADS is a pioneering technology developed by Repsol jointly with INDRA, and a patent is pending.</p> <p>In 2017, it was installed in the Petronor refinery and installation of the system was launched in the A Coruña refinery, in addition to an extension of the initial system in operation at the Tarragona refinery. Its use in the Cartagena refinery is scheduled for 2018.</p>

In the New Ventures Area, Repsol invests in companies that have potentially scalable technologies or innovations that are of interest to the Company's activities. The target companies are

innovative firms that are proposing solutions in energy efficiency, resource management and circular economy. Some examples are as follows:

#### Graphenea Project

The Graphenea Project is an investment within the INNVIERTE program in a graphene production company based on San Sebastian, Spain.

Graphene is an cutting-edge material for which countless applications are being discovered in a number of sectors, including energy (a component of batteries, photovoltaic panels, catalyzers, etc.). Major milestones were reached in 2017:

- Start-up of the new pre-commercial plant of graphene oxide.
- Revenue of over one and a half million euros in 2017.
- Exports its products to more than 40 countries, with customers including universities and research institutes as well as large companies (Philips, Nokia, Sigma-Aldrich, etc.).

#### Rocsole Project

The Rocsole project is an investment in a Finnish company that owns a technology based on Electrical Capacitance Tomography (ECT) to generate imagery of the flow of multiphase fluids (water, crude oil, air) inside piping and monitor the rates of deposition build-up, thus optimizing maintenance costs and preventing unscheduled stoppages.

In addition, it has open several lines of research and development, one of which is its possible use in subsea pipes.

#### Sorbwater Project

The Sorbwater project is an investment in a Norwegian company that owns a technology for the elimination of crude oil in water, which is part of the primary treatment of water in production and, in general, of any wastewater.

This investment boosts the development of hydrocarbons separation in water, improves the carbon footprint and the use of this technology in settings where formation water treated for livestock can be reused.

## Social performance

### Labor Practices and decent work

#### G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender and region

##### Percentage of new hires

Region		<30	30-50	>50		2017	2016
Africa	Women	50	4	0	Total	2	2
	Men	0	2	0			
Asia	Women	18	5	0	Total	4	1
	Men	7	4	1			
Europe	Women	71	11	5	Total	11	7
	Men	68	7	2			
Latin America	Women	68	20	3	Total	26	27
	Men	58	10	3			
North America	Women	0	2	2	Total	2	1
	Men	4	2	0			
Oceania	Women	NA	NA	0	Total	0	10
	Men	NA	0	NA			
<b>Total</b>	Women	66	12	4	Total	13	10
	Men	59	7	2			

**Number of new hires**

Region		<30	30-50	>50	2017 Total	2016 Total
Africa	Women	1	1	-	Total	4
	Men	-	2	-		
Asia	Women	6	11	-	Total	43
	Men	3	21	2		
Europe	Women	352	542	46	Total	2,092
	Men	531	553	68		
Latin America	Women	407	203	2	Total	23
	Men	247	125	11		
North America	Women	-	6	3	Total	2
	Men	3	11	-		
Oceania	Women				Total	0
	Men					
<b>Total</b>	Women	766	763	51	Total	3,157
	Men	784	712	81		

The rate reflects the new hires with no previous working relationship with company compared to the origin population of the tranche analyzed at December 31, 2017. 31% of these new hires have permanent contracts and, of these, 81% are in Peru.

**Voluntary employee turnover**

Region		<30	30-50	>50	2017 Total	2016 Total
Africa	Women	0	0	0	Total	1
	Men	0	1	0		
Asia	Women	6	7	4	Total	6
	Men	5	6	10		
Europe	Women	1	1	1	Total	1
	Men	1	1	0		
Latin America	Women	44	15	5	Total	17
	Men	32	7	2		
North America	Women	10	6	1	Total	6
	Men	15	7	3		
Oceania	Women	NA	NA	0	Total	167
	Men	NA	150	NA		
<b>Total</b>	Women	24	4	1	Total	4
	Men	12	2	1		

The Latin America turnover rate is concentrated in the Marketing business and is aligned with the economic growth and labor market of the country, and in Oceania, as a result of the reduction of activity in non-core businesses.

<b>Total employee turnover</b>							
<b>Region</b>		<b>&lt;30</b>	<b>30-50</b>	<b>&gt;50</b>		<b>2017</b>	<b>2016</b>
Africa	Women	0	4	0	Total	4	13
	Men	0	3	7			
Asia	Women	9	9	4	Total	9	5
	Men	5	7	19			
Europe	Women	2	2	15	Total	5	8
	Men	1	2	14			
Latin America	Women	60	20	18	Total	25	33
	Men	44	12	13			
North America	Women	13	12	16	Total	14	23
	Men	24	12	16			
Oceania	Women	NA	NA	0	Total	700	15
	Men	NA	450	NA			
<b>Total</b>	Women	33	6	15	Total	9	13
	Men	16	4	15			

This is calculated as the turnover of permanent employees out of the total number of employees at 12.31.2017.

#### **G4-LA2 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation**

<b>Social benefits by region (thousands of euros)</b>							
<b>Region</b>	<b>Life insurance</b>	<b>Medical insurance</b>	<b>Pension fund</b>	<b>Food allowances</b>	<b>Subsidized loans</b>	<b>Study assistance</b>	<b>Other</b>
Africa	91.3	442.8	(8.8)	106.2	0	75.2	1.4
Asia	188.8	72	2,769.2	77.3	0	173.4	0
Europe	2,737.9	11,804.3	31,621.6	10,223.6	1,136.5	2,107.5	280.5
Latin America	829.2	5,762.2	1,455.6	3,021	0	192.3	83.01
North America	210.8	7,758.1	18,737.2	83	0	228.9	0
Oceania	0	0	337.4	0	0	2.9	0
<b>Total</b>	<b>4,058</b>	<b>25,839.4</b>	<b>54,912.2</b>	<b>13,511.1</b>	<b>1,136.5</b>	<b>2,780.2</b>	<b>365</b>

The information shows the benefits for all employees (full-time, part-time, temporary and permanent).



#### G4-LA3 Return to work and retention rates after parental leave, by gender

The figures of this indicator are based on the number of employees. Reported data only includes Spain and personnel with permanent and temporary contracts during the year and the previous year.

<b>Return to work</b>		<b>2017</b>	<b>2016</b>
Total employees entitled to take leave	Women	230	250
	Men	424	466
	<b>Total</b>	<b>654</b>	<b>716</b>
Total employees that took maternity or paternity leave	Women	227	243
	Men	400	424
	<b>Total</b>	<b>627</b>	<b>667</b>
Total employees that returned to work after leave	Women	214	233
	Men	397	416
	<b>Total</b>	<b>611</b>	<b>649</b>
Index of those returning to work <sup>(1)</sup>	Women	94%	96%
	Men	99%	98%
	<b>Total</b>	<b>97%</b>	<b>97%</b>

<b>Retention</b>		<b>2017</b>	<b>2016</b>
Total employees who kept their position twelve months after re-joining	Women	223	230
	Men	411	404
	<b>Total</b>	<b>634</b>	<b>634</b>
Attrition Rate <sup>(2)</sup>	Women	96%	95%
	Men	99%	95%
	<b>Total</b>	<b>98%</b>	<b>95%</b>

(1) Number of employees returning to work after maternity or paternity leave/ Number of employees due to return after leave.

(2) Number of employees keeping job 12 months after returning from maternity or paternity leave/ Number of employees returning after leave in reporting period.

The difference between individuals who have taken maternity or paternity leave and those who have returned to work after leave it's because they continue to enjoy such leave or they take a leave for child care.

## Health

#### G4-LA5 Percentage of total workforce represented in formal joint management' worker health and safety committees, set up to help monitor and advise on occupational health and safety programs

Repsol has health and safety committees on a parity basis between company management and workers. The committees are local (workplace) or national, although this depends on the applicable legislation in each country. Some countries have coordination committees for risk prevention activities between Repsol and contractors. 100% of workers in countries where this mechanism is in place are represented on the committees.

The general areas of action of these committees are as follows: information on potential risks, assessment and preventive and mitigation measures of risks; monitoring of collective health; information and research on incidents and improvement actions; health promotion plans at the workplace; training related to risk prevention, among others.

Health and safety committees meet at least once per half year.

<b>Country</b>	<b>Corporate</b>
<b>Bolivia</b>	Committees in Santa Cruz and Mamore. The employer representatives are designated by the UN Director (personnel of Health and Safety areas, and UN managers), while employees themselves elect their own representatives. In Caipipendi, the process is begun to formalize and establish the Committee. The committees are parity-based.
<b>Canada</b>	Monthly meetings on health and safety, with the participation of the specialist from occupational health. Line and worker representatives attend.
<b>Colombia</b>	COPASST (Joint Committee on Health and Safety in the workplace) works with representatives of management and employees. It consists of 50% management representatives and 50% employee representatives. There is also a Cooperation Committee, with representatives of workers and of management, the main responsibilities of which include preventing and dealing with cases of workplace harassment.
<b>Ecuador</b>	Central Committee in Quito and two subcommittees in Block 16 (NPF and SPF). Each committee or subcommittee has representatives of the employer (Repsol) and representatives of the workers. The information managed in the committees must be sent annually to the authorities.
<b>Spain</b>	Parity-based health, safety and environment committees by workplace and/or company. They represent all Group employees in Spain. In the main workplaces, coordination committees of business activities with contractors. Group Health and Safety Committee (under Framework Agreement).
<b>United States</b>	Monthly meetings on safety and the environment, with the inclusion of health topics when deemed appropriate.
<b>Malaysia</b>	There is a central committee and a field committee. Monthly meetings.
<b>Peru</b>	Three committees and four workplace health and safety subcommittees. These committees and subcommittees have a parity-based membership, with an equal number of representatives of management and of employees.
<b>Portugal</b>	Industrial: Occupational Health and Safety Committee which examines health issues Marketing and LPG: There is no formal committee. Periodic technical meetings with the technical managers of workplace health and safety, and technical visits to facilities.
<b>Russia</b>	There is no formal committee, although there are good practices pursuant to Company policy.
<b>Venezuela</b>	Internal committee with three delegates representing workers.

#### G4-LA6 Type and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender

Rate of employee occupational illness			
Region		2017 Total	2016 Total
Africa	Women	0	0
	Men	0	0
	Total	0	0
Asia	Women	0	0
	Men	0	0
	Total	0	0
Europe	Women	0	0
	Men	0	0
	Total	0	0
Latin America	Women	0.2	0
	Men	0	0.2
	Total	0.2	0.2
North America	Women	0	0
	Men	0	0
	Total	0	0
Oceania	Women	0	0
	Men	0	0
	Total	0	0

In 2017 there was one case of occupational illness among Group employees (in Peru).

As a general rule, in countries where Repsol operates, the health information of individuals hired is not accessible for reasons of data protection laws/confidentiality, owing to regulations on protection of health information aimed at preventing illegal data transfers. Controls are in place to ensure that employees have an aptitude certificate for the work they are to perform. Also, in some countries such as Spain, risk prevention issues among contractor workers are managed through the co-ordination of business activities.

#### G4-LA7 Workers with high incidence or high risks of diseases related to their occupation

In some units and positions, there is a remote risk owing to exposure to noise, physical exertion and/or repetitive movements, the prolonged use of screens for viewing data (pvds), or exposure to toxic substances (chemical risks). Preventive measures are applied in all cases.

In some locations there may also be a risk of contracting contagious illnesses, such as dengue fever, malaria, yellow fever, leishamiasis, among others). Repsol provides vaccination programs, fumigation and pest control, continuous monitoring of vectors with these biological studies, among other relevant preventive measures.

As a general rule, the Company performs a general risk assessment as a prerequisite for planning and implementing preventive action. The specific procedure includes an analysis of risks, an assessment of them and corrective/mitigating measures with their corresponding periodic controls. Ergonomic and psycho-social risks are also assessed as a part of monitoring of collective health.

Preventive action is planned with the aim of eliminating or controlling and reducing the hazards identified. Planning also includes the appropriate emergency measures and health surveillance activities (collective and individual, using different protocols depending on the risks), as well as informing and training workers.

Individual monitoring is carried out through both pre-employment and periodic examinations, with application of appropriate protocols for occupational risks and the clinical and employment history of each individual.

The following are some significant actions against specific risks in 2017:

<b>Malaria</b>	Dissemination and operating deployment of procedure in areas of high risk of malaria for company's non-health care staff, including employee family members, to enable them to understand and follow guidelines for preventing or making a diagnosis in suspicious cases, and to carry out tests for confirmation and act in the event of contagion of the illness.
<b>Vaccination</b>	Updating of the internal scheme of health risk assessment by country, with the inclusion of new information and extending the scheme to Legacy Talisman countries. In addition, the international vaccination plan was updated. Dissemination and deployment of the procedure for required vaccination in situations of travel on company business and for expatriates.

A new website for travel has been launched, with significant information on health and safety issues to be considered in travel, especially to risk countries.

In addition to these general actions, the Company undertake various activities, by country:

Country	Corporate
<b>Algeria</b>	Mandatory use of bottled water in drilling rig and building awareness of the malaria risk.
<b>Bolivia</b>	Health and safety training program, including all issues related to occupational, endemic, and workplace health. Instruction on safety for new hires and for all personnel visiting facilities. 24-Hour a day medical care in medical services, with appropriate equipment and ambulances for communities that live in the vicinity of areas of activity.
<b>Canada</b>	Monitoring and control plan of exposure limits in activities Pre-employment and periodic examinations of individuals in positions with risks. Ergonomics programs Alcohol and drug prevention.
<b>Italy</b>	Periodic health and safety training Awareness-raising and training for contractors. Periodic health monitoring.
<b>Malaysia</b>	Risk mitigation through health monitoring, exposure control and follow-up.
<b>Peru</b>	Annual occupational health program with five basic pillars: Workplace health management system; emergency response program; health promotion program; health and safety training program; health monitoring program.
<b>Russia</b>	Introduction to safety, training in first aid and fire fighting. Health promotion campaigns: cardiovascular, colon cancer, prostate cancer, among others, and vaccination.

#### G4-LA8 Health and safety topics covered in formal agreements with trade unions

The Company has instruments in place in countries where it operates to effectively monitor the implementation of policies, rules and procedures on occupational health and safety.

The following agreements have been reached with trade unions on health and safety-related issues:

- **Brazil:** The Repsol Sinopec collective bargaining agreement includes health and safety issues.
- **Spain:** Occupational health and safety committee consisting of three representatives of management and three representatives of each of the trade unions on the negotiating commission of the 7th Framework Agreement of the Repsol Group. The committee analyzes the philosophy and basic outlines of prevention plans, general occupational health and safety policies and promotes measures to improve risk prevention levels of Repsol Group companies in Spain, and it covers 100% of related issues.
- **Peru:** Collective agreements of the La Pampilla Refinery (RELAPASAA).
- **Portugal:** In this country, the following agreements address health and safety-related issues:

– Acordo de empresa 2016-2018 entre a Repsol Polímeros, SA e a Federação de Sindicatos da Indústria, Energia e Transportes - COFESINT e outra – Alteração salarial e outras.

– Acordo coletivo entre a BP Portugal - Comércio de Combustíveis e Lubrificantes, SA e outras empresas petrolíferas e o Sindicato dos Trabalhadores e Técnicos de Serviços - SITESE - Alteração salarial e outras e texto consolidado.

– Acordo coletivo entre a BP Portugal - Comércio de Combustíveis e Lubrificantes, SA e outras empresas petrolíferas e a Federação de Sindicatos da Indústria, Energia e Transportes - COFESINT e outra -Alteração salarial e outras/texto consolidado.

– AE Repsol Polímeros 2009 - FIEQUIMETAL

– AE Repsol Polímeros 2012 - FETESE

## Training and development

### G4-LA9 Average hours of training per year per employee by gender, and by employee category

Average training hours year by person and by gender				
Category	Training hours year	2017 Total	2016 Total	
<b>Executives</b>	Training hours Year	9,232	10,349	
	Person	36	37	
	Women	49	48	
	Men	33	35	
<b>Technical managers</b>	Training hours Year	84,498	74,691	
	Person	37	32	
	Women	42	34	
	Men	35	31	
<b>Technicians</b>	Training hours Year	528,213	588,197	
	Person	46	49	
	Women	44	43	
	Men	47	52	
<b>Administrative staff</b>	Training hours Year	20,367	20,229	
	Person	20	18	
	Women	19	17	
	Men	21	19	
<b>Operatives and subordinates</b>	Training hours Year	314,558	304,578	
	Person	36	35	
	Women	16	13	
	Men	45	44	
<b>Total</b>	Training hours Year	956,868	998,045	
	Person	40	41	
	Women	33	31	
	Men	44	46	

#### G4-LA10 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

Learning in Repsol aims to develop the professional capacities needed for effective performance in pursuit of the company's strategic goals.

Programs carried out in 2017 were based on initiatives designed to acquire knowledge, develop skills and encourage the commitment of everyone in the company to its plans, culture and values throughout their working lives:

Area	Subject
<b>General</b>	<p>Leadership and management Programs aimed at the developing employees in their professional career in the company to improve their leadership skills and develop their important role in achieving a safe and efficient operation.</p> <p>Training for Executives: External training programs selected for each specific type of position, and pilot for internal strategic program for all senior managers to promote the achievement a common vision, sense of team and identification with the strategic plan.</p> <p>Programs of generic skills and languages.</p> <p>Programs available at all times for all Repsol employees.</p> <p>Generic: No. of employees: 10,995 Hours of training: 100,195            Technical: Number of employees: 11,046 Hours of training: 472,003            Management: Number of employees: 13,242 Hours of training: 66,552            Foreign languages Number of employees: 2,576 Hours of training: 90,858</p>
<b>Health, Safety and Environment</b>	<p>Training in the new Incident Management Rules and tools for management of incidents. In addition, ten basic safety rules were disseminated and deployed, including online training program.</p> <p>No. of employees: 21,777 Hours of training: 227,260</p>
<b>Master programs (general; Upstream; Refining and Chemicals) Upstream</b>	<p>Training for recruitment of new university degreeholders. A total of 73 students from 13 different countries completed these programs during the year.</p> <p>Technical training programs for the dissemination of corporate and safety policies tools to ensure permanent refreshing and training of professionals in the business.</p>
<b>Refining and Chemical</b>	<p>Program to reinforce defined safety and environment conduct that can help achieve the goal of zero accidents.</p> <p>Program for the dissemination of Repsol values, targeted at operators of chemical plants and of dual occupational training.</p> <p>Training program with process simulators to improve knowledge and operation of plants and practice situations of emergency.</p>
<b>Marketing and LPG</b>	<p>University expert programs in commercial management.</p> <p>Program for leadership in service quality excellence in service stations In Portugal, program for service station managers and, in Peru, annual refresher course in sales training.</p> <p>In LPG, in safety, training programs in emergencies and first aid in all factories and central office staff.</p>
<b>Training in other areas</b>	<p>Training programs and non-employment internships for disabled persons and other vulnerable groups (non-employees) to promote their employability in the sector.</p> <p>No. of training actions: 8</p> <p>No. of beneficiaries: 80 people.</p> <p>Vocational training programs in Spain.</p> <p>A total of 180 students undertook internships in the Company. Some 130 students from six training phases in dual modality, and 50 students in training modality in workplaces.</p>

## Performance assessment

### G4-LA11 Percentage of employees receiving regular performance and career development reviews, by gender and employee category

#### Performance assessments and social development at Repsol

Category	2017 <sup>(2)</sup>			2017 <sup>(1)</sup>		
	Women	Men	Total	Women	Men	Total
Executives	45	217	262	47	240	287
Technical managers	690	1,650	2,340	672	1,746	2,418
Technicians	2,950	5,656	8,606	3,106	6,129	9,235
Administrative staff	613	301	914	677	302	979
Operatives and subordinates	374	2,719	3,093	340	2,769	3,109
<b>Total</b>	<b>4,672</b>	<b>10,543</b>	<b>15,215</b>	<b>4,842</b>	<b>11,186</b>	<b>16,028</b>

(1) The figures of 2016 have been recalculated considering 2017 reporting criteria.

(2) Information regarding 2017, is the best data available, because a part of the evaluation process has not been completed at the date of disclosure of this report.

## Diversity and equal opportunities

### G4-LA12 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity

#### Number of employees by employee category, age and gender

Job category		2017			2016		
		<30	30-50	>50	<30	30-50	>50
Executive	Female	0	25	21	0	27	20
	Male	0	90	126	0	96	137
	Total	0	115	147	0	123	157
	% Female	0	22	14	0	22	13
Technical manager	Female	1	499	181	1	474	179
	Male	2	1,012	662	5	993	731
	Total	3	1,511	843	6	1,467	910
	% Female	33	33	21	17	32	20
Technician	Female	758	3,254	464	828	3,239	463
	Male	626	4,840	2,034	726	5,020	2,132
	Total	1,384	8,094	2,498	1,554	8,259	2,595
	% Female	55	40	19	53	39	18
Administrative staff	Female	30	509	208	37	538	230
	Male	23	264	91	27	253	103
	Total	53	773	299	64	791	333
	% Female	57	66	70	58	68	69
Operatives and subordinates	Female	369	2,111	383	344	2,056	339
	Male	679	4,063	1,760	630	4,051	1,790
	Total	1,048	6,174	2,143	974	6,107	2,129
	% Female	35	34	18	35	34	16
<b>Total</b>	Female		8,813			8,775	
	Male		16,272			16,694	
	Total		25,085			25,469	
	% Female		35			34	

The percentage of women in this section includes all employees, including those that have working hours of less than 80%.

**G4-LA13 Ratio of basic salary and remuneration of women to men by employee category ,by significant locations of activity****Ratio of basic salary of women to men**

Country	Executive	Technical manager	Technician	Administrative staff	Operatives and subordinates
Bolivia	n.a.	1.03	1.01	n.a.	n.a.
Brazil	n.a.	1.15	1.04	n.a.	n.a.
Canada	1.05	1.09	1.10	n.a.	n.a.
Ecuador	n.a.	n.a.	1.36	n.a.	n.a.
Spain	1.12	1.09	1.10	n.a.	n.a.
United States	n.a.	1.10	1.23	n.a.	n.a.
Indonesia	n.a.	n.a.	1.32	n.a.	n.a.
Malaysia	n.a.	1.14	1.34	n.a.	n.a.
Peru	n.a.	1.23	1.14	n.a.	n.a.
Portugal	n.a.	1.00	1.09	n.a.	n.a.

n.a. No data is published in categories with no information available (administrative assistants and operations staff and subordinates) or for staff that is representative in one of the genders (technical managers in Ecuador and Indonesia, and Executives in the United States and Peru).

The differences compared to the previous year are small, especially in countries with a greater company presence.

The year 2017 was one of wage restraint, and the main cause of variations were the changes in the composition of the workforce. In countries and categories where the workforce is small or with an insignificant presence of one of the genders, the ratio is sharply affected by small variations caused by new hires or departures.

**Human rights****G4-HR2 Total hours of employee training on human right policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of trained employees**

Repsol promotes a culture of respect for human rights among its employees.

Since 2012, an online course has been provided on Human Rights Principles based on the United Nations Guiding Principles on Business and Human Rights. Up to 2017, the course has been taken by a cumulative total of 10,670 employees, which is equivalent to 21,484 hours of training.

Furthermore, the Latin America Legal Services team, comprising 30 people throughout the region, have strengthened their knowledge of the rights of indigenous peoples and provide consultation with a focus on legislative changes and developments in the region on this topic. This training was carried out by experts (Baker & McKenzie) and provided as part of the offsite program conducted in Lima on and November 6 and 7.

In addition, online training is available to employees on the workplace integration of disabled people, called *Superando Barreras* (Overcoming Barriers), which was taken by 217 employees; and prevention of harassment, taken by 50 employees in 2017.

**G4-HR3 Total number of incidents of discrimination and corrective actions taken**

In 2017, three harassment cases were undertaken in Spain pursuant to the protocol for the prevention of harassment of the Repsol Group. All the claims have been dismissed with no harassment perceived. Nevertheless, as a result of one case, other infractions have been detected that gave rise to a disciplinary proceeding for the employee.

Under Spanish legislation, the company is unable to provide any further details on the claims, investigations, handling or resolution of harassment cases for reasons of confidentiality.

In the US, there were three claims of discrimination, which are currently ongoing.

In Canada, a discrimination complaint was filed by a former employee, and it is currently in progress.

**G4-OG9 Operations where indigenous communities are present or affected by activities and where specific engagement strategies are in place**

Repsol is currently conducting seventeen operations in seven countries (Bolivia, Canada, Colombia, Ecuador, Papua New Guinea, Peru and Russia) that are taking place near or are adjacent to the territories of indigenous communities.

All the aforementioned operations have at least one of the following elements: public consultation and consultation plans; reference studies; social impact assessments and action plans; relocation plans, community development plans; claim and complaint procedures; and other documents from community information centers.

100% of significant assets have development programs for local communities based on the needs of the latter and participation plans for stakeholders based on their geographic distribution.

### Social development and performance reviews in repsol

Country	Description	Participation strategy
<b>Bolivia</b>	Margarita: Caipipendi and Huacaya. 5 indigenous communities belonging to the Guaraní people. Caimbeiti: 1 indigenous community belonging to the Guaraní people.	Process of prior consultation for environmental license in new projects and ongoing dialog with communities in active projects. Impacts are assessed and monitored. Continuous execution of action plans and continuous contact with communities through participative dialogue. Monthly meetings with communal and community leaders. Operational level formal grievance mechanisms in place. Social investment projects carried out with communities and in conjunction with municipality of Huacaya and Entre Ríos.
<b>Canada</b>	Greater Edson, North Duvernay & South Duvernay, Chauvin 16 indigenous communities of First Nations and Metis.	Participative dialogue is carried out on a continuous basis with indigenous groups (First Nations and Metis). Formalization of dialog gave rise to five management plans with communities. Inclusion of local development, social investment plans, etc. In addition, there are specific consultation processes in accordance with regulatory requirements for both First Nations and for Metis.
<b>Colombia</b>	RC-12: 18 Wayuu communities; CPE-8: Four Sikuani and Curripaco ethnic communities; PUT-30: One Pijao community	Prior consultation process according to permanent interactive participative model. Impact assessment in human rights with communities within area of direct influence. Establishment of communication and grievance mechanism according to model of requests, complaints, claims and suggestions. Relationship strategies that engage these communities directly, taking into account their cultural particularities: whether they are desert communities, Pie de Monte communities and high plains or rainforest communities. Their representative organizations, leaders and traditional authorities have been identified in order to build a smooth and ongoing relationship. Social investment projects are undertaken with indigenous communities.
<b>Ecuador</b>	Active Block 16 - Waorani community and the Kichwa people in the eight communities of direct influence	There is a permanent dialog of cooperation and management of agreements and commitments, including a current agreement for compensation for the Wait project, and permanent voluntary cooperation via a cooperation agreement pursuant to "Waemo Kewingi" (Good Living) with the Waorani Nationality of Ecuador (NAWE), the representative body of the entire Waorani ethnic group. Projects are governed by Ecuadorian legislation and by the Environmental Management Plan. Plans are being made for community development, emergency plans, environment and an anthropological contingency plan.
<b>Papua New Guinea</b>	9 operating licenses: indigenous communities organized into 137 clans and sub-clans (population of approximately 5,000 people).	Strategy based on continuous participation of communities through dialog plans that identify key stakeholders, frequency of contacts and periodic meetings, etc. In addition, local development projects are carried out, such as specific training courses for farmers and women, and social investment projects.
<b>Peru</b>	Block 57: 8 native communities in area of direct influence.	Operations of activities being carried out are covered during three stages of community relationship (insertion, residence and abandonment) through participation strategies, which are carried out in accordance with the Community Relations Plan under social impact management programs (community monitoring and citizen vigilance; compensations and indemnities; grievance register; promotion of local employment; community communication and relations) and social investment and contribution to local development. Relations with communities are carried out with respect for the culture of each ethnic group (Machiguenga, Kakinte, Ashaninka, Yine) In addition, account has been taken of the socio-economic situation of each community and stakeholder.
<b>Russia</b>	6 indigenous communities of Khanty and Mansy ethnic groups in area of activity.	Strategy is based on studies of identification of stakeholders carried out previously, including indigenous communities in our area of influence. The country's legal requirements for participation have been met.

## Society

### Impacts on local communities

#### G4-SO2 Operations with significant actual and potential negative impacts on local communities

To the extent that the activities are consistent with those of previous years, the impacts are too. No different negative impacts have been reported.

Activity	Potential impacts identified
Downstream Industrial complexes	Smells, noise, gas emissions into the atmosphere, dust, visual impacts and, to a lesser extent, discharges.
Onshore exploration and production	Potential health effects on the people living locally as a result of the inhalation of gases associated with exploration activities Temporary use of land to carry out the exploration work. Hiring of local manpower to carry out the exploration work. Migratory movements toward operations they may cause on use of local services.
Offshore exploration and production	Temporary change in fishing routes to accommodate the presence of boats and other equipment related to oil and gas operations. Temporary change in fishing sector revenue due to the installation of equipment and facilities for offshore exploration purposes. Economic activity related to tourism. Hiring of local manpower to carry out the exploration work.

## Anti-corruption

### G4-SO4 Communication and training practices on anti-corruption practices and procedures

The fight against corruption is one of the principles included in Repsol's Suppliers' Code Ethics and Conduct. This code is provided to all suppliers through the General Conditions for Purchasing and Contracts in the bidding processes and tenders in which they take part, and it is required from suppliers in rating and audit questionnaires. This is why the Company may consider that 100% of Repsol's suppliers are informed of Repsol's position in this regard. The following table shows the number of Repsol's suppliers.

### Employee training

The company has three online training courses on the fight against corruption:

- "Ethics and Conduct Code": includes anti-corruption policies (available to all employees).
- "Crime Prevention Model" (available to all employees).
- "Anti-Money Laundering and Counter Terrorist Financing" (available to employees in Peru).

#### Number of employees receiving anti-corruption training by region

	Executives	Technical managers	Technicians	Clerical staff	Manual workers junior personnel
Africa	2	32	64	1	
Asia	5	109	529	145	
Europe	138	1,091	4,169	441	1,406
Latin America	19	227	1,807	17	7
North America	16	261	581	56	145
Oceania	2	15	15	1	
<b>Total</b>	<b>182</b>	<b>1,735</b>	<b>7,165</b>	<b>661</b>	<b>1,558</b>



**Percentage of employees receiving anti-corruption training by region**

	Executives	Technical managers	Technicians	Clerical staff	Manual workers junior personnel
Africa	50	64	54	25	
Asia	63	68	79	85	
Europe	68	75	64	58	17
Latin America	97	92	53	83	10
North America	80	73	77	75	78
Oceania	67	79	75	33	
<b>Total</b>	<b>70</b>	<b>76</b>	<b>62</b>	<b>64</b>	<b>18</b>

Region	Suppliers informed on anti-corruption policies and procedures by region <sup>(1)</sup>	
Africa	963	100%
Asia	1,703	100%
Europe	22,655	100%
Latin America	28,207	100%
North America	4,666	100%
Oceania	231	100%

(1) The figure includes supplier informed in the year, as well as all those who settle in the supplier history by region.

**Responsible participation in public policy****G4-SO6 Total value of political contributions by country and recipient/beneficiary**

In 2017, Repsol made no political contributions. Accordingly, there were no breaches of the Ethics and Conduct Code with respect to contributions to political parties. Repsol is in favor of lobbying activity being carried out in a transparent manner.

In Europe and in Spain, the Company has taken part in debates and public consultations, with the aim of working with the institutions and society in the development of different legislative initiatives. Accordingly, the Company reports such activity in all areas where formal registration is required, and pursuant to the requests made by competent authorities, where such information is public and accessible.

Specifically, such activity is registered in the following jurisdictions: the European Union, the United States at federal and state level (in the states of Pennsylvania and Texas) and in Canada at federal and provincial level (Alberta and British Columbia).

Links to official lobby registration pages and further information at [www.repsol.com](http://www.repsol.com).

**Compliance****G4-EN29 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations**

In 2017 and 2016, there were no significant (for Repsol) fines or sanctions levied as a result of lawsuits or administrative proceedings ending with a final decision.

**G4-SO7 Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes****litigation<sup>(\*)</sup> due to allegations of anti-competitive practices (number of cases initiated)<sup>(\*)</sup>**

	2017	2016
	1	0

(\*) Number from lawsuits or administrative procedures begun in the year that are significant for the Repsol Group.

In order to foster growing awareness and stay permanently abreast of anti-trust legislative developments, the company continued to provide subject-specific training throughout 2017.

# Appendix IV. GRI-G4 index

## Part I. General standard disclosures

GRI	Description of the indicator	Reference in the Management Report, Reports or online	Verification
<b>Strategy and Analysis</b>			
G4-1	Statement about the relevance of sustainability to the organization and its strategy for addressing sustainability	Message from the CEO	√
G4-2	Key effects, risks and opportunities	Section 1. Summary of main events Section 2.4. Corporate Governance Section 6.1. Climate change Appendix II: Risks	√
<b>Organization profile</b>			
G4-3	Name of the organization	2017 Consolidated Financial Statements - Note 1 General Information	√
G4-4	Primary brands and products and services	Section 2.1 Business model Section 5.1 Upstream Section 5.2 Downstream	√
G4-5	Location of organization's headquarters	2017 Consolidated Financial Statements - Note 1 General Information	√
G4-6	Number of countries where the organization operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report	Section 2.2 Repsol around the world Section 5. Performance by business areas	√
G4-7	Nature of ownership and legal form	2017 Consolidated Financial Statements - Note 1 General Information 2017 Consolidated Financial Statements - Note 6 Intangible Assets	√
G4-8	Markets served (including geographical breakdown, sectors served and types of customers/ and beneficiaries)	Section 2.2. Repsol around the world Section 5.1. Upstream Section 5.2. Downstream	√
G4-9	Scale of the organization	Section 2.1. Business model Section 2.2. Repsol around the world Section 2.3. Corporate Structure	√
G4-10	Workforce by employment contract, employment types, region and gender	Section 6. Sustainability - 6.2. People - Our human team Appendix III: GRI Indicators - PART I Company profile	√ (1)
G4-11	Percentage of total employees covered by collective agreements	Appendix III: GRI Indicators - PART I Company profile	√
G4-12	Description of the organization's supply chain	Section 6.8. Supply chain	√ (2)
G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership or its supply chain	2017 Consolidated Financial Statements - Note 1 General Information- 1.4. Main changes in consolidation perimeter	√
G4-14	Description of the how the precautionary principle is addressed by the organization	Section 2.4. Corporate Governance Section 6.1 Climate change Section 6.3 Safe operation Section 6.4 Environment Appendix II: Risks	√
G4-15	List of externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes	<a href="https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshtml">https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshtml</a>	√
G4-16	List of national and international advocacy organizations and memberships of associations to which the organization belongs	<a href="https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshtml">https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshtml</a>	√
<b>Identified material aspects and boundary</b>			
G4-17	List of entities included in the organization's consolidated financial statements and equivalent documents	Section 2.3. Organizational structure 2017 Consolidated Financial Statements - Appendix I: Main companies comprising the Repsol Group	√
G4-18	Process for defining the report content	Appendix III: GRI Indicators - PART I Materiality and stakeholders	√
G4-19	Material aspects identified in the process for defining report content	Appendix III: GRI Indicators - PART I Materiality and stakeholders	√
G4-20	Scope of the report	About this report	√
G4-21	Limits in terms of Aspect Boundaries	About this report	√
G4-22	Effects of any restatement of information provided in previous reports and the reasons for such restatements	There were no significant restatements in the period. The scope used for preparation of supply chain information published in 2016 has been revised	√
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	About this report Section 6.8. Supply chain	√
<b>Stakeholder engagement</b>			
G4-24	Stakeholders groups engaged by the organization	Section 2.4. Corporate Governance Appendix III: GRI Indicators - PART I - Materiality and stakeholders	√
G4-25	Criteria for identification and selection of stakeholders	<a href="https://repsol.energy/es/sostenibilidad/nuestro-modelo/index.cshtml">https://repsol.energy/es/sostenibilidad/nuestro-modelo/index.cshtml</a>	√
G4-26	Organization's approach to stakeholder engagement	Appendix III: GRI Indicators - PART I - Materiality and stakeholders	√

GRI	Description of the indicator	Reference in the Management Report, Reports or online	Verification
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Appendix III: GRI Indicators - Materiality and stakeholders	√
<b>Report profile</b>			
G4-28	Reporting period for information provided	2017	√
G4-29	Date of most recent previous report	For 2016, which was published in the first half of 2017	√
G4-30	Reporting cycle	Yearly	√
G4-31	Contact point for questions regarding the report or its contents	Questions, queries, suggestions or any other questions related to this report can be sent to the Shareholders' Office, by telephone at +34 900 100 100 or via email, to infoaccionistas@repsol.com or to repsolteescucha@repsol.com	√
G4-32	"In accordance" option chosen by the organization	About this report	√
G4-33	Organization's policy and current practice with regard to seeking external assurance for the report	See Deloitte letter of verification at Repsol.com	√
<b>Governance</b>			
G4-34	Governance structure of the organization	Section 2.4 Corporate Governance Appendix VI: 2017 Annual Corporate Governance Report - A2. Give details on the direct and indirect holders of significant interests excluding directors Appendix VI: 2017 Annual Corporate Governance Report - C1.2 Members of the Board of Directors Appendix VI: 2017 Annual Corporate Governance Report - C1.16 Members of top management Appendix VI: 2017 Annual Corporate Governance Report - C2. Committees of the Board	√
G4-35	Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	Section 2.4. Corporate Governance Section 6.1 Climate change	√
G4-36	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics	Appendix VI: 2017 Annual Corporate Governance Report - C2 Committees of the Board - Audit and Control Committee Appendix VI: 2017 Annual Corporate Governance Report - C2 Committees of the Board - Sustainability Committee Section 2.4 Corporate Governance	√
G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics	Section 2.4 Corporate Governance	√
G4-38	Composition of the highest governance body and its committees	Appendix VI: 2017 Annual Corporate Governance Report - C1.2 Members of the Board of Directors Appendix VI: 2017 Annual Corporate Governance Report - C2. Committees of the Board	√
G4-39	Indicate whether the Chair of the highest governance body is also an executive officer	Appendix III: GRI Indicators - PART I Company profile	√
G4-40	Nomination and selection processes for the highest governance body and its committees	Directors selection policy: <a href="https://repsol.energy/es/accionistas-inversores/gobierno-corporativo/comisiones-del-consejo-de-administracion/comision-de-nombramientos/index.cshtrmlhttps://www.repsol.energy/imagenes/global/es/politica_de_seleccion_consejeros_tcm13-66877.pdf">https://repsol.energy/es/accionistas-inversores/gobierno-corporativo/comisiones-del-consejo-de-administracion/comision-de-nombramientos/index.cshtrmlhttps://www.repsol.energy/imagenes/global/es/politica_de_seleccion_consejeros_tcm13-66877.pdf</a> Anexo VI: 2017 Annual Corporate Governance Report - C1.19. Procedures for selection, appointment, re-election, assessment and removal of directors.	√
G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided and managed	Appendix VI: 2017 Annual Corporate Governance Report - D.1 Competent body and procedure for approving related party and inter-company transactions Appendix VI: 2017 Annual Corporate Governance Report - D.6. Mechanisms to detect, define and resolve possible conflicts of interest between the company and/or its group, and its directors, executives or controlling shareholders	√
G4-42	Highest governance body's and senior executives' roles in the development, approval and updating of the organization's purpose, value or mission statements, strategies, policies and goals related to economic, environmental and social impacts of the organization	Regulations of the Board of Directors - Article 5 <a href="https://www.repsol.energy/imagenes/global/es/reglamento_consejo_administracion_27072016_tcm13-13029.pdf">https://www.repsol.energy/imagenes/global/es/reglamento_consejo_administracion_27072016_tcm13-13029.pdf</a>	√
G4-43	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics	Section 2.4. Corporate Governance	√
G4-44	Processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics and actions taken in response	Bylaws of Repsol S.A.- Article 45 quarter. Assessment of the Board Regulations of the Board of Directors - Article 11 <a href="https://www.repsol.energy/imagenes/global/es/reglamento_consejo_administracion_27072016_tcm13-13029.pdf">https://www.repsol.energy/imagenes/global/es/reglamento_consejo_administracion_27072016_tcm13-13029.pdf</a> Appendix VI: 2017 Annual Corporate Governance Report - C1.20 Describe the process of assessment and the areas assessed by the Board of Directors Section 2.4. Corporate Governance	√

GRI	Description of the indicator	Reference in the Management Report, Reports or online	Verification
G4-45	Highest governance body's role in the identification and management of the economic, environmental and social impacts, risks and opportunities and in the implementation of due diligence processes	Appendix VI: 2017 Annual Corporate Governance Report - E. Risk control and management systems Appendix VI: 2017 Annual Corporate Governance Report - F. Internal risks management and control systems over financial reporting (ICFR)	√
G4-46	Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics	Appendix VI: 2017 Annual Corporate Governance Report - E. Risk control and management systems Appendix VI: 2017 Annual Corporate Governance Report - F. Internal risks management and control systems over financial reporting (ICFR)	√
G4-47	Frequency of the highest governance body's review of economic, environmental and social impacts, risks and opportunities	Appendix VI: 2017 Annual Corporate Governance Report - E. Risk control and management systems Appendix VI: 2017 Annual Corporate Governance Report - F. Internal risks management and control systems over financial reporting (ICFR)	√
G4-48	Highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	Appendix VI: 2017 Annual Corporate Governance Report - C2 Committees of the Board - Sustainability Committee	√
G4-49	Process for communicating critical concerns to the highest governance body	Section 2.4. Corporate Governance	√
G4-50	Nature and total number of critical concerns that were communicated to the highest governance body and the mechanisms used to address and resolve them	Section 2.4. Corporate Governance	√
G4-51	Remuneration policies for the highest governance body and senior executives in relation to the organization's performance	Appendix VI: 2017 Annual Corporate Governance Report - C2 Committees of the Board - Sustainability Committee Compensation Committee 2017 Annual report on the remuneration of Directors Remuneration Policy of the Directors of Repsol, S.A. - <a href="https://www.repsol.energy/imagenes/global/en/Pol%C3%ADtica_de_Remuneraciones_EN_VF_tcm14-64095.pdf">https://www.repsol.energy/imagenes/global/en/Pol%C3%ADtica_de_Remuneraciones_EN_VF_tcm14-64095.pdf</a>	√
G4-52	Process for determining remuneration	2017 Consolidated Financial Statements - Note 27. Remuneration of Board members and executive officers Compensation Committee 2017 Annual report on the remuneration of Directors Appendix VI: 2017 Annual Corporate Governance Report - C2 Committees of the Board - Sustainability Committee	√
G4-53	Mechanisms for seeking and taking into account the opinion of stakeholders regarding remuneration	Appendix III: GRI Indicators - PART I Company profile	√
G4-54	Ratio for the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees in the same country	Appendix III: GRI Indicators - PART I Company profile	√
G4-55	Ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees in the same country	Appendix III: GRI Indicators - PART I Company profile	√
<b>Ethics and Integrity</b>			
G4-56	Organization's values, principles, standards and norms of behavior	Code of ethics and conduct. Section 6.7. Ethics and Compliance About this report	√
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity	Repsol Ethics & Compliance Channel. Section 6.7. Ethics and Compliance	√
G4-58	Internal and external mechanisms for reporting concerns about unethical and lawful conduct, and matters related to organizational integrity	Repsol Ethics & Compliance Channel. Section 6.7. Ethics and Compliance	√

## Part II. Specific standard disclosures

GRI	Description of the indicator	Reference in the Management Report, Reports or online	Verification
<b>1. Economic</b>			
<b>1.1. Economic Performance</b>			
G4-EC1	Direct economic value generated and distributed	Section 6.6. Responsible Tax Policy 2017 Consolidated report of payments to public administrations relating to hydrocarbon exploration and production operations Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance	√ (3)
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Section 6.1. Climate change	√
G4-EC3	Coverage of the organization's defined benefit plan obligations	2017 Consolidated Financial Statements - Note 28 Personnel obligations	√
G4-EC4	Financial assistance received from government	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance	√
<b>1.2. Market Presence</b>			
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance	√
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance	√
<b>1.3. Indirect Economic Impacts</b>			
G4-EC7	Development and impact of infrastructure investments and services supported	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance	√
G4-EC8	Significant indirect economic impacts, including the extent of impacts	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance	√
<b>1.4. Procurement Practices</b>			
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	Section 6.8. Supply chain	√ (2)
G4-OG1	Volume and type of estimated proven reserves and production	Section 1. Summary of main events - Main figures and indicators Section 5.1 Upstream 2017 Hydrocarbon exploration and production activities report	√
<b>2. Environmental</b>			
<b>2.1. Materials</b>			
G4-EN1	Materials used by weight or volume	Section 5. Performance by business areas	√ (4)
G4-EN2	Percentage of materials used that are recycled input materials	Not material	Not verified
<b>2.2. Energy</b>			
G4-EN3	Energy consumption within the organization	Section 6.1. Climate Change	√ (5)
G4-EN4	Energy consumption outside of the organization	Section 6.1. Climate Change	√
G4-EN5	Energy intensity	Section 6.1. Climate Change	√ (5)
G4-OC2	Total amount invested in renewable energy	Section 6.1. Climate Change	√
G4-OC3	Total amount of renewable energy generated by source	Section 6.1. Climate Change	√ (6)
G4-EN6	Reduction of energy consumption	Section 6.1. Climate Change	√ (5)
G4-EN7	Reductions in energy requirements of products and services	Section 6.1. Climate Change	√
<b>2.3. Water</b>			
G4-EN8	Total water withdrawal by source.	Section 6.4. Environment	√
G4-EN9	Water sources significantly affected by withdrawal of water	Section 6.4. Environment	√ (8)
G4-EN10	Percentage and total volume of water recycled and reused	Section 6.4. Environment	√

2.4. Biodiversity			
GRI	Description of the indicator	Reference in the Management Report, Reports or online	Verification
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Biodiversity and ecosystem services	√ (9)
G4-EN12	Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Biodiversity and ecosystem services	√ (10)
G4-EN13	Habitats protected or restored	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Biodiversity and ecosystem services	√ (7)
G4-EN14	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Biodiversity and ecosystem services	√
G4-OG4	Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Biodiversity and ecosystem services	√
2.5. Emissions			
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)	Section 6.1. Climate Change	√ (5)
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (scope 2)	Section 6.1. Climate Change	√ (5)
G4-EN17	Other indirect greenhouse gas (GHG) emissions (scope 3)	Section 6.1. Climate Change	√ (11)
G4-EN18	Greenhouse gas (GHG) emissions intensity	Section 6.1. Climate Change	√
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Section 6.1. Climate Change	√ (5)
G4-EN20	Emissions of ozone-depleting substances (ODS)	Not material	Not verified
G4-EN21	NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance - Non-GHG emissions	√
2.6. Effluents and Waste			
G4-EN22	Total water discharges by quality and destination.	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environment performance - Water management	√
G4-EN23	Total weight of waste managed by type and disposal method.	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance - Waste management	√
G4-EN24	Total number and volume of significant spills.	Section 6.3. - Safe Operation	√
G4-OG5	Volume and disposal of formation or produced water	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance - Water management	√
G4-OG6	Volume of flared and vented hydrocarbon	Section 6.1. Climate Change	√
G4-OG7	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance - Waste management	√
G4-EN25	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III and VIII, and percentage of transported waste shipped internationally	Not material	Not verified
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Biodiversity and ecosystem services	(7)
2.7. Products and Services			
G4-EN27	Extent of mitigation of environmental impacts of products and services	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Mitigation of the environmental impact of products and services	√
G4-OG8	Benzene, lead and sulfur content in fuels	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Energy efficient and climate change - Non-GHG emissions	√ (7)
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	Not material	Not verified
2.8. Compliance			
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Society - Regulatory compliance	√
2.9. Transport			

<b>G4-EN30</b>	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	Major environmental impacts associated with the transportation and distribution of our products are listed in section 6.1. Climate Change in Scope 3 indicators	√ (11)
<b>GRI</b>	<b>Description of the indicator</b>	<b>Reference in the Management Report, Reports or online</b>	<b>Verification</b>
	<b>2.10. Overall</b>		
<b>G4-EN31</b>	Total environmental protection expenditures and investments by type	2017 Consolidated Financial Statements - Note 29 Environmental information	√
	<b>2.11. Supplier Environmental Assessment</b>		
<b>G4-EN32</b>	Percentage of new suppliers that were screened using environmental criteria	Section 6.8 Supply chain	√
<b>G4-EN33</b>	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Economic performance - Supply chain management and its impact where the company performs its operations	√
	<b>2.12. Environmental Grievance Mechanisms</b>		
<b>G4-EN34</b>	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Section 6.2.2 Respect for Human Rights and the relationship with local communities	√ (12)
	<b>2.13. Biofuels</b>		
<b>G4-OG14</b>	Volume of biofuels produced and purchased meeting sustainability criteria	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Environmental performance - Energy efficient and climate change	√ (7)
	<b>3. Social</b>		
	<b>3.1. Labor Practices and Decent Work</b>		
	<b>3.1.1. Employment</b>		
<b>G4-LA1</b>	Total number and rates of new employee hires and employee turnover by age group, gender and region	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Labor Practices and Decent Work	√
<b>G4-LA2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Labor Practices and Decent Work	√
<b>G4-LA3</b>	Return to work and retention rates after parental leave, by gender	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Labor Practices and Decent Work	√
	<b>3.1.2. Labor/Management Relations</b>		
<b>G4-LA4</b>	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	Repsol adheres to the periods of minimum notice established by law in the countries in which Repsol operates, and also those laid down in collective agreements or policies, where applicable.	√
	<b>3.1.3. Occupational Health and Safety</b>		
<b>G4-LA5</b>	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Health	√
<b>G4-LA6</b>	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Section 6.3. Safe Operation Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Health	√
<b>G4-LA7</b>	Workers with high incidence or high risk of diseases related to their occupation	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Health	√
<b>G4-LA8</b>	Health and safety topics covered in formal agreements with trade unions	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Health	√
	<b>3.1.4. Training and Education</b>		
<b>G4-LA9</b>	Average hours of training per year per employee by gender, and by employee category	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Training and development	√
<b>G4-LA10</b>	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Training and development	√
<b>G4-LA11</b>	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Performance appraisals	√

3.1.5. Diversity and equal opportunities			
<b>G4-LA12</b>	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Section 2.4. Corporate Governance Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Diversity and equal opportunities	√
<b>GRI</b>	<b>Description of the indicator</b>	<b>Reference in the Management Report, Reports or online</b>	<b>Verification</b>
3.1.6. Equal Remuneration for Women and Men			
<b>G4-LA13</b>	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Diversity and equal opportunities	√ (13)
3.1.7. Supplier Assessment for Labor Practices			
<b>G4-LA14</b>	Percentage of new suppliers that were screened using labor practices criteria	Section 6.8. Supply chain	√
<b>G4-LA15</b>	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Contribution to economic development where the company performs its operations	√
3.1.8. Labor Practices Grievance Mechanisms			
<b>G4-LA16</b>	Number of grievances about labor practices filed, addressed and resolved through formal grievance mechanisms	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√ (12)
3.2. Human Rights			
3.2.1. Investment			
<b>G4-HR1</b>	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Section 6.8. Supply chain	√
<b>G4-HR2</b>	Hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Human Rights	√
3.2.2. Non-discrimination			
<b>G4-HR3</b>	Total number of incidents of discrimination and corrective actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Human Rights	√ (14)
3.2.3. Freedom of Association and Collective Bargaining			
<b>G4-HR4</b>	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	Section 6.8. Supply chain	√
3.2.4. Child Labor			
<b>G4-HR5</b>	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	Section 6.8. Supply chain	√
3.2.5. Forced or Compulsory Labor			
<b>G4-HR6</b>	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	Section 6.8. Supply chain	√
3.2.6. Security Practices			
<b>G4-HR7</b>	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√
3.2.7. Indigenous Rights			
<b>G4-HR8</b>	Total number of incidents of violations involving rights of indigenous peoples and actions taken	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√
<b>G4-OG9</b>	Operations where indigenous communities are present or affected by activities and where specific engagement strategies are in place	Section 2.2 Repsol around the world Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Human Rights	√



3.2.8. Assessment			
GRI	Description of the indicator	Reference in the Management Report, Reports or online	Verification
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√
3.2.9. Supplier Human Rights Assessment			
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	Section 6.8. Supply chain	√
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Contribution to economic development where the company performs its operations	√
3.2.10. Human Rights Grievance Mechanisms			
G4-HR12	Number of grievances about human rights practices filed, addressed, and resolved through formal grievance mechanisms	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√
3.3. Society			
3.3.1. Local Communities			
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√
G4-SO2	Operations with significant actual or potential negative impacts on local communities	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Society - Impact on local communities	√
G4-OC10	Number and description of significant disputes with local communities and indigenous peoples	Section 5.1. Upstream	√
G4-OC11	Number of sites that have been decommissioned and sites that are in the process of being decommissioned	Section 5.1. Upstream Section 5.2. Downstream	√
3.3.2. Anti-corruption			
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Section 6.7. Ethics and compliance	√
G4-SO4	Communication and training on anti-corruption policies and procedures	Section 6.7. Ethics and compliance Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Society - Fight against corruption	√
G4-SO5	Confirmed incidents of corruption and actions taken	Section 6.7. Ethics and compliance	√ (15)
3.3.3. Public Policy			
G4-SO6	Total value of political contributions by country and recipient/beneficiary	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Society - Responsible participation in public policy	√ (15)
3.3.4. Anti-competitive Behaviour			
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Social performance - Society - Regulatory compliance	√
3.3.5. Compliance			
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	The information on legal and tax contingencies can be found in Notes 16 and 23 of the 2017 Consolidated Financial Statements	√
3.3.6. Supplier Assessment for Impacts on Society			
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	Section 6.8. Supply chain	√
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC STANDARD DISCLOSURES - Contribution to economic development where the company performs its operations	√
3.3.7. Grievance Mechanisms for Impacts on Society			
G4-SO11	Number of grievances about impacts on society filed, addressed and resolved through formal grievance mechanisms	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√

3.3.8. Involuntary Resettlement			
<b>G4-OG12</b>	Operations where involuntary resettlement took place, the number of households resettled in each and how their livelihoods were affected in the process	Section 6.2.2 Respect for Human Rights and the Relationship with Local Communities	√
<b>GRI</b>	<b>Referencia en el informe RC</b>	<b>Referencia en Informes o web</b>	<b>Verificación</b>
3.3.9. Asset Integrity and Process Safety			
<b>G4-OG13</b>	Number of process safety events, by business activity	Section 6.3. Safe Operation	√
3.4. Product Responsibility			
3.4.1. Customer Health and Safety			
<b>G4-PR1</b>	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	Not material	Not verified
<b>G4-PR2</b>	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	Not material	Not verified
3.4.2. Product and Service Labeling			
<b>G4-PR3</b>	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	Not material	Not verified
<b>G4-PR4</b>	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	Not material	Not verified
<b>G4-PR5</b>	Results of surveys measuring customer satisfaction	Not material	Not verified
3.4.3. Marketing Communications			
<b>G4-PR6</b>	Sale of banned or disputed products	Not material	Not verified
<b>G4-PR7</b>	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship, by type of outcomes	Not material	Not verified
3.4.4. Customer privacy			
<b>G4-PR8</b>	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Not material	Not verified
3.4.5. Compliance			
<b>G4-PR9</b>	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Not material	Not verified

√ Content reviewed according to the scope of the information described in the Deloitte's Independent Assurance Report.

- (1) Information on contractors and subcontractors is not provided.
- (2) Information about supply chain only makes reference to the significant purchases carried out by the contracting and purchasing department. It excludes purchases of crude oil, gas and materials.
- (3) The referenced report about payments to Public Administrations by countries has not been audited, only the global evolution of payments
- (4) Processed crude oil, which is the main material, is itemized.
- (5) The overall reasonableness of the data has been verified. The data are subject to modification once the audits of the emissions of each facility and asset under the ISO 14064 standard are carried out.
- (6) It relates to the installed power.
- (7) The information is qualitative.
- (8) Soley information on water withdrawn by water sources is provided.
- (9) Information on the biodiversity value is not provided.
- (10) Information on the nature of the impacts is not provided.
- (11) Scope 3 emissions do not include E&P transport and distribution categories nor investments on operated and equity share categories.
- (12) Breakdown by nature is not reported.
- (13) Information on remuneration by category and gender is not provided.
- (14) Relevant discrimination incidents involving employees are reported.
- (15) Labor sanctions and warnings due to breaches of the Code of Ethics and Conduct are reported.

# Appendix V.

## Table of conversions and abbreviations

			Oil				Gas		Electricity
			Liters	Barrels	Cubic meters	toe	Cubic meters	Cubic feet	kWh
Oil	1 barrel <sup>(1)</sup>	bbl	158.99	1	0.16	0.14	162.60	5,615	1.7x10 <sup>6</sup>
	1 cubic meter <sup>(1)</sup>	m <sup>3</sup>	1,000	6.29	1	0.86	1,033	36,481	10,691.5
	1 ton of oil equivalent <sup>(1)</sup>	tep	1,160.49	7.30	1.16	1	1,187	41,911	12,407.4
Gas	1 cubic meter	m <sup>3</sup>	0.98	0.01	0.001	0.001	1	35.32	10.35
	1,000 cubic feet=1.04x10 <sup>6</sup> Btu	ft <sup>3</sup>	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

			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	22.046	1

			Cubic feet	Barrel	Liter	Cubic meter
Volume	Cubic foot	ft <sup>3</sup>	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 <sup>3</sup>	35.3147	6.2898	1,000	1

(1) Reference average: 32.35° API and relative density 0.8636.

Term	Description	Term	Description	Term	Description
<b>bbl / bbl/d</b>	Barrel/ Barrel per day	<b>Mb</b>	Thousand barrels of oil	<b>Mm<sup>3</sup>/d</b>	Million cubic meters per day
<b>bcf</b>	Bcf Billion cubic feet	<b>kbb/d</b>	Thousand barrels per day	<b>Mscf/d</b>	Million standard cubic feet per day
<b>Bm<sup>3</sup></b>	Billion cubic meters	<b>Mboe</b>	Thousand barrels of oil equivalent	<b>kscf/d</b>	Thousand standard cubic feet per day
<b>Boe</b>	Barrel of oil equivalent	<b>Mboe/d</b>	Thousand barrels of oil equivalent per day	<b>MMW</b>	Million watts
<b>Btu/MBtu</b>	British thermal unit/ Btu/millions of Btu	<b>km<sup>2</sup></b>	Square kilometer	<b>MWh</b>	Megawatt hour
<b>LPG</b>	Liquefied petroleum gas	<b>Kt/Mt</b>	Thousand tons/Million tons	<b>Tcf</b>	Trillion cubic feet
<b>LNG</b>	Liquefied natural gas	<b>MMb</b>	Million barrels	<b>toe</b>	Tons of oil equivalent
<b>GWh</b>	Gigawatts per hour	<b>MMboe</b>	Million barrels of oil equivalent	<b>USD / Dollar / \$</b>	US dollar

# Appendix VI. Annual corporate governance report

The Annual Corporate Governance Report for 2017 is included as Appendix to this document, and as an integral part of the whole document, as required under Article 538 to the Spanish Companies Act (“Ley de Sociedades de Capital”).

## Independent Assurance Report on the Sustainability information of the 2017 Consolidated Management Report of Repsol S.A. and Subsidiaries

To the shareholders of Repsol S.A:

### Scope of our work

We have performed the review, with a limited assurance, of the sustainability information of the 2017 Consolidated Management Report (MR) of Repsol S.A. and Subsidiaries (Repsol Group), the scope of which is defined in the chapter "About this report". Our work consisted of the review of:

- The reliability and adherence of the contents of the MR to the GRI Sustainability Reporting Guidelines version 4 (hereinafter referred to as G4 Guidelines), including the *Oil&Gas Sector Supplement*.
- The information included in the MR relating to the application of the principles of inclusivity, materiality and responsiveness set out in the AccountAbility's AA1000 *Accountability Principles Standard* (AA1000APS).

### Procedures performed

We conducted a limited assurance engagement in accordance with International Standard on Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000) issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) and with Guidelines for engagements relating to the review of Corporate Responsibility Reports issued by the Spanish Institute of Certified Public Accountants to achieve limited assurance. Additionally, we have applied AccountAbility's 1000 Assurance Standard (AA1000AS) to provide moderate assurance on the application of the principles established in standard AA1000APS and on the sustainability performance indicators (type 2 moderate assurance).

Our work consisted of making enquiries to Management and certain business units and corporate units of Repsol and subsidiaries involved in the preparation of the MR and in carrying out the following analytical procedures and sample-based review tests:

- Meetings with Repsol personnel to ascertain the principles, systems and sustainability management approaches applied.
- Review of the 2017 meetings minutes of the Sustainability Committee.
- Review of the steps taken in relation to the identification and consideration of the stakeholders throughout the year and of the stakeholders' participation processes through the analysis of the available internal information and third-party reports.
- Analysis of the coverage, materiality and completeness of the information included in the MR on the basis of the understanding of Repsol Group of its stakeholders' requirements in relation to the relevant issues identified by the organization and described in the 'Appendix III. GRI Indicators', section "Materiality and Stakeholders" of the MR.
- Review of the information related to the management approaches applied to sustainability and verification of the existence and scope of the policies, systems and sustainability procedures.
- Analysis of the adherence of the contents of the MR to those recommended in the G4 Guidelines, comprehensive option, and verification that the contents included agree with those recommended by the GRI Guidelines.
- Review on a sample basis, of the quantitative and qualitative information relating to the GRI G4 indicators included in the MR and of the adequate compilation thereof based on the data furnished by the information sources of Repsol Group.

### Responsibilities of Repsol Group and of Deloitte

- The preparation and contents of the MR are the responsibility of the Board of Directors of Repsol S.A., who are also responsible for defining, adapting and maintaining the management and internal control systems from which the information is obtained.
- Our responsibility is to issue a limited assurance report based on the procedures applied in our review.
- Since a limited assurance is substantially less in scope than a reasonable assurance engagement, we do not provide reasonable assurance on the MR.
- This report has been prepared in the interest of Repsol in accordance with the terms and conditions of our Engagement Letter.
- We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.
- Deloitte maintains, in accordance with the International Standard on Quality Control 1 (ISQC1), a global system of quality control including policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.
- Our team consisted of professionals with assurance on Corporate Responsibility Reports qualifications and, specifically, on economic, social and environmental performance and stakeholders' participation processes.

## Conclusions

"Appendix IV" of the MR, GRI- G4 Index, provides details of the contents reviewed and of the limitations in the scope of our work, and identifies any contents that do not cover all the areas recommended by the GRI. Based on the procedures performed and evidence obtained, except for the issues identified in the GRI-G4 Index, nothing has come to our attention that causes us to believe that:

- The Sustainability information included in the MR has not been prepared in accordance with the guidelines of the GRI G4, including the reliability and adequacy of the contents, in all material aspects.
- Repsol Group has not applied the principles of inclusivity, materiality and responsiveness as described in the chapter "*About this Report*", in accordance with standard AA1000 APS:
  - Inclusivity: Repsol Group has carried out a participation process for stakeholders that facilitates their involvement in the development of a responsible approach to sustainability management.
  - Materiality: the process of determining materiality requires an understanding of the important or relevant issues for Repsol Group and its stakeholders.
  - Responsiveness: Repsol Group responds with specific actions and commitments related to the material issues identified previously.

## Observations and recommendations

In addition, we presented to the Sustainability Direction of the Repsol Group our recommendations related to the areas of improvement in sustainability management and information and, specifically, to the application of the principles of inclusivity, materiality and responsiveness. Hereunder is a summary of the most significant ones, which do not modify the conclusions presented in this report:

### Inclusivity and materiality

As stated in the section "*Materiality and Stakeholders*", included in the "Appendix III" of the MR, Repsol Group employs a materiality study based on thorough analyses and consultations to its stakeholders. In order to improve the representativeness of the stakeholder groups consulted, as well as their inclusivity, it would be advisable to adapt the sample used to the different business units of Repsol Group, and to broaden its scope to all the different geographies in which Repsol Group has a significant presence.

### Responsiveness

In 2017, Repsol Group approved the Global Sustainability Plan, which includes objectives for 2020 based on the six pillars of Repsol's Sustainability Model: ethics and transparency, climate change, people, safe operation, resource and impact management, and innovation and technology. To facilitate the monitoring and evaluation of the Plan, it would be advisable to continue working on a global scorecard that provides overall control and consolidates the progress updates of the local sustainability plans, including both the level of attainment of each objective and its impact.

Additionally, during 2017, Repsol has worked on aligning the climate change related information to the recommendations provided by the *Task Force on Climate-related Financial Disclosures* (TCFD). Similarly, Repsol is working on the development of climate scenario analyses that are compatible with the Sustainable Development scenario presented by the International Energy Agency. The application of indicators and metrics that facilitate the monitoring of the adherence of each of the business units to Repsol's climate change strategy, not only from an energy efficiency perspective, will enable Repsol to focus investment decisions on new technologies and solutions that enable an efficient transition to low carbon business models.

DELOITTE, S.L.



Helena Redondo

27 de febrero de 2018



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