



REPSOL Group

---

**2018**

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:

In its commitment to transparency and efficiency, Repsol has prepared a **Management Report** consisting of financial and non-financial information, the latter of which complies with the provisions of current regulations<sup>1</sup>, based on the recommendations contained in the “*International Integrated Reporting Framework*” of the International Integrated Reporting Council (IIRC) and the “*International Integrated Reporting Council (IIRC)*”, the “*Guidelines for Preparation of the Listed Company Management Reports*” of the Spanish National Securities Market Commission. This “integrated” approach positions this report as a reference point for the Group’s financial and non-financial information.

This **Management Report** faithfully presents Repsol Group’s business, results and financial situation<sup>2</sup>, together with a description of the main risks and uncertainties it faces. The Statement of Non-Financial Information also presents the impact of its business on environmental and social issues, as well as on workforce, on human rights and the fight against corruption and bribery, including any measures that may have been adopted to support the principle of equality and opportunity among men and women, non-discrimination and inclusion of the disabled and universal accessibility.

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 5 “*Segment reporting*” 5” in the 2018 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 information relating to the **Sustainability indicators** is presented in accordance with the Global Reporting Initiative (GRI), “Standard” using the “comprehensive” option. Appendix IV “GRI Index” contains a list of the GRI indicators, with references to the indicators that are included throughout the report, in other public reports or reported in Appendix III “GRI Indicators.” Together with the additional information required by Law 11/2018, these indicators make up the Statement of Non-Financial Information, the content of which is identified in Appendix V “Statement of Non-Financial Information”. 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 risks and uncertainties, meaning that the future performance of the Group will not necessarily coincide with what was initially planned.

## Mission, outlook and principles:

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

The Executive Committee has defined a new Culture Framework for which **Principles** have been created: “*Creation of value, Respect, Efficiency and Anticipation*” that supplement the Company’s values of “*Integrity, Responsibility, Flexibility, Transparency and Innovation*” established in the Code of Ethics and Conduct. All of this is intended to fulfill the Company’s Mission and make its Outlook an achievable challenge.

Repsol’s **mission** (its reason for being) is to be an energy company that is committed to a sustainable world.

Repsol’s **outlook** (where it is going) is to be a global energy company that uses innovation, efficiency and respect to create sustainable value in the service of societal progress.

1. Among others, the Spanish Code of Commerce, the Consolidated Text of the Spanish Companies Act and Law 11/2018 (28 December), which amends the Code of Commerce, the Spanish Companies Act and the Audit Act with respect to non-financial and diversity information, and transposes Directive 2014/95/EU regarding the disclosure of non-financial information into Spanish Law.

2. 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.

3. This report should be read jointly with the 2018 Consolidated Financial Statements, which have been subject to an independent audit.



## Message from the CEO



In 2018 we updated our Strategic Plan and acquired significant electricity generation assets to drive forward our transformation into a multi-energy company.

At Repsol we have been working for years to become a multi-energy company, a global supplier that is capable of making needed energy and services available to customers in a safe, competitive and sustainable manner. Our strategic plan was updated in 2018 to further encourage this transformation process.

One of the pillars of the new plan is the profitable growth of the Company's *Upstream* and *Downstream* businesses, which will continue to be one of its primary strengths over the coming years. Between now and 2020 we will invest €12,500 million to increase oil and gas production and to improve key *Downstream* assets, clearly implementing international expansion in several businesses in this area.

Another of the objectives set in the strategic plan 2018-2020 is to continue to make advances with the energy transition. We have therefore established a roadmap with ambitious objectives based on the development of low-emission business operations, in which we plan on investing €2,500 million between now and 2020.

We have reached an agreement to acquire the non-regulated low emission electricity production, and gas and electricity marketing businesses from Viesgo, which led to the creation of *Repsol Electricidad y Gas* to market this new energy resource. This transaction has made us a relevant player in the Spanish electricity market with more than 750,000 customers and 2,952 MW of total installed capacity.

The energy transition will be accomplished by improving the energy efficiency of our industrial and product processes, through circular economy initiatives to reduce the consumption of natural resources and the generation of by-products, supporting natural gas and renewable energies as an alternative energy for electricity production and, in the medium term, by developing new technologies such as CO<sub>2</sub> capture, storage and use.

All of the work that we are carrying out is reflected in the Company's financial results. In 2018, adjusted net income amounted to €2,352 million, which is 10% higher than last year, net debt was down to a leveraging ratio of 10%, our credit rating by the leading rating agencies improved and we fulfilled our commitment to improve shareholder remuneration. This Integrated Management Report presents all significant information regarding the Group's financial position, the

performance of our businesses, the updated targets of our strategic plan and critical commitments and indicators with respect to sustainability.

Repsol applies sustainability criteria to all of our activities.

First of all, I would like to highlight our commitment to respect for human rights, in accordance with the United Nations Guiding Principles on Business and Human Rights, as well as with the 10 Principles of the UN Global Compact.

I would also like to stress that Repsol supports the United Nations 2030 Agenda for Sustainable Development and we are convinced that energy companies can play a key role in promoting their goals. Repsol has therefore established priorities in order to focus our efforts on the goals in which the company can best maximize its own contribution.

Repsol shares the concern of society about the effect human activity is having on the climate and is firmly committed to the aspiration of limiting to 2°C the increase in the average global temperature of the planet, compared to pre-industrial levels, by the end of the century. As a signatory of the Paris Pledge for Action, Repsol supports the Paris Agreement and works to be an active part of the solution to climate change. Accordingly, Repsol will reinforce its strategy to reduce its carbon footprint, enabling us to reduce CO<sub>2</sub> emissions by 2.1 million tons in 2020, compared to 2014 levels, with 85% of this objective achieved in 2018, and set even more ambitious objectives for 2025.

At Repsol, we are committed to diversity and equality. For this reason, we have a number of concrete measures in place to foster more balanced gender representation. In addition, pursuant to the new 2018 law in Spain, we break down and publish the gender wage gap, and average remuneration broken down by gender, job category and age.

It can be seen that Repsol not only obtains good results, but takes steps every day to secure a sustainable future. We are a dynamic company that is in constant evolution and continues to make advances with energy transition to supply society with more sustainable energies.

Thank you for your confidence.

## Annual report Repsol Group 2018:

### **Management Report**

Information on the performance of the Group's businesses, results and financial position (sustainability) and the primary risks and uncertainties it faces

### **Financial Statements**

Information on the equity and financial position at December 31, and the income, changes in equity and cash flows of the period

### **Information on hydrocarbon exploration and production activities**

Information on acreage, exploratory and development activity, net proved reserves, future cash flows, production, income and investment

### **Information on payments to governments in hydrocarbon exploration and production activities**

Information on payments made to governments related to extraction operations by country, project and public administration

### **Annual Corporate Governance Report**

Information on the Company's corporate governance structure and practices

### **Annual Report on Remuneration of Repsol Directors**

Detailed information on application of remuneration policy of directors

### **Activity Report of Audit and Control Committee<sup>1</sup>**

Composition and principal activities of Audit and Control Committee

### **Report by Audit and Control Committee on Independence of External Auditor**

Opinion of Audit and Control Committee on independence of auditor and assessment of provision by auditor of non-audit services

1. It will be published together with the Shareholder Annual Meeting call.

# Table of contents

Page 6	<b>1. Summary of main events</b>
Page 10	<b>2. Our company</b> <ul style="list-style-type: none"><li>2.1. Business model</li><li>2.2. Repsol around the world</li><li>2.3. Corporate structure</li><li>2.4. Corporate governance</li><li>2.5. Risk management</li><li>2.6. Strategy</li></ul>
Page 21	<b>3. Environment</b> <ul style="list-style-type: none"><li>3.1. Macroeconomic environment</li><li>3.2. Energy landscape</li></ul>
Page 25	<b>4. Financial performance and shareholder returns</b> <ul style="list-style-type: none"><li>4.1. Results</li><li>4.2. Cash flows</li><li>4.3. Financial overview</li><li>4.4. Shareholder return</li></ul>
Page 35	<b>5. Business performance</b> <ul style="list-style-type: none"><li>5.1. <i>Upstream</i></li><li>5.2. <i>Downstream</i></li><li>5.3. Corporate and other</li></ul>
Page 59	<b>6. Sustainability</b> <ul style="list-style-type: none"><li>6.1. Climate change</li><li>6.2. People</li><li>6.3. Safe operation</li><li>6.4. Environment</li><li>6.5. Innovation and technology</li><li>6.6. Responsible tax policy</li><li>6.7. Ethics and compliance</li><li>6.8. Supply chain</li></ul>
Page 104	<b>7. Outlook</b> <ul style="list-style-type: none"><li>7.1. General outlook</li><li>7.2. Outlook for business</li></ul>
Page 107	<b>Appendix</b> <ul style="list-style-type: none"><li>Appendix I: Alternative performance measurements</li><li>Appendix II: Risks</li><li>Appendix III: GRI Indicators</li><li>Appendix IV: GRI - Standard Index</li><li>Appendix V: Statement of non-financial information</li><li>Appendix VI: Table of conversions and abbreviations</li><li>Appendix VII: Annual Corporate Governance Report</li></ul>

# 1. Summary of main events

## Strategic update

- Profitable business growth
- Development of new businesses associated with the energy transition
- Growing shareholder returns

## Notable financial performance

- Cash and income driven by *Upstream*
- Solidity of *Downstream* in worse environment for industrial businesses

**2,341 M€**

net income in 2018  
[↑10%]

Once the targets set by the Strategic Plan 2016-2020 were met early, and after the sale of the interest held in Gas Natural Fenosa<sup>1</sup>, a **strategic update**<sup>2</sup> was published with a **2018-2020** time horizon.

The new strategy focuses on growth and the creation of value, based on three fundamental pillars: i) increasing shareholder returns; ii) profitable business growth and iii) development of new businesses associated with the energy transition.

## Result

In an environment marked by the recovery and wide fluctuation of crude oil prices net income totaled €2,341 million (10% vs 2017) free cash flow reached €5,056 million (+98% vs 2017) and the debt decreased by €3,439 million (-45% vs 2017).

### Results for the year

	Million euros		
	2018	2017 <sup>1</sup>	Δ
Upstream	1,325	632	693
Downstream	1,583	1,877	(294)
Corporate and other	(556)	(378)	(178)
<b>Adjusted net income</b>	<b>2,352</b>	<b>2,131</b>	<b>221</b>
Inventory effect	(68)	104	(172)
Special items	57	(114)	171
<b>Net income</b>	<b>2,341</b>	<b>2,121</b>	<b>220</b>

(1) Includes all adjustments necessary to the 2017 financial statements with respect to the sale of the interest in Naturgy.

1. Sale of 20% of the interest held in Gas Natural SDG, S.A. (Currently called Naturgy Energy Group, S.A., hereinafter "Naturgy" or "Naturgy Group"). (See section 2.3).

2. Published on June 6, 2018 (see section 2.6).

**Upstream** business segment results (+110% on 2017), have been driven by the increase in realization prices and by the increase in volumes sold (Libya and the organic growth projects: Trinidad and Tobago, United Kingdom, USA - Marcellus, Malaysia, Peru-Sagari and Algeria). The **total Reserve Replacement Ratio** in 2018 was 94%.

**Downstream** results (-16% vs 2017) remain sound in spite of the weakening of international indicators of industrial business and, in particular, of chemicals.

The continuing reduction of finance and structural costs in **Corporate** was not sufficient to offset the lower income in management of currency positions

As a result of the foregoing, **adjusted net income**, which aims to reflect the ordinary profit resulting from business management, amounted to €2,352 million, which is 10% higher than in 2017.

**Inventory effect**, which reflects the impact of price changes on inventories, is negative due to the trend in crude oil and product prices during the period.

**Special items** in the period include the capital gain on the sale of the interest in Naturgy and the accounting provisions for risks and reversible impairment, particularly in Venezuela.

The Group's 2018 **net income** amounted to a profit of €2,341 million, up 10% on 2017 and net earnings per share of €1.45 (12% higher than 2017).

**Free cash flow** in 2017 came to 5,056 million, 98% higher than in 2017 due to the improved *Upstream* operating cash flow and the divestment in Naturgy.

**Net debt** at the end of the period amounted to €3,439 million, which constitutes an important reduction on year-end 2017 (€6,267 million), and a leveraging ratio of 10% (17.3% in 2017).

This healthy financial performance enabled us to fulfil our commitment to **increasing shareholder remuneration** and, at the same time, improve the

**12%** ↑

earnings per share

## Financial soundness and shareholder returns

- Reduction of leverage
- Better credit rating
- Higher shareholder remuneration

## Growth in businesses

- Start of new electricity and gas business
- Organic growth in *Upstream*
- International expansion in *Downstream*
- Divestment in Naturgy

Group's **credit rating**. *Moody's* raised the Group's **credit rating** from "Baa2" to "Baa1", and the **outlook** from *Fitch and Standard & Poor's* also improved.

**The shareholder return**<sup>1</sup>, equivalent to €0.873 per share,<sup>2</sup> is a 15% increase over last year.

The average **share** price in 2018 was 8% higher than in 2017.

## Activities

### Divestment of Naturgy

In May 2018 Repsol sold the 20% interest held in Naturgy Energy Group, S.A. for €3,816 million, representing a capital gain of €344 million.

### Acquisition of businesses linked to energy transition

One of the three pillars on which the Strategic Plan is based is the development of new businesses associated with the energy transition, paying particular attention to the development of the gas business, low-emission production and the marketing of gas and electricity. Accordingly, in 2018:

- The non-regulated **low-emission electricity production businesses** operated by Viesgo were acquired, together with its **gas and electricity**

1. The "Repsol Flexible Dividend" program allowed shareholders to choose to receive this remuneration in new shares or in cash. At a General Meeting held on May 11, shareholders approved a share capital reduction consisting of the redemption of treasury shares that offsets the diluting effect of the share capital increases that were carried out in 2018 within the framework of that program. After the share buyback program ended a share capital reduction was executed in November consisting of the redemption of 68,777,683 treasury shares with a par value of 1 euro each.

2. This is in line with the price of the commitment to purchase the assignment rights granted free of charge that was assumed by Repsol in the share capital increase transactions that took place in January and July 2018.

**marketing company** (750,000 customers).

Repsol has started to engage in the electricity production and gas and electricity marketing businesses in Spain through a new brand, Repsol Electricidad y Gas (see section 5.2).

- The company **Valdesolar Hive, S.L.** was acquired. This company is developing a photovoltaic project Valdecaballeros (Badajoz) that would have an installed capacity of 264 megawatts (MW) and could be operational in either 2019 or 2020.


### International expansion and mobility in *Downstream*

The Group, also in line with the Strategic Plan, has increased its international presence in the *Downstream* businesses of Mexico, where the first service stations have been opened, and is entering the Lubricantlubrication business has commenced following the acquisition of a significant stake in Bardahl de México, S.A., and in Peru, Puma Energy Peru SAC was acquired, which adds a further 23 service stations to give Repsol a total of 560 stations in the country.

In addition, and capitalizing on **digitalization** opportunities for **mobility**, the Group has launched the free mobile application *Waylet*, which ended the year with a million users, and rolled out *WIBLE*, a shared car service for cities, with more than 500 vehicles in Madrid.

45% ↓  
net Debt

0.873  
€/share  
shareholder returns



**GSP**  
Global Sustainability Plan

Throughout this document, GSP Ambitions and Targets (see section 6) are identified with a **a** and **2020** in similar boxes. Further information: [www.repsol.com](http://www.repsol.com)

**Sustainability and climate change**

- 310 kt CO<sub>2</sub> prevented
- Digitalization
- Improved process safety
- Technology development for efficient energies

**Governance**

- Renovation of Board of Directors
- Renovation of management team

**Growth in Upstream**

In the *Upstream* business segment there have been four notable exploration **discoveries** in Colombia, positive results from the appraisal well drilled in Russia, an increase in **production** due to *Reggane*, Algeria, *Juniper* and TROC in Trinidad and Tobago, *Monarb* in the UK, *Kinabalu* in Malaysia and Sagari in Peru, together with the acquisition of the *Visund* field in Norway, new wells in *Marcellus* in the US and the larger contribution from Libya.

These events also include the start of the **development** of the Buckskin project in USA and approval of the start of Phase 1 of the development plan of the Akacias project in Colombia to increase production, as well as the acquisition of **exploration blocks** in Mexico, Brazil, Norway, Alaska, Indonesia, Greece and Bulgaria.

**Sustainability and climate change**

In the context of an energy transition towards a low-emissions future that will limit the effects of **climate change**, in addition to the development of new businesses of **low-emission electricity generation**, in 2018 Repsol implemented improvement actions at its facilities that avoided 310 thousand tons of CO<sub>2</sub>, while also reducing its energy consumption.

The value proposal made to our **employees** notably includes a continuous commitment to training in 2018 (600 euros invested per employee) and an increase in women in leadership positions to 29.2% (34.6% in Spain).

With **respect to occupational safety**, the Total Recordable Incident Rate (TRIR) increased 11.2% from the 2017 figure and there were two fatalities occurring among contractors' personnel.

**Digitalization** is now a reality in Repsol, with more than 130 digital initiatives under way and an investment of more than €90 million. In 2018, ten

hubs or expert centers were created - dedicated to data analytics and artificial intelligence, omnichannel, UX/UI design, blockchain and emerging technologies – staffed by internal and external experts, and they provide technical support to businesses' digital needs.

The new strategy for **technology and corporate Venturing** was approved in June with the objective of contributing to the Group's results and sustainability. In the Technology area a focus has been on projects to reduce energy intensity and CO<sub>2</sub> emissions, as well as on advanced mobility.

**Tax contributions** in 2018 in the countries in which the Group operates totaled €13,600 million (14% more than in 2017).

**Renovation in the Board of Directors**

Notable events in the **governance** area include the announcement by Caixabank of the sale of its entire interest in Repsol and the resignation of its external proprietary directors. The appointment of new Independent External Directors encourages a diversity of knowledge and genders within the Board of Directors. The executive team was also renewed in 2018 to adapt the organization to the Strategic Plan.

**Significant events in 2019**

In February 2019, a major gas Discovery was announced in the Sakakemang onshore block in the south of the island of Sumatra, in Indonesia. Preliminary estimations of recoverable resources are of about 2 billion trillion cubic feet of gas. (for more information, see section 5.1).

**>90M€**  
in digitalization



## Main figures and indicators

Financial indicators <sup>(1)</sup>	2018	2017	Performance of our businesses <sup>(1)</sup>	2018	2017
<b>Results</b>			<b>Upstream</b>		
Results from operations	4,396	3,214	Net proven reserves <sup>(9)</sup> (Mboe)	2,340	2,355
Adjusted net income	2,352	2,131	Proven reserve replacement ratio (%)	94	89
Net income	2,341	2,121	Net daily liquids production (kbb/d)	261	255
Earnings-per-share (€/share)	1.45	1.29	Net daily gas production (kboe/d)	454	440
EBITDA	7,513	6,723	Net daily hydrocarbon production (kboe/d)	715	695
Investments	3,874	2,936	Average crude oil price (\$/bbl)	63.9	49.6
Capital employed <sup>(2)</sup>	34,353	33,106	Average gas price (\$/kscf)	3.4	2.9
ROACE (%)	6.7	6.4	EBITDA	4,801	3,507
<b>Financial overview and cash flows</b>			Adjusted net income	1,325	632
Cash flows from operations	5,428	5,506	Cash flows from operations	3,341	2,268
Free cash flow	5,056	2,560	Investments	1,973	2,089
Generated cash flow	2,706	1,391	<b>Downstream</b>		
Net Debt (ND)	3,439	6,267	Refining capacity (kbb/d)	1,013	1,013
ND/EBITDA (x times)	0.5	0.9	Conversion rate in Spain (%)	63	63
ND/Capital employed (%)	10.0	17.3	Spain conversion refining use (%)	107	104
Debt interest/EBITDA (%)	3.8	5.2	Distillation utilization Spanish refining (%)	93	94
<b>Shareholder return</b>			Refining margin indicator in Spain (\$/Bbl)	6.7	6.8
Shareholder return (€/share)	0.873	0.761	Service stations (no.) <sup>(10)</sup>	4,849	4,709
<b>Sustainability indicators</b>			Sales of oil products (kt)	51,766	51,836
<b>People</b>			Sales of petrochemical products (kt)	2,610	2,855
No. of employees <sup>(3)</sup>	25,288	25,085	LPG sales (kt)	1,330	1,375
New employees <sup>(4)</sup>	3,810	3,157	Sale of gas in North America (TBtu)	520	496
Voluntary turnover rate (%)	6%	4%	EBITDA	2,859	3,386
Investment in training (€ million)	14.5	12.4	Adjusted net income	1,583	1,877
<b>Taxes paid</b> (million €) <sup>(5)</sup>	13,600	11,979	Cash flows from operations	1,854	2,516
<b>Safety</b>			Investments	1,831	805
Lost time injury frequency rate <sup>(6)</sup>	0.89	0.71	<b>Macroeconomic environment</b>		
Total recordable incident rate <sup>(7)</sup>	1.59	1.43	Brent (\$/bbl) average	71.3	54.2
<b>Environment</b>			WTI (\$/bbl) average	64.9	50.9
Direct CO <sub>2</sub> emissions (Mt)	17.80	18.38	Henry Hub (\$/MBtu) average	3.1	3.1
Annual CO <sub>2</sub> emissions reduction (Mt) <sup>(8)</sup>	0.310	0.329	Electricity Pool - OMIE (€/MWh)	57	52
No. of hydrocarbons spills >1bbl (t)	25	17	Exchange rate (\$/€) average	1.18	1.13
<b>Social</b>			CO <sub>2</sub> (€/Tn)	15.9	5.9
Voluntary social investment (million €)	21.3	23.5	<b>Stock market indicators</b>		
			Share price at year-end (€/share)	14.08	14.75
			Average share price (€/share)	15.78	14.57
			Market capitalization at year-end (million €)	21,506	22,521

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

(2) Capital employed in 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. Some 40% of new employees in 2018 and 31% in 2017 had permanent 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.

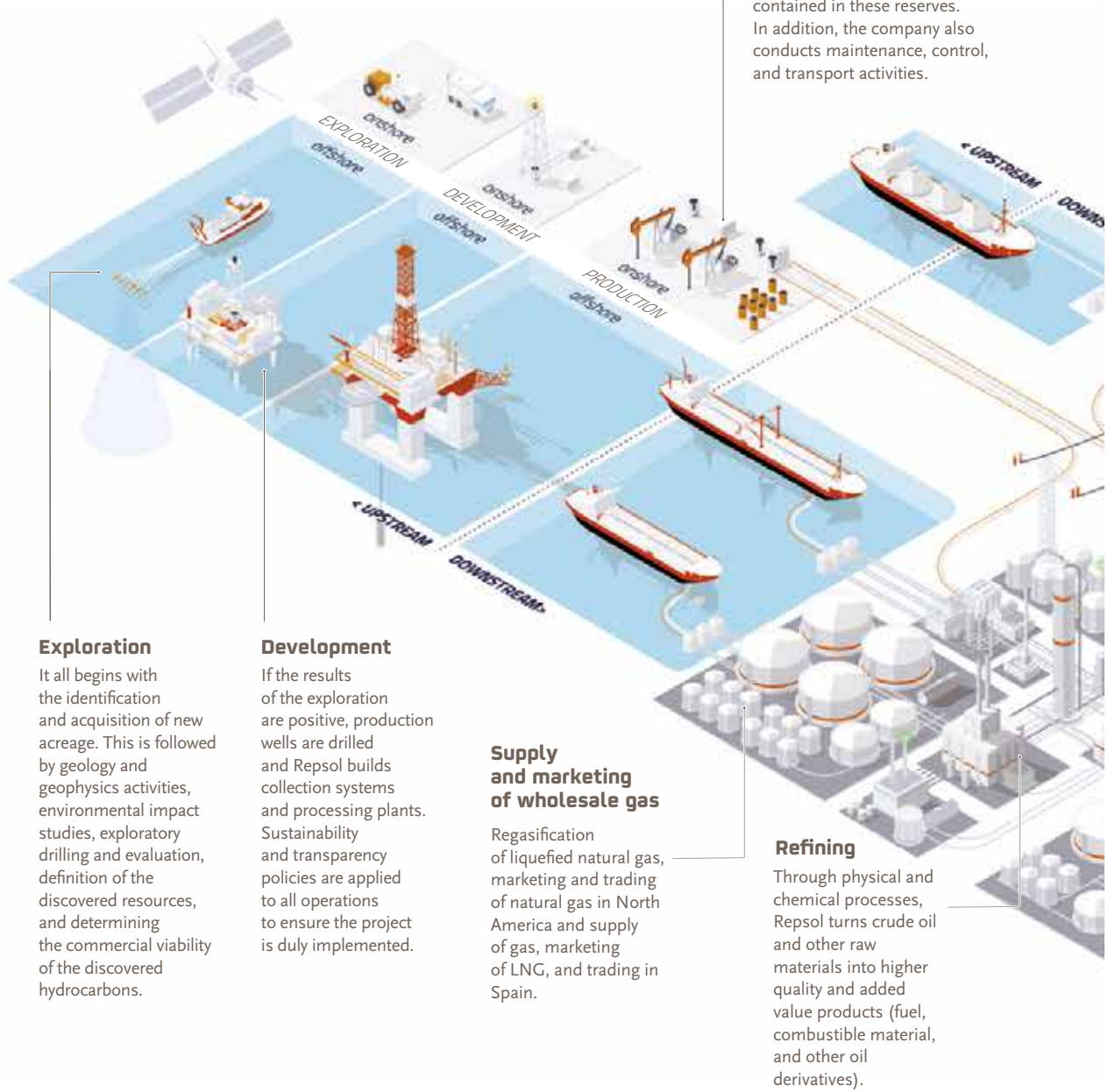
(7) Total Recordable Incident Rate (TRIR): Total number of injuries (fatalities, lost time injuries, medical treatment and restricted work) accumulated within the period per million hours worked.

(8) Reduction of CO<sub>2</sub> compared with the 2010 baseline. E&P CO<sub>2</sub> reductions since 2017 have been included.

(9) To estimate proved and unproved reserves and oil and gas resources, Repsol uses the criteria established by the "SPE/WPC/AAPG/SPEE/SEG/SPWLA/EAGE Petroleum Resources Management System", commonly referred to by its acronym SPE-PRMS (SPE standing for Society of Petroleum Engineers).

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

## 2. Our company



### Exploration

It all begins with the identification and acquisition of new acreage. This is followed by geology and geophysics activities, environmental impact studies, exploratory drilling and evaluation, definition of the discovered resources, and determining the commercial viability of the discovered hydrocarbons.

### Development

If the results of the exploration are positive, production wells are drilled and Repsol builds collection systems and processing plants. Sustainability and transparency policies are applied to all operations to ensure the project is duly implemented.

### Production

Repsol extracts reserves from the oil field to market the oil and gas contained in these reserves. In addition, the company also conducts maintenance, control, and transport activities.

### Supply and marketing of wholesale gas

Regasification of liquefied natural gas, marketing and trading of natural gas in North America and supply of gas, marketing of LNG, and trading in Spain.

### Refining

Through physical and chemical processes, Repsol turns crude oil and other raw materials into higher quality and added value products (fuel, combustible material, and other oil derivatives).

## Upstream

### Operating figures

Proven reserves: 2,340 Mboe  
 Reserve replacement ratio: 94%  
 Gas reserves: 73%  
 Net hydrocarbon production: 715 kboe/day  
 Net gas production: 454 kboe/d  
 Net undeveloped acreage: 232,331 km<sup>2</sup>  
 Net developed acreage: 5,494 km<sup>2</sup>

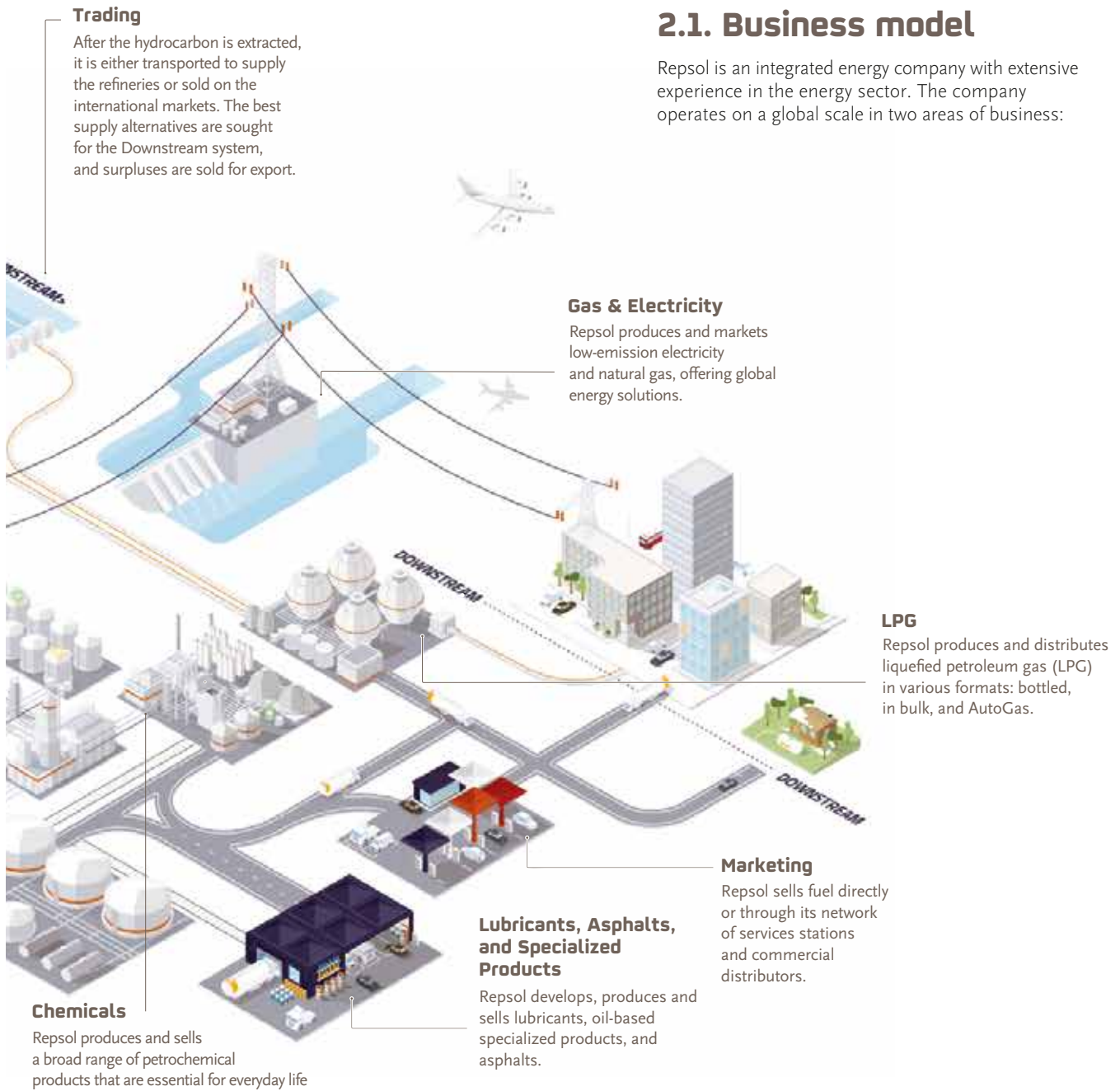
### Sustainability indicators\*

Number of employees: 3,948 (28.7% female)  
 CO<sub>2</sub>e emissions: 10.23 Mt (Scope 1 + Scope 2)  
 Water withdrawn: 1,833 kt  
 TRIR: 2  
 PSIR: 0.71

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

## 2.1. Business model

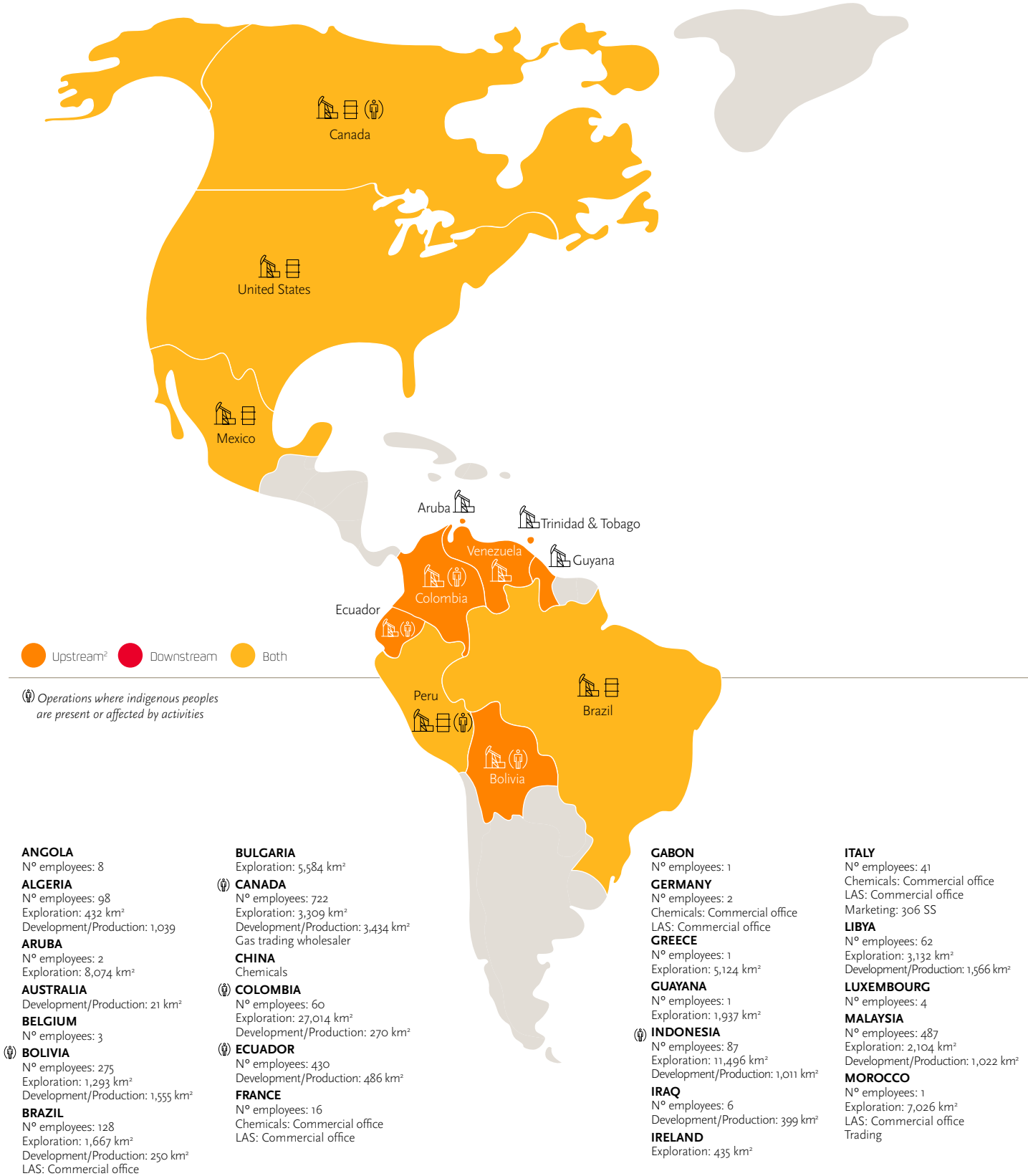
Repsol is an integrated energy company with extensive experience in the energy sector. The company operates on a global scale in two areas of business:



Downstream	
<b>Operating figures</b>	<b>Sustainability indicators*</b>
Refining capacity: 1,013 kbb/d	Number of employees: 18,851 (35.8% female)
Chemical capacity:	CO <sub>2</sub> e emissions: 12.15 Mt (Scope 1 + Scope 2)
Basic: 2,603 kt	Water withdrawn: 49,487 kt
Derived: 2,235 kt	TRIR: 1.44
Processed crude oil: 46,565 kt	PSIR: 0.35
Marketing (no. of SS):	Electric charging points: 1,055
3,350 in Spain/1,499 rest of the world	Autogas points: 732
Electricity production:	
Installed capacity: 2,952MW	

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

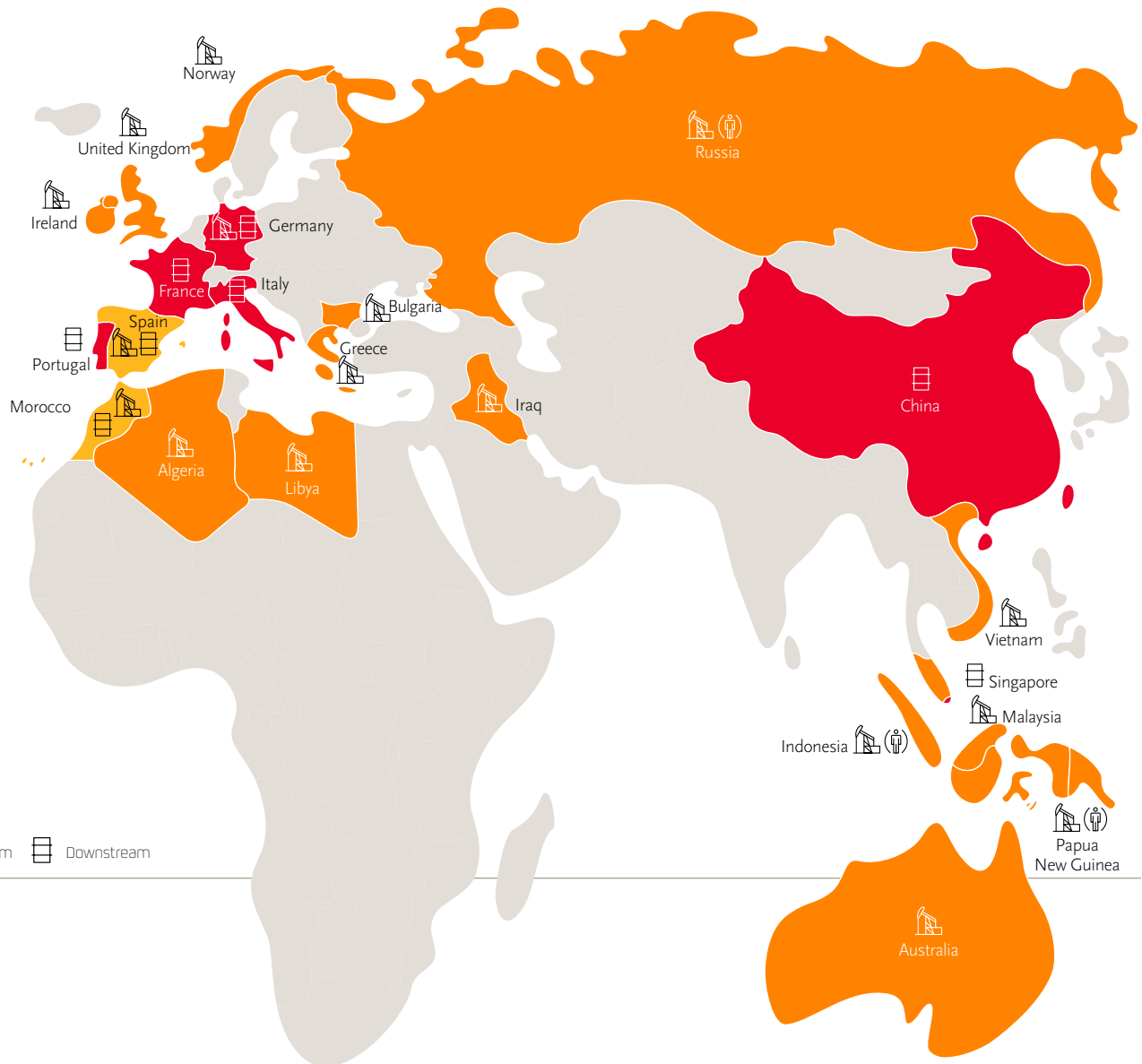
## 2.2. Repsol around the world<sup>1</sup>



1. The data in this map reflect Repsol's worldwide presence at December 31, 2018, at activity level (including the newly acquired company Viesgo).

2. Exploration and production and/or development/production data reported in net acreage.

3. LAS: Lubricants, asphalt and specialty products



Upstream Downstream

**MEXICO**  
 N° employees: 72  
 Exploration: 4,842 km<sup>2</sup>  
 Chemicals  
 LAS  
 Marketing: 168 SS

**NORWAY**  
 N° employees: 248  
 Exploration: 717 km<sup>2</sup>  
 Development/Production: 310 km<sup>2</sup>

**NETHERLANDS**  
 N° employees: 12

**PAPUA NEW GUINEA**  
 N° employees: 1  
 Exploration: 9,021 km<sup>2</sup>  
 Development/Production: 68 km<sup>2</sup>

**PERU**  
 N° employees: 2991  
 Exploration: 50,975 km<sup>2</sup>  
 Development/Production: 292 km<sup>2</sup>  
 LAS: Commercial office  
 Refining: 1 refinery  
 Trading  
 Marketing: 560 SS

**PORTUGAL**  
 N° employees: 1293  
 Chemicals  
 LAS: Commercial office  
 Marketing: 465 SS  
 LPG

**UNITED KINGDOM**  
 N° employees: 18  
 Exploration: 63 km<sup>2</sup>  
 Development/Production: 480 km<sup>2</sup>

**UNITED STATES**  
 N° employees: 559  
 Exploration: 1,847 km<sup>2</sup>  
 Development/Production: 1,264 km<sup>2</sup>  
 Chemicals: Commercial office  
 Trading  
 Wholesale gas trading

**RUSSIA**  
 N° employees: 59  
 Exploration: 2,206 km<sup>2</sup>  
 Development/Production: 169 km<sup>2</sup>

**SINGAPORE**  
 N° employees: 45  
 LAS: Commercial office  
 Trading

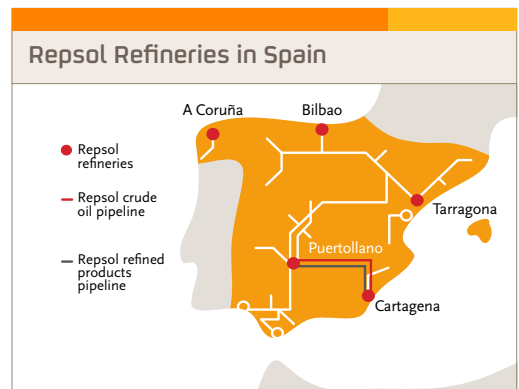
**SPAIN**  
 N° employees: 17,316  
 Development/Production: 331 km<sup>2</sup>  
 Chemicals  
 LAE  
 Refining: 5 refineries  
 Trading  
 Wholesale gas trading  
 Gas and electricity  
 Marketing: 3,350 SS  
 LPG

**SWITZERLAND**  
 N° employees: 1

**TRINIDAD & TOBAGO**  
 N° employees: 10  
 Development/Production: 1,121 km<sup>2</sup>

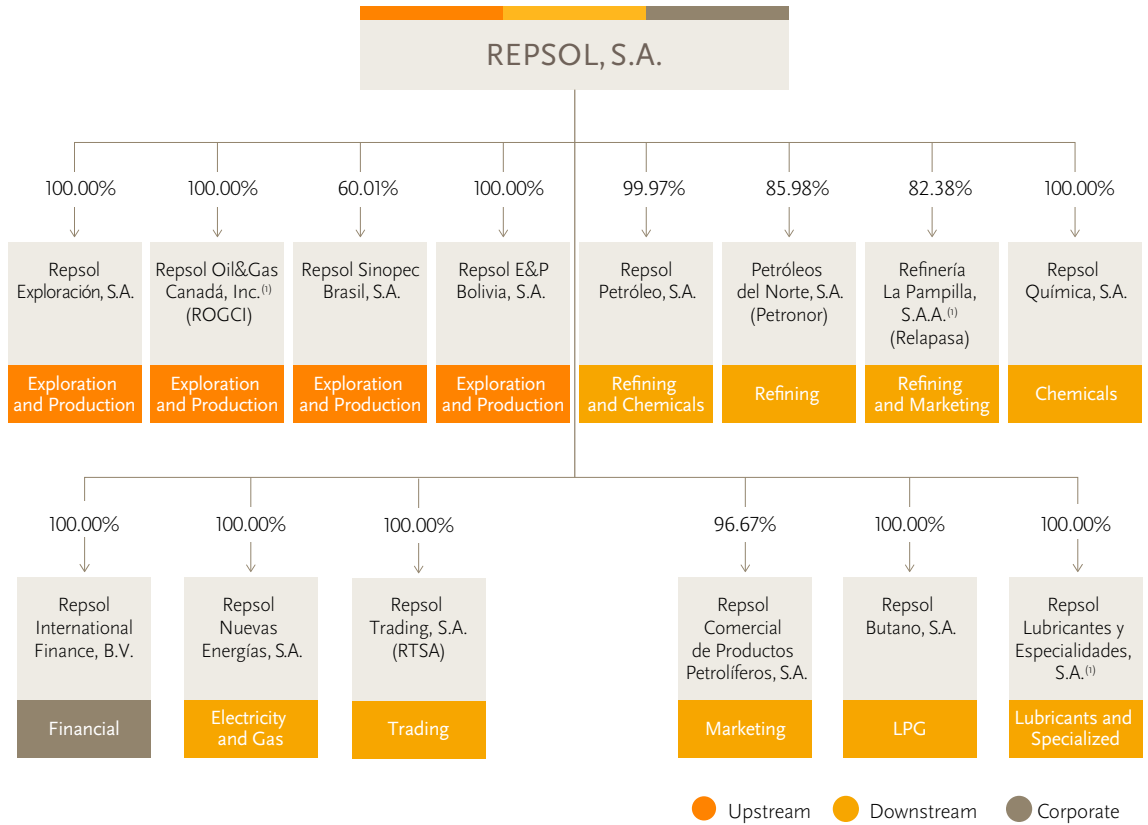
**VENEZUELA**  
 N° employees: 153  
 Development/Production: 853 km<sup>2</sup>

**VIETNAM**  
 N° employees: 75  
 Exploration: 73,325 km<sup>2</sup>  
 Development/Production: 261 km<sup>2</sup>



## 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 participations

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

On May 18, 2018, Repsol, S.A. reached an agreement with Rioja Bidco Shareholdings, S.L.U., a company controlled by funds advised by CVC, for the sale of its 20% stake in Gas Natural SDG, S.A., for a total of €3,816,314,502, equivalent to a price of €19 per share.

### Repsol electricidad y gas:

On November 2, 2018 the non-regulated low emission electricity production businesses operated by Viesgo were acquired together with the regulated and non-regulated electricity and gas marketing businesses, which represents the entry into the Group of three investee companies through Repsol Nuevas Energías

#### Corporate structure:

For further information see Appendix I of the Consolidated Financial Statements

#### Corporate streamlining:

For further information see section 6.7.

## 2.4. Corporate Governance

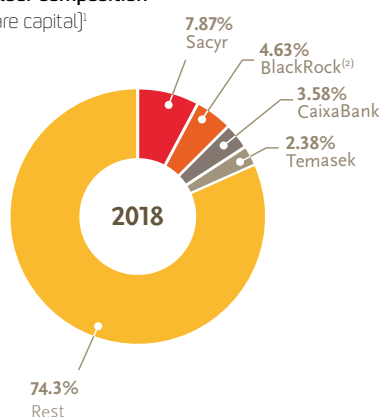
Repsol's system of corporate governance, which was established in accordance with best national and international practice and standards, guides the structure, organization, and operation of corporate bodies in the interests of the Company and of its shareholders, and is based on the principles of transparency,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

### Shareholder composition

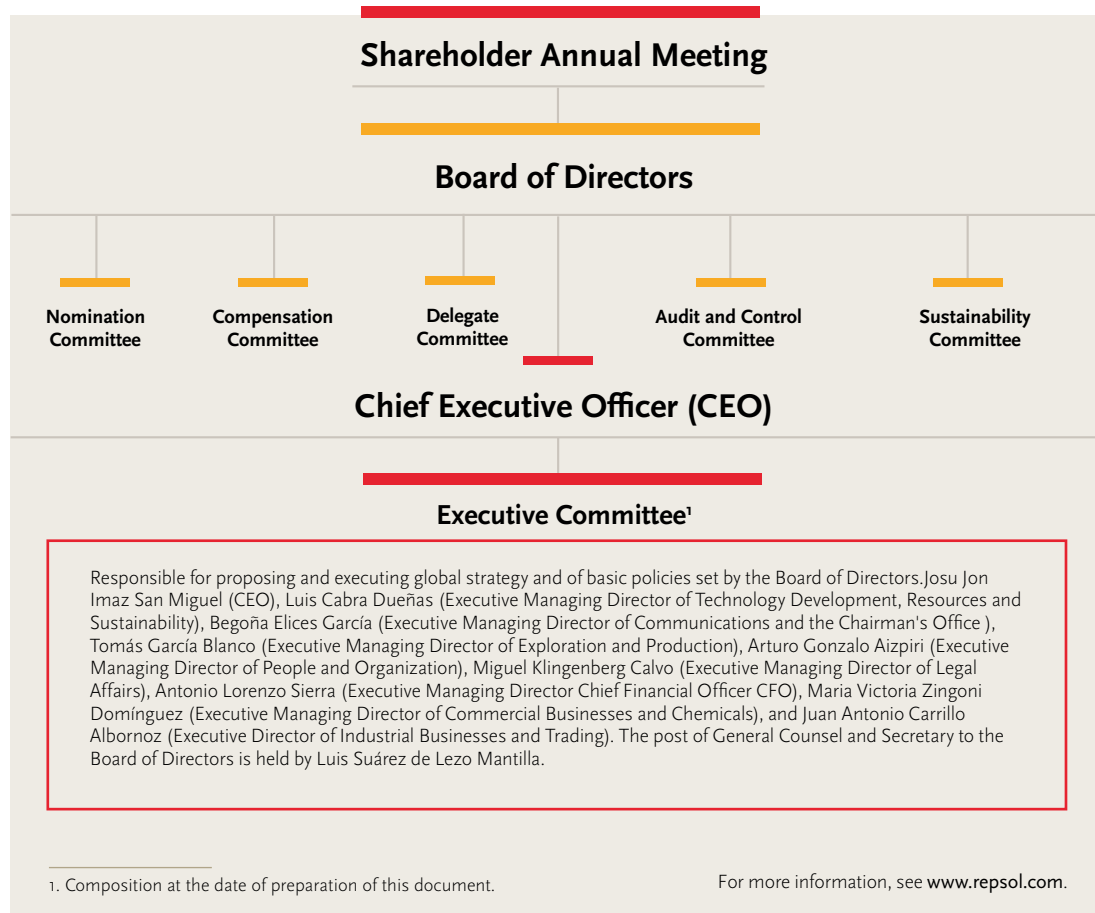
(% of share capital)<sup>1</sup>



1. % of share capital according to the latest information available at the date of this document. Information provided by Iberclear, and information submitted by shareholders to the Company and to the CNMV.
2. Information on BlackRock, Inc. is based on the filing made by the entity with the Spanish National Securities Market Commission (CNMV) of August 2, 2018 on share capital of 1,596,173,736 shares.

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

**20%**  
of women  
on the Board  
of Directors

**Board of Directors<sup>1</sup>**



**26.6%**  
of foreigners  
on the Board of  
Directors

GSP

**20  
20**

**Objective:**  
30% women  
on the Board  
of Directors.

**Changes to the Board in 2018**

- At a General Meeting held in May, shareholders adopted a resolution to ratify and reelect Mr. Jordi Gual Solé as a Director, and appoint to the position of Director Ms. María del Carmen Ganyet i Cirera and Mr. Ignacio Martín San Vicente to cover the vacancies caused by the end of the term of office of Mr. Artur Carulla Font and the exit of Mr. Mario Fernández Pelaz. All shall serve a term of office of 4 years.
- As a result of the announcement made by CaixaBank, S.A. Of the sale of its entire interest in Repsol, S.A., in September Mr. Gonzalo Gortázar Retacee and Mr. Jordi Gual Solé presented their respective resignations from the position of Director.
- In October the Board approved the appointment of the proprietary director Mr. Henri Philippe Reichstul.



## Proposals for shareholders at the general meeting

At the next General Meeting of Shareholders, the Board will propose the reelection of Mr. Antonio Brufau Niubó and Mr. Josu Jon Imaz San Miguel to four-year terms as Directors and to reduce the number of Board members to 15.

## Board Remuneration

Directors receive fixed remuneration for fulfilling their supervisory and decision duties. The calculation of this remuneration, except for that relating to the Chairman of the Board of Directors, is carried out by assigning points for pertaining to the Board or its Committees, and each point has a remuneration equivalency. This therefore means that there is no gender difference whatsoever. Detailed information regarding the application of the Remuneration Policy for Directors is set out in Repsol's Annual Report on Directors' Remuneration available at [www.repsol.com](http://www.repsol.com)

Senior management remuneration is set out in Note 30 of the Consolidated Financial Statements.

## 2.5. Risk management

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

The Company has an organization, procedures and systems that allow it to reasonably manage the risks to which the group is exposed, where risk management is an integral part of decision-

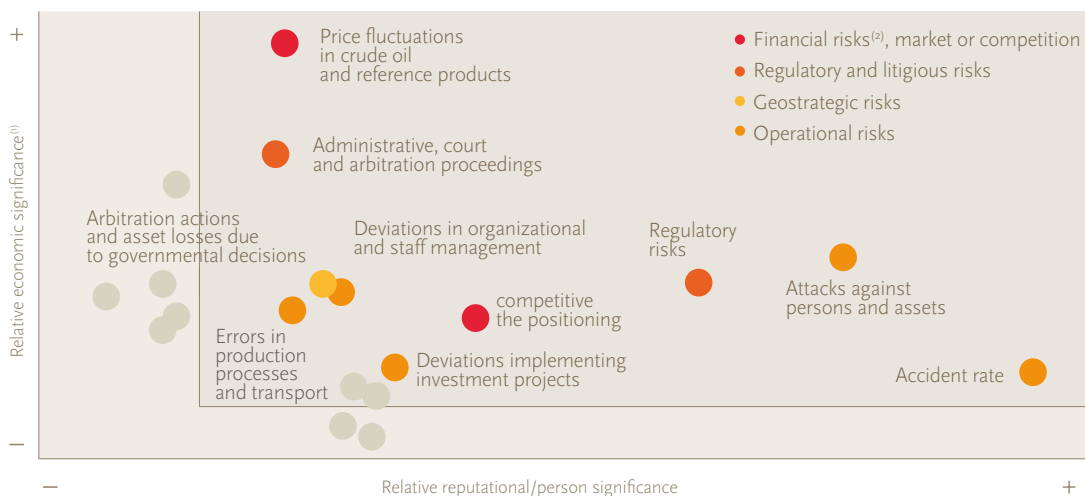
making processes in both corporate governance bodies and the businesses. The Integrated Risk Management System (SGIR in Spanish) provides a comprehensive and reliable view of all risks that might affect the Company, which allows their joint management.

The Group's main risks are identified below based on their importance in terms of finances, reputation and people:

### Risk management

Additional information in Appendix II "Risks".

## Principales Riesgos



(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) See Note 10 of the Group's 2018 Consolidated Financial Statements.

1. The Risk Map has a 5-year time horizon. 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.

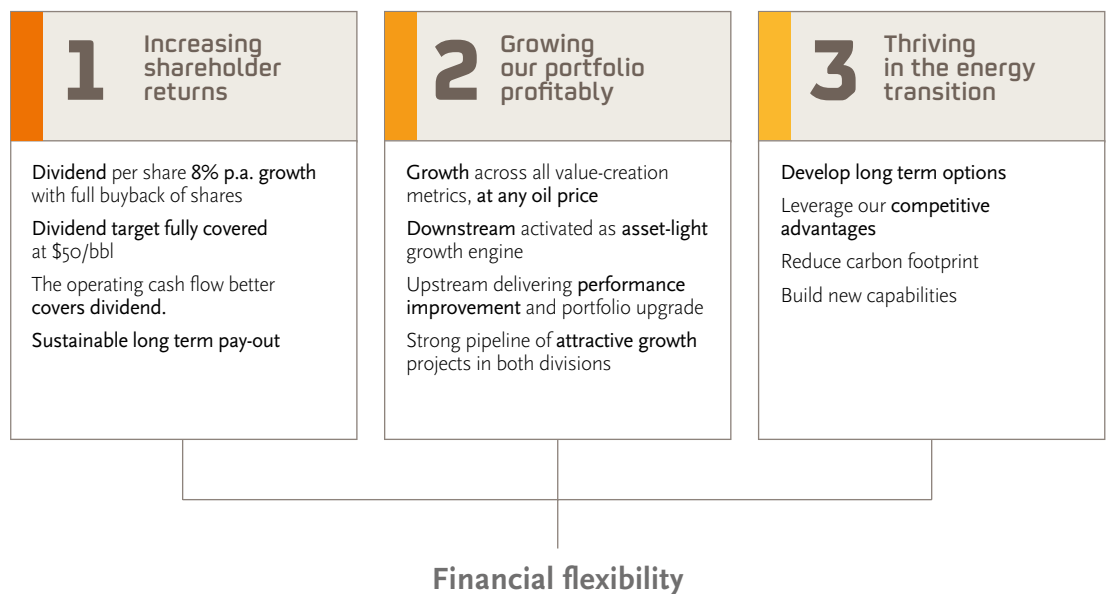
## 2.6. Strategy

### Strategy:

Further information:  
www.repsol.com

After meeting the targets established in the 2016-2020 Strategic Plan early, on June 6, 2018 an update to the Strategic Plan was published with a 2018-2020 time horizon (hereinafter “the Plan”). This updated strategy is focused on growth and the creation of value under any scenario and therefore it uses a price of \$50 per barrel of Brent as a reference during the entire period.

The new strategy is based on **three pillars**: increasing shareholder returns; profitable business growth (*Upstream* and *Downstream*); and the development of new businesses associated with the energy transition. It is a self-financed plan at \$50/barrel (Brent crude oil), which is a price at which the Company maintains a solid financial position and flexibility.



**8%** ↑  
growth of shareholder returns

### 1. Improvement to shareholder returns

One of the key aspects is to continue increasing shareholder returns. A specific annualized average growth target of 8% has been set through a scrip dividend formula, together with share capital reductions consisting of the redemption of treasury shares, which will avoid the dilution of those who choose to collect their remuneration in cash.

### 2. Profitable growth of our portfolio

The company has two growth engines to increase value and remunerate shareholders, consisting of its *Upstream* and *Downstream* businesses,

which allow growth targets to be set for the period 2018-2020 in a scenario of \$50/barrel, driving operating cash flow of +€1,900 million (+12% annualized) and earnings-per-share of +€0.60 per share (+12% annualized). *Upstream* will focus on higher returns and an improvement in the asset portfolio, while *Downstream* will consolidate the excellent performance shown over the past few years and will create new growth and value generation levers..

#### **Upstream – Increase in production and Profitability**

After merging with Talisman Energy Inc. (currently Repsol Oil & Gas Canada Inc. ) and doubling the size of the *Upstream* segment, the company faces a period in which it will increase its hydrocarbon production and will obtain higher returns while optimizing its asset portfolio.

The *Upstream* business expects to invest approximately €7,900 million in the period 2018-2020. Around 60% of this amount will be used for growth projects and exploration, in order to increase production and guarantee an optimal level of reserves in the medium and long-term. Onshore and shallow water projects will be priorities, as Repsol has a competitive advantage. Organic growth in the short-term will focus on existing assets that do not require significant development, generate large cash flows and will allow production to increase, such as Sagari (Peru), Marcellus, Eagle Ford and Buckskin (United States), Yme (Norway), Bunga Pakma and Kinabalu (Malaysia), Corridor (Indonesia), NC-115 and NC-186 (Libya) and Reggane (Algeria)

The objective of increasing production to 750,000 boe/d in 2020 (annualized growth of 2.6% per year) will be supplemented by the active management of the portfolio through which production of barrels

will be replaced by others with higher profit margins.

The *Upstream* business segment will launch a new efficiency and digitalization program in order to attain \$1,000 million in free cash flow in 2020.

The Plan includes an increase in cash flows from organic operations amounting to 50%, bringing the figure to €3,000 million in a scenario of straight-line Brent prices at \$50 per barrel.

**Downstream – International expansion**

The Plan will allow the company's position to be consolidated in areas such as Refining and Marketing, while taking advantage of the new fuel regulations for maritime transport (IMO), increasing demand and new growth opportunities.

**750 kboe/d**  
production increase in 2020

**Downstream-Expand**

	Refining	Chemicals	Marketing	LPG	Lubricants	Trading
	Sustain	Grow	Grow	Sustain	Grow	Grow
<b>Sustain</b>	<ul style="list-style-type: none"> <li>Energy efficiency</li> <li>IMO readiness</li> <li>Digitalization and optimization</li> <li>Peru desulphuration units</li> </ul>	<ul style="list-style-type: none"> <li>Energy efficiency</li> <li>Digitalization and optimization</li> <li>Differentiation</li> </ul>	<ul style="list-style-type: none"> <li>TWP<sup>1</sup></li> <li>Digitalization</li> <li>Non-oil business growth &amp; partnerships</li> </ul>	<ul style="list-style-type: none"> <li>Customer-centric and digitalization</li> <li>Logistic services &amp; commercial integration</li> </ul>	<ul style="list-style-type: none"> <li>Maintain leadership in Spain</li> <li>Grow exports</li> </ul>	<ul style="list-style-type: none"> <li>Maximize value from the system</li> <li>Digitalization</li> </ul>
<b>Expand</b>	<ul style="list-style-type: none"> <li>Biofuels</li> </ul>	<ul style="list-style-type: none"> <li>Growth in current high value products</li> </ul>	<ul style="list-style-type: none"> <li>Expand into new geographies</li> <li>New mobility businesses</li> </ul>	<ul style="list-style-type: none"> <li>Growth opportunities in hinterland</li> </ul>	<ul style="list-style-type: none"> <li>Expand international presence (Asia, Latam)</li> </ul>	<ul style="list-style-type: none"> <li>Develop global crude business</li> <li>Incremental growth in key products</li> </ul>

- Chemicals growth
- International expansion

**4,200M€**  
Downstream investment

(1) Transforming While Performing (TWP): a program for operational excellence.

**2.1 Mtn**  
CO<sub>2</sub> in 2020



The *Downstream* business segment expects to invest a total of €4,200 million by 2020, which will be used in projects distributed between the international expansion of some businesses (€1,500 million) and maintaining and improving key assets that guarantee excellent performance (€2,700 million).

International expansion includes the service station business in markets such as Mexico, where Repsol opened 168 stations in 2018, and Peru, where the Company already has more than 500 points of sale. In other businesses such as Lubricants and Liquefied Petroleum Gases (LPG) growth will be driven in Asia and South America, in the first case, and in southern France and Morocco in the second. Trading will be another area of the *Downstream* business that will be expanded between 2018 and 2020, particularly through the development of a global crude oil business and the optimization of fleet operations.

Efforts will also be made in the Chemicals area that will focus on high-value products with applications in high-demand sectors offering high margins. The objective is for Repsol to become one of the most competitive global companies in our segments, through both organic and inorganic growth.

Repsol estimates that the operating cash flow generated by *Downstream* will increase by €700 million in 2020 compared with 2017, which

represents a 27% increase during the period and profitability (ROA CE) exceeding 18% during the entire period.

### 3. Energy transition – New opportunities:

The objective is to make progress with energy transition and to reduce emissions by Repsol's operations and products, in line with the company's commitment to the fight against climate change that it adopted at the Paris Conference of Parties (COP21). Repsol's target for 2020 is to reduce its carbon intensity by 3% and CO<sub>2</sub> emissions by 2.1 million tons.

The manner of consuming energy will change over the coming years, representing evolution in the industry driven by technology and digitalization. By updating its Plan, Repsol is anticipating large trends, such as the increase in demand for electricity and the key role of gas in the energy transition and will develop new capacities and establish a profitable position as a long-term operator in this segment.

The investments in this area will total €2,500 million between 2018 and 2020 with the objective of obtaining 2.5 million retail gas and electricity customers in Spain by 2025, in accordance with the following roadmap:

## Investments

	Wholesale Gas	Wholesale gas and electricity	Low emissions generation
<b>Top capability</b>	Leverage our industrial self consumption as the <b>largest gas consumer in Spain</b>	<b>Strong brand and ~10M clients</b> base with direct contact	<b>Technical capabilities and experience in managing large scale projects</b>
<b>Roadmap</b>	Create a successful <b>wholesale gas</b> business, ensuring a competitive gas supply Developing new business through gas flexibility Deliver a <b>competitive gas offer</b> for our future retail clients	To become a relevant Spanish low carbon multi-energy retailer <b>Progressively sophisticate</b> our offer including advanced energy services and solutions	Develop a strong position in Spain achieving a <b>low carbon integrated business</b> <b>Technological vocation oriented to solar, wind, CCGT and other low carbon technologies</b> <b>Diversify in emerging countries</b> that yield higher returns
<b>Targets by 2025</b>	<b>&gt;15%</b> Market share <sup>1</sup>	<b>&gt;5%</b> Market share <sup>2</sup>	<b>2.5M</b> Clients <sup>3</sup>
			<b>~4.5 GW</b> Capacity

(1) Market share in Spain includes consumption by our refineries.  
(2) Market share in Spain by number of customers.  
(3) Not adjusted for dual customers

**2,500M€**  
investments in new businesses associated with the energy transition in 2018-20

# 3. Environment

## 3.1. Macroeconomic environment

### Recent economic trends

In 2017 the **world economy** showed notable improvement assisted by a change in the tone of fiscal policies and the improving investments and international trade. Sequentially, the highest growth rate was reached at the start of 2018 but then a clear deceleration started to take place.

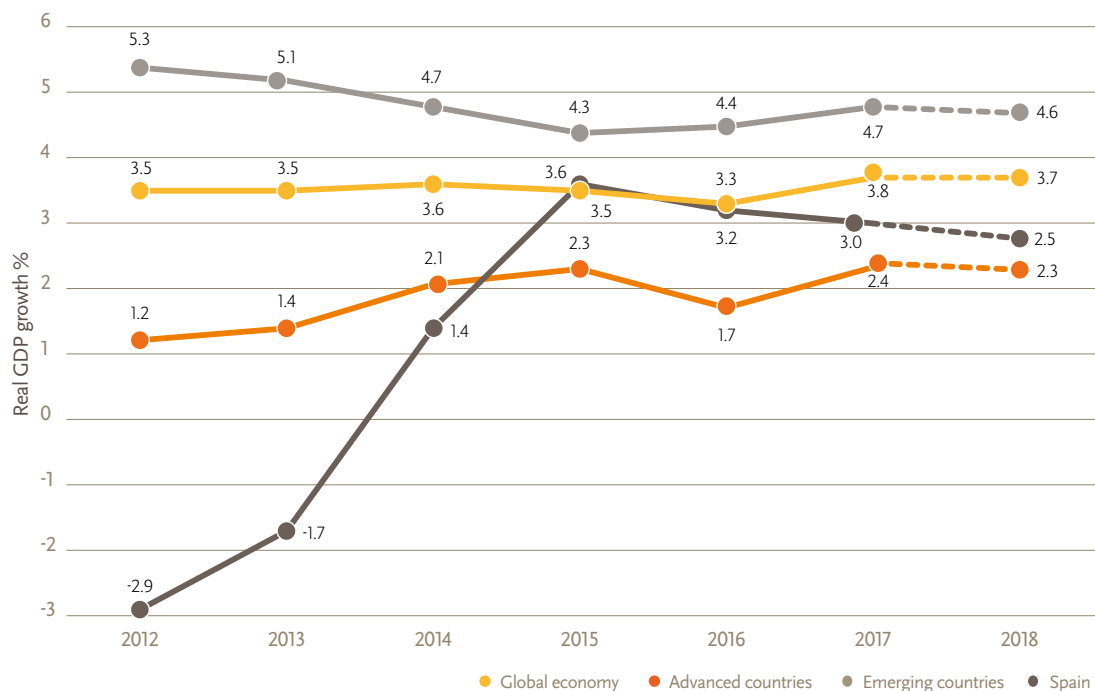
While throughout 2018 global GDP grew by around 3.7% (in line with 2017 as a whole), the dynamics at the end of the year were clearly lower. This deceleration is taking place in a context in which the higher interest rates in the United States and the appreciation of the dollar have tightened global financial conditions. Together with an environment of greater uncertainty due to the threats of a trade war, this has particularly affected investments and global trade.

Growth in **advanced economies** was relatively steady, going from 2.4% in 2017 to 2.3% in 2018, due solely to the acceleration in the **United States**. That country has a very pro-cyclical fiscal policy that has driven the activity, which expanded by 2.9% (notably above the 2.2% seen in 2017). The higher growth in the United States and the tight labor market has led the Federal Reserve (FED) to more decidedly enter into a process of normalizing its monetary policy, with four 25 basis point increases during the year.

Meanwhile, growth in the **Eurozone** has notably become more moderate, advancing around 1.8% in 2018 compared to 2.4% in 2017. Weak exports and greater uncertainty due to the Brexit negotiations and the fiscal dispute affecting the Italian government have weighed on the activity. The deceleration has been aggravated by transitory factors such as production disruptions in the automobile sector due to new emissions regulations. In **Spain** the activity has remained more dynamic, increasing by around 2.5%, although this is lower than the 3.0% seen in 2017 due to the decline in private spending and the negative contribution of the export sector.

**3.7%** ↑  
global  
GDP growth  
in 2018

GDP change



Source: International Monetary Fund (IMF, WEO update January 2019) and Repsol Research Unit

**1.18€/\$**  
average rate  
in 2018

Finally, **emerging economies** were the most affected by the tightening of financial conditions and the intensification of trade tensions, although the highest departures of capital and depreciation are concentrated in countries that are most dependent on external financing. Growth in 2018 for all emerging countries is estimated at 4.6%, which is less than previously expected despite the recovery of crude oil exporting countries.

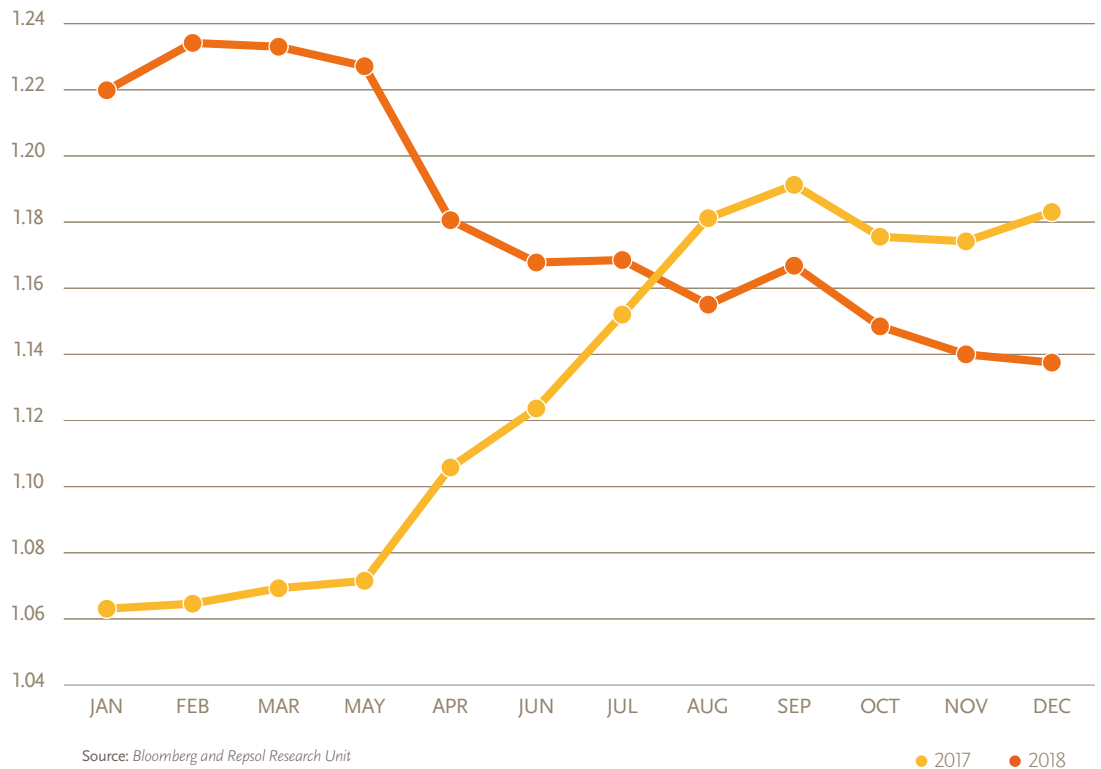
### Evolution of the exchange rate

During the first months of 2018 the depreciation of the US dollar intensified and reached levels of €1.25/dollar given the expectation that the tax stimulus announced in the United States could further exacerbate its external imbalance (expansion of the twin deficits). However, since the start of April the dollar reversed the previous depreciation while growth in the Eurozone ceased to provide upward surprises and the interest rate spread gained more protagonism.

As the growth in the United States continued to be robust and that in the Eurozone fell short, the dollar continued to strengthen. This trend was aggravated by the increase in the political risk in Europe over the past few months due to the Brexit negotiations and the tax dispute in Italy. The 2018 year-end dollar exchange rate was €1.15/dollar.

In 2018, emerging economies saw significant appreciation of their currencies in this context of higher interest rates in the United States and increasing uncertainty, which has driven capital to exit those countries. On average for all emerging economies, the magnitude of the depreciation in 2018 was similar to the episode known as the «taper tantrum»<sup>1</sup>, in 2013. In any event, there does not seem to be any generalized contagion and the corrections have been much more intense in the most vulnerable economies such as Argentina, Turkey, South Africa or Brazil.

Evolution of the EUR/USD exchange rate (monthly averages)



**General outlook**  
See section 7 of this document.

1. The markets reacted with large outflows from bond markets after the US Federal Reserve announced a possible early reduction of its bond acquisitions. This was particularly the case in emerging countries,

which gave rise to notable declines in their exchange rates and bond and share prices.

## 3.2. Energy environment

### Crude oil - Brent

There were sharp fluctuations in the price of crude oil in 2018. Between the start of the year and October the trend was predominantly upward, which led the reference price for Brent crude to rise from around \$65/barrel to \$86/barrel (\$/barrel). The maximum level seen during the year, was 30% above the 2017 year-end price. The price then began to decline and led it to lose all of the gains seen during the year over the course of the final two months. A for in 2019 Brent remains at around \$60/barrel in the first several weeks of 2019. The average price of crude oil in 2018 was \$71.3/barrel, 32% higher than the average in 2017.

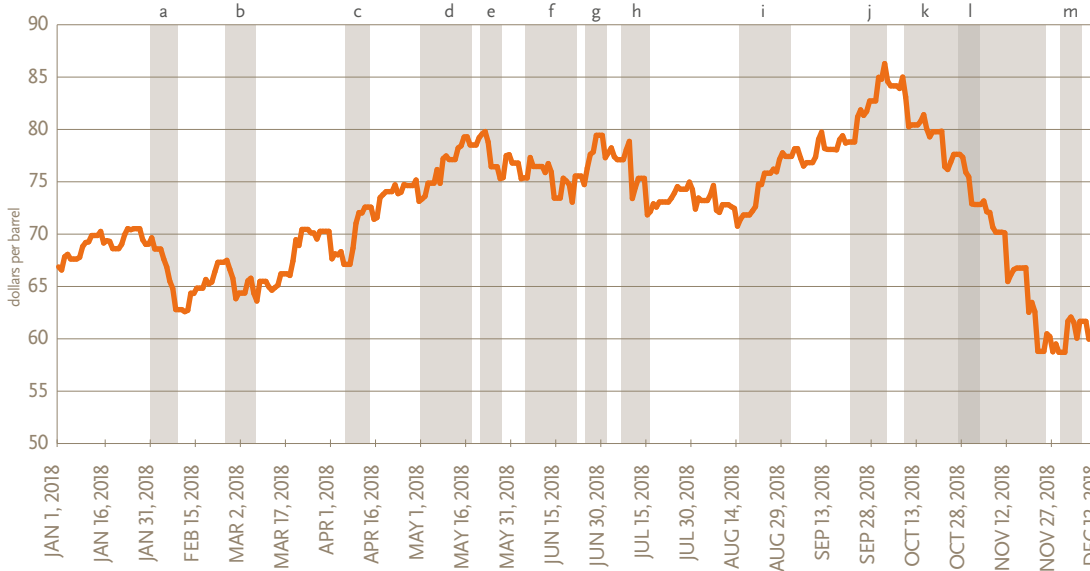
These dizzying price movements were primarily caused by OPEC actions. During the first half of 2018 OPEC was faithful to its cutting policy that was set at the end of 2016. Between November 2016 and May 2018 crude oil production fell by 1.8 million barrels.

In June, the OPEC policy was completely altered after pressure was received from the United States government, particularly on Saudi Arabia, to increase production and reduce price levels from \$80/barrel that had been reached at the start of that month. OPEC noted the need to adjust production by its member countries to their assigned quotas, without cutting more than had been agreed. This weakened prices to around \$70/barrel.

Furthermore, the re-imposing of US sanctions on Iran after it left the nuclear agreement at the beginning of May had only exacerbated the situation, and prices rose to the maximum level

**32%** ↑  
Brent in 2018

Main milestones marking the price of Brent crude oil



Source: Bloomberg and Repsol Research Unit

- a) Approval of a scheme to sell crude oil from the US Strategic Petroleum Reserve (SPR)
- b) New sanctions forecast for Venezuela and Iran
- c) Easing of hostilities in the trade war between the US and China
- d) US toughens stance on (and later withdraws from) the nuclear deal with Iran
- e) Saudi Arabian and Russian declarations on increased production to prevent market "overheating"
- f) Decision forecast to increase OPEC production
- g) US pressure to cut imports of Irani crude oil
- h) Proposed new tariffs in the US on Chinese products
- i) Evidence of drop in crude oil production in Iran
- j) Proximity of date for reimposing sanctions on Iran
- k) The Agencies present a more negative outlook for the markets in their monthly reports
- l) Some countries receive exemptions to the sanctions to continue importing crude oil from Iran
- m) OPEC/OPEC+ agreement to reduce production

# 3.1 \$/MBtu

## Henry Hub

seen during the year (\$86/barrel). However, at the end of October the United States granted waivers to the prohibition against several countries from importing oil which, in total, digested almost 85% of Iran's exports, after which the market calmed and the geopolitical premium declined. Projected exports from Iran increased and prices declined by 30% in somewhat more than two months.

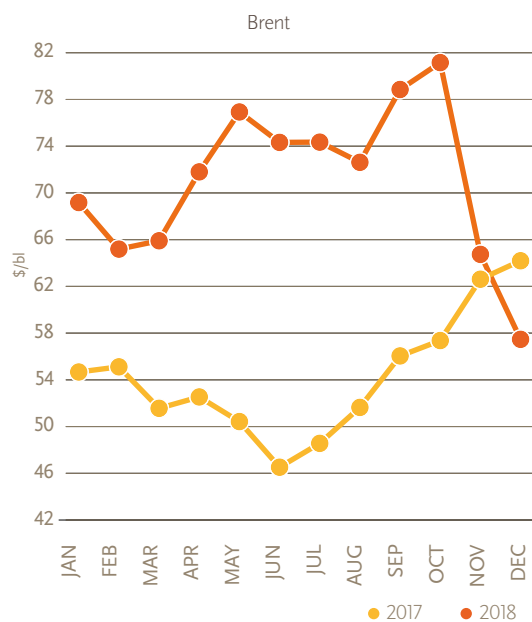
Various indicators on the demand side warned of a certain slowdown in consumption, although the outlook still points towards positive performance. The current situation is one of a market with relative oversupply, which should be understood to be transitional after the response from OPEC and its non-OPEC allies during the last ordinary meeting held on 6-7 December, where a joint cut of 1.2 million barrels per day was agreed (800 million by OPEC and 400 million by non-OPEC). This decision by OPEC sends a signal to the market in which it sets the minimum price of Brent crude oil at \$60 per barrel. The exemption of Iran, Libya and Venezuela from the cuts announced on December 7, plus the volatile situation in other cartel countries such as Nigeria or Angola lead to the conclusion that there is the potential for further production cuts. It should be remembered that all of those countries are suffering under complicated political situations that directly affect their production and exports.

## Natural Gas - Henry Hub

The average Henry Hub US natural gas price reference for Repsol was \$3.1/MBtu (in line with 2017 data). The supply of natural gas in the United States continued to grow at significant rates for both dry gas and gas associated with the production of oil. On the demand side, the increase in the exports of liquefied natural gas (LNG) and the spike in demand for the production of electricity were key factors. The latter was due to the switch from coal as a production fuel. Inventories at the end of December were 19% lower than both the level reached in 2017 and the historic average over the past five years.

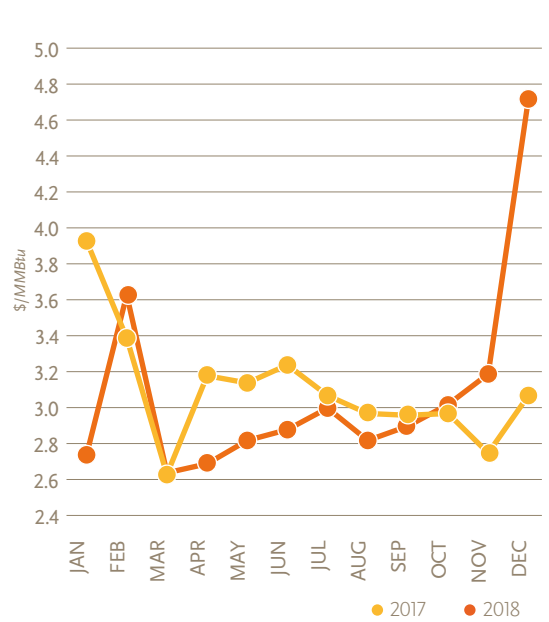
In quarter-on-quarter terms, prices remained stable until September, despite the continuous growth in production, which reached historic maximums (11% more than in 2017), but this was largely offset by the increases seen in domestic demand and LNG exports. A significant recovery of the price was observed during the last quarter of the year due to weather conditions, which drove demand for gas and lowered inventory levels, within a context of infinite sufficient infrastructure to move gas to the main consumption centers.

Brent price evolution



Source: Bloomberg and Repsol Research Unit

Henry Hub price evolution



Source: Bloomberg and Repsol Research Unit



## 4. Financial performance and shareholder returns

The **environment** in which our businesses operated in 2018 compared to the same period in 2017 is characterized by higher and more volatile crude oil prices (Brent +32%), gas prices in line with those in 2017 (Henry Hub -1%) and a weaker dollar against the euro (average €/€ of 1.18 vs. 1.13 in 2017). Furthermore, the Refining margin indicator in Spain remains at high levels (around seven dollars/barrel), but petrochemical margin indicators internationally have significantly declined as a result of the increase in naphtha prices.

In this context, Repsol obtained **adjusted net income** totaling €2,352 million (+10% vs. 2017) and **net income** of €2,341 million (+10% vs. 2017). **EBITDA** amounted to €7,513 million (+12% vs. 2017) and **free cash flow** was €5,056 million (+96% vs. 2017, including €3,816 million on the sale of Naturgy). The period ended with a very significant reduction in **net debt**, falling to €3,439 million (€2,828 million less than in 2017). The dividend paid to shareholders amounted to €0.873/share (+15% vs. 2017).

### 4.1. Results

Million euros	2018	2017 <sup>(1)</sup>	Δ
Upstream	1,325	632	693
Downstream	1,583	1,877	(294)
Corporate and other	(556)	(378)	(178)
<b>Adjusted net income</b>	<b>2,352</b>	<b>2,131</b>	<b>221</b>
Inventory effect	(68)	104	(172)
Special items	57	(114)	171
<b>Net income</b>	<b>2,341</b>	<b>2,121</b>	<b>220</b>

(1) Includes the modifications that were necessary with respect to the 2017 consolidated financial statements relating to the sale of the interest held in Naturgy (see Note 4 of the 2018 Consolidated Financial Statements).

The increase in **operating income** (€+1.181 million; +37%), owing to the strong performance of the *Upstream* segment, drove **EBITDA** upward by +12%.

EBITDA (million euros)	2018	2017	Δ
Upstream	4,801	3,507	1,294
Downstream	2,859	3,386	(527)
Corporate and other	(147)	(170)	23
<b>TOTAL</b>	<b>7,513</b>	<b>6,723</b>	<b>790</b>

### Upstream

**Average production** reached 715 Kboe/d in 2018, which represents a 3% increase (+20.7 Kboe/d; +6.2 Kboe/d in liquids and 14.5 Kboe/d in gas) vs. 2017. This increase is primarily due to production in Libya and the launch of organic development projects in 2017 (*Reggane* in Algeria, *Kinabalu* in Malaysia, *TROC and Juniper* in Trinidad and Tobago, *Shaw and Cayley* in the United Kingdom and *Sagari* in Peru) and in 2018 (launch of the gas project *Bunga Pakma* in Malaysia and the connection of new wells in *Marcellus* in the United States), as well as the acquisition of the *Visund* field in Norway. These positive effects were offset by lower production in Venezuela and by the sale of the SK field in Russia in 2017. and MidContinent in the US.

**Exploration activities** during the period included the completion of the drilling of 21 exploratory wells and 1 appraisal well. 5 had positive results (4 exploratory wells in Colombia and 1 appraisal well in Russia), 16 had negative results (3 in Colombia, 2 in the United States, 2 in Algeria, 2 in Malaysia, 1 respectively in Aruba, Bolivia, Bulgaria, Gabon, Norway, Romania and Trinidad and Tobago) and one is being evaluated (in Norway).

**Upstream adjusted net income** amounted to €1.325 million, well up on the figure attained in 2017 (+110%). This improvement is explained by the increase in prices for crude oil and gas (+29% and +17%, respectively) and by the higher volume sold. The impact of the change in the estimated depreciation of production assets must also be taken into consideration (see Note 3 of the 2018 consolidated financial statements).

**7,513M€**  
EBITDA

**110%**  
ANI  
*Upstream*

**1,583M€**  
**ANI**  
**Downstream**

Those positive effects were partially offset by the increase in taxes as a result of the improvement in operations (net tax rate of 48% vs. 40% in 2017), the higher exploration expenses resulting from the depreciation and provisions recorded for wells and investments that are unlikely to be successful and the negative effect of the exchange rate due to the weakening of the dollar.

*Upstream EBITDA* totals €4,801 million, 37% higher than in the same period last year, driven by the increase in **operating profits** and notably by the improvement in the business in Libya, Norway, United Kingdom, Brazil, Malaysia and Algeria.

**Investments** in 2018 (€1,973 million) fell by €116 million compared to the same period last year mainly due to the depreciation of the dollar against the euro. Investments were fundamentally made in production assets and development in the United States, Canada, Norway, Trinidad and Tobago, and the acquisition of 7.7% of the Visund field in Norway.

**Downstream**

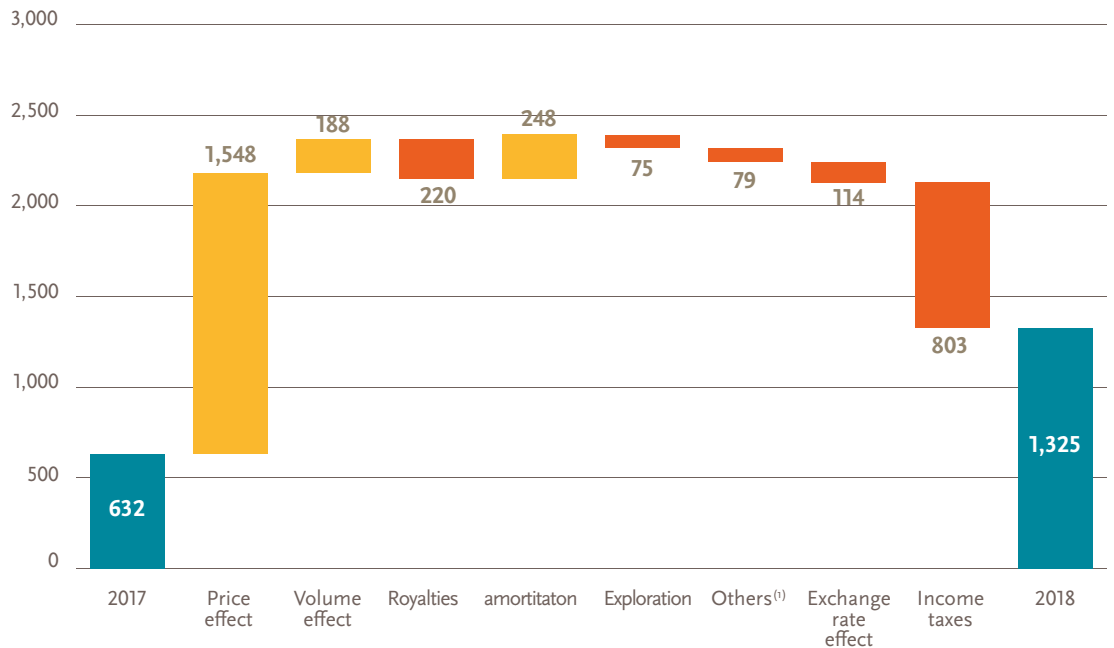
**Adjusted net income** in 2018 amounted to €1,583 million, compared to the €1,877 million obtained in the same period in 2017.

The change in results is due mainly to:

- **Refining:** despite continuing with the good production margins in Spain, lower results were obtained due to the negative effect of the weakening of the dollar and higher fixed costs, as well as the reduction in margins in Peru (affected by the pricing mechanisms in that country) and higher fixed costs.
- **Chemicals:** the lower results are explained by the weakening of the international landscape, fundamentally as a result of the increase in naphtha prices, as well as lower sales and higher variable costs as a result of operating incidents and maintenance stoppages.
- **Trading and Gas:** better results were obtained, primarily as a consequence of higher margins and lower transportation expenses in gas trading in North America.

**Upstream adjusted net income variation**

Millions of euros



(1) Includes income from investees and others.

**37%** ↑  
**EBITDA**  
**Upstream**

- **Retail Businesses:** the better results are primarily due to Marketing (driven by the improvement in margins and no relevant changes in the level of sales and LPG due to the higher volume sold as a result of lower temperatures).

**Downstream EBITDA** totaled €2,859 million (compared to the €3,386 million recorded in the same period of 2017).

Operating **investments** totaled €1,831 million (compared to the €805 million in the same period of 2017). The acquisitions made in 2018 within the framework of the strategic plan covering the Viesgo assets and the Valdesolar project are notable, as are the investments for expansion in Mexico (the opening of service stations and the acquisition of 40% of the Mexican lubricant and additive company Bardal). The investments made to improve energy efficiency, safety and environmental matters are also notable, as are the multi-year stoppages of the refineries in Spain, the maintenance of the Chemical plants and the remodeling of the gasoline block at the Pampilla refinery in Peru.

### Corporate and other

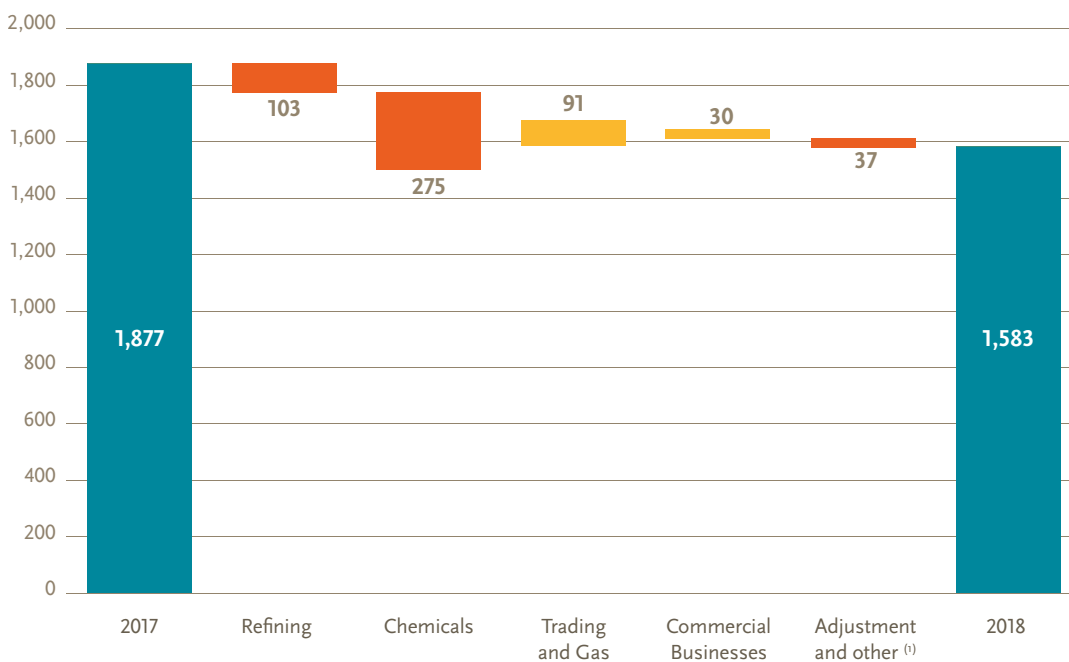
Accumulated results in 2018 total €-556 million (€-378 million in 2017). *Corporate* maintained its efforts to reduce corporate costs, despite the increases deriving from the digitalization projects. Financial results notably include lower that interest and improvements in income as a result of interest-rate positions and treasury shares. Those positive effects were offset by the negative impact of the exchange rate on currency positions and the financial restatement of provisions.

**Adjusted net income** totals €2,352million (vs. €2,131 million in 2017). These results include income tax expense totaling €1,569 million, which is an **effective tax rate** of 40% (compared to 26% in 2017, primarily due to the increase in *Upstream* business income which is taxed at high rates).

**2,352 M€**  
adjusted net income (10%) ↑

### Downstream adjusted net income variation

Millions of euros



**1,831 M€**  
Downstream investment

(1) This is primarily due to the effect of the negative consolidation adjustments made to eliminate the intra-group operating profit arising between the various business units in the *Downstream* segment.

# 5,428M€

million  
cash flow  
from operating  
activities

The **inventory effect** amounted to €68 million, and is explained by the evolution of prices for crude oil and oil products during the period.

**Special items** amount to €57 million and are mainly due to: i) the capital gain on the sale of the interest held in Naturgy Energy Group, S.A. (+€344 million); ii) the extraordinary write downs in Venezuela (-€843 million due to the risk affecting the recovery of loans, tax assets and investments<sup>1)</sup> and *Upstream* production assets (€-454 million) and *Downstream* (-€24 million); iii) extraordinary income on exchange differences (includes the impact of the exchange rate on financial and tax positions and the reclassification of exchange differences relating to canceled exploration assets) and the application of abandonment and tax risk provisions in *Upstream*.

(Million euros)

Special items	2018	2017
Divestments	83	(51)
Headcount restructuring	(55)	(64)
Impairment	(684)	(635)
Provisions and other	301	362
Discontinued operations	412	274
<b>TOTAL</b>	<b>57</b>	<b>(114)</b>

**Net income** from all of the above total €2,341 million, 10% higher than in 2017.

Profitability indicators	2018	2017
Return on average capital employed (ROACE) (%)	6.7	6.4
Earnings-per-share (€/share)	1.45	1.29

# 6.7%

ROACE  
for the period

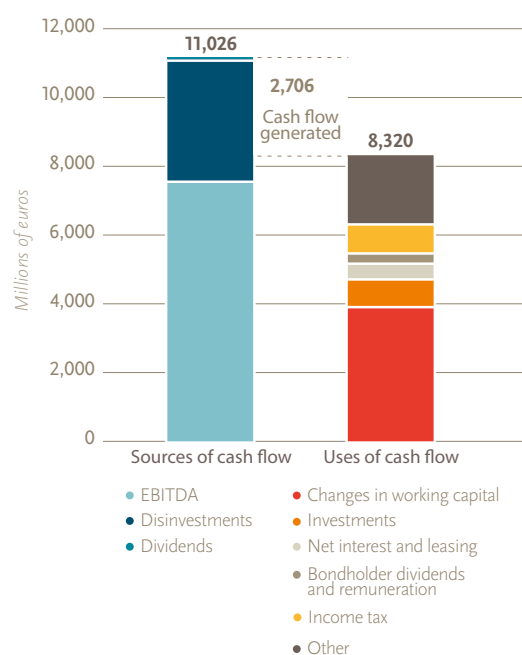
1. Excludes the amount recognized in reserves for the first application of IFRS 9 (see Note 2.2 of the 2018 Consolidated Financial Statements).

## 4.2. Cash flows

Cash flows (Million euros)	2018	2017
<b>EBITDA</b>	7,513	6,723
Changes in working capital	(806)	(751)
Collections of dividends <sup>(1)</sup>	20	218
Income tax receivable /(payable)	(845)	(357)
Other receipts/(payments)	(454)	(327)
<b>I. Cash flow from operations</b>	<b>5,428</b>	<b>5,506</b>
Payments for investments	(3,866)	(3,030)
Proceeds from divestments	3,494	84
<b>II. Cash flow from investments</b>	<b>(372)</b>	<b>(2,946)</b>
<b>Free cash flow (i + ii)</b>	<b>5,056</b>	<b>2,560</b>
Dividends and other equity instruments	(297)	(332)
Net interest and lease installments	(458)	(544)
Treasury shares	(1,595)	(293)
<b>Generated cash flow</b>	<b>2,706</b>	<b>1,391</b>

(1) Includes cash flows from discontinued operations relating to the dividends received for the interest in Naturgy, which totaled €218 million in 2017.

### Cash sources and applications



**Cash flow from operating activities** in 2018 (€5,428 million) was lower than that obtained during the same period in 2017: the increase in EBITDA from *Upstream* businesses was offset by the increase in *Upstream* working capital (increase in receivables) and in the *Downstream* segment (due to the increase in inventories as a result of the upward trend in prices and higher volumes), higher tax payments and the absence of dividends from Naturgy.

**Cash flow from investing activities** (€-372 million) reflects the continuing investment efforts from the preceding year, after having isolated the two notable corporate transactions during the year, consisting of the acquisition of assets from Viesgo (€-732 million) and the cash obtained from the divestment from Naturgy (€3,352 million, net of taxes).

**Free cash flow** totaled €5,056 million, which is much higher than the €2,560 million recorded in the same period in 2017. This is primarily explained by the improvement in EBITDA and the divestment from Naturgy.

As a result of all of the above, after satisfying financing costs (€-458 million), shareholder returns (€-297 million) and the acquisition of treasury shares (€-1,595 million), **cash generated** amounted to €2,706 million (+95% higher than in 2017).

### 4.3. Financial overview

In line with the Group's commitment to strengthen its financial structure, in 2018 it continued with the various measures that has allowed it to reduce debt and improve the credit rating outlook for the Group (*Moody's* improved its credit rating from "Baa2" to "Baa1" and *Fitch* and *Standard & Poor's* improved their outlook from "stable" to "positive").

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.

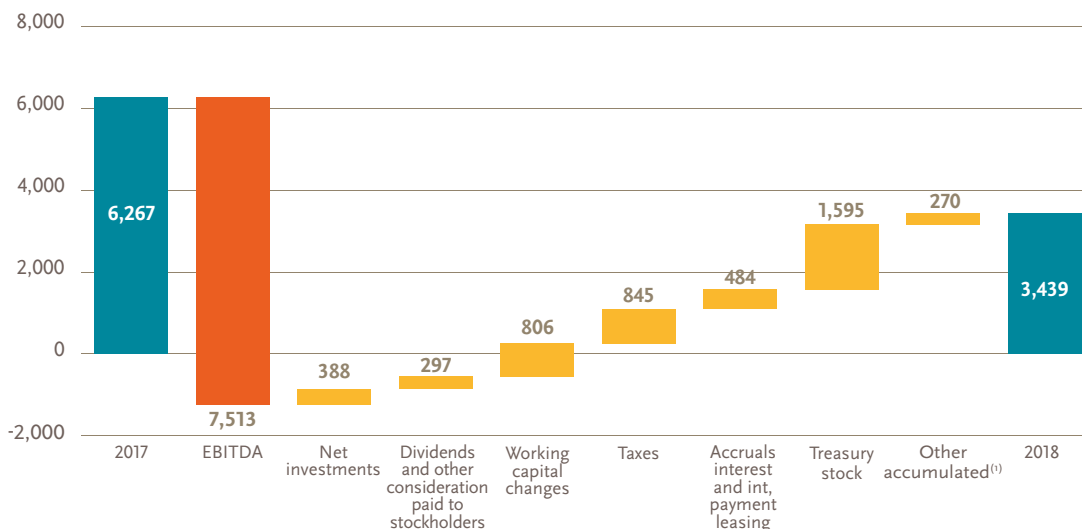
**2,706M€**  
cash generated

(Millones de euros)

Financial position indicators	12/31/2018	12/31/2017 <sup>(1)</sup>
Net debt (million euros)	3,439	6,267
Net Debt/EBITDA (x times)	0.5	0.9
Net debt/Total capital employed (%)	10.0	17.3
Liquidity/Gross current debt (x times)	2.3	1.8
Debt interest/EBITDA (%)	3.8	5.2

(1) Includes the modifications that were necessary with respect to the 2017 consolidated financial statements relating to the sale of the interest held in Naturgy (see Note 2.2 of the 2018 Consolidated Financial Statements).

#### Net debt variation



**10%**  
leveraging

(1) Includes dividends collected, other payments for operating activities and the effect of the exchange rate.

**2,828M€**  
million  
reduction  
in net debt



### Indebtedness

The **net debt** at the year-end is €3,439 million, significantly lower than at December 31, 2017 (€6,267 million), mainly due to the significant cash flow generated by the businesses and the divestment from Naturgy.

### Main funding operations

In 2018 there were no new issues of debentures or traded securities, and the cancellations or buybacks carried out are as follows:

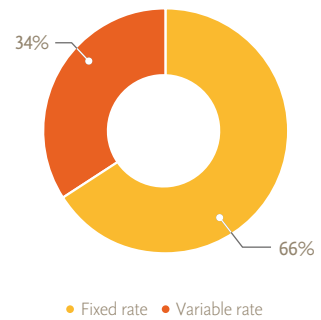
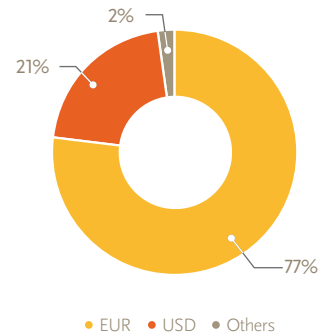
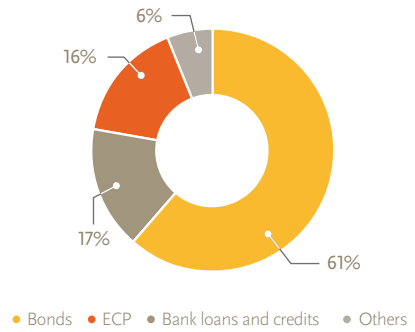
- In January 2018, ROGCI repurchased a fixed-annual 3.75% coupon bond maturing in February 2021 for a total of \$251 million.
- In February 2018 the bond issued by Repsol International Finance B.V. (RIF) was canceled at maturity. This bond was issued in September 2012 under the EMTN Program for a nominal amount of €750 million and an annual fixed coupon of 4.375%.
- On July 6, 2018 the bond issued by RIF in July 2016 under the EMTN Program was canceled at maturity. This bond was for a nominal amount of €600 million and had an annual coupon indexed to the 3-month Euribor plus a 70 basis point spread.

### Gross debt

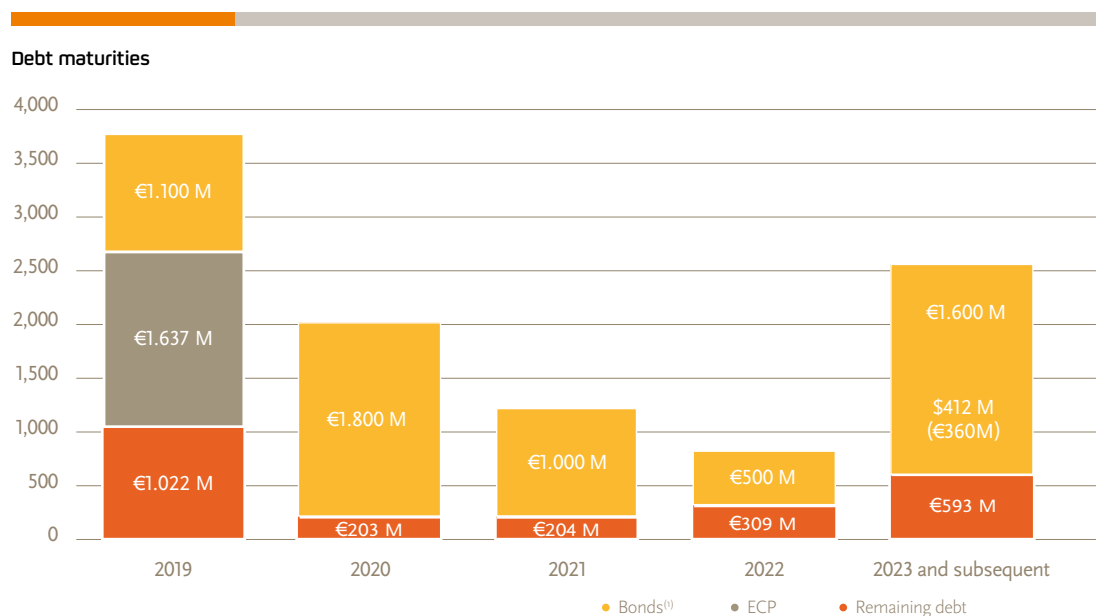
**Gross debt** at December 31, 2018 amounts to €10,326 million and mostly consists of financing obtained from capital markets (bonds and commercial paper) and, to a lesser extent, bank borrowings

**2.3 times**  
liquidity/gross  
current debt

Gross debt



The **maturity** of the gross debt is as follows:



**8,742 M€**  
liquidity

For further information, see Note 8 of the 2018 consolidated financial statements.

had undrawn credit lines amounting to €2,265 and €2,503 million at December 31, 2018 and 2017, respectively.

## Liquidity

Group liquidity, including committed and undrawn credit facilities, stood at €8,742 million at December 31, 2018, which is enough to cover its short-term gross debt maturities by a factor of 2.33. Repsol

## Credit rating

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

TERM	Standard & poor's		Moody's		Fitch	
	Repsol, S.A.	ROGCI	Repsol, S.A.	ROGCI	Repsol, S.A.	ROGCI
Long-term	BBB	BBB	Baa1	Baa1	BBB	BBB
Short-term	A-2	A-2	P-2	N.A.	F-3	F-3
Outlook	positive	positive	stable	stable	positive	positive
Date of latest modification	12/12/2018	12/12/2018	12/10/2018	12/10/2018	10/29/2018	10/29/2018

**Credit rating improvement**

**0.873**  
**€/per share**  
**shareholder**  
**returns**

### Treasury shares and own equity investments

In 2018 the acquisition of a total of 68,777,683 treasury shares is notable, of which 62,705,079 shares were acquired under the buyback program that started on September 4), representing approximately 4.31% of Repsol's share capital at September 30. The shares were amortized in order to offset the dilutive effect of the share capital increases carried out within the framework of the "Repsol Flexible Dividend" program.

At the end of 2018 the Group holds treasury shares representing 1.55% of its share capital. For further information, see Note 7.2 "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 23 days in 2018, which is 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 18 "Trade and other payables" of the consolidated financial statements.

## 4.4. Shareholder return

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 2018 and 2017 under the "Repsol Flexible Dividend"<sup>1</sup> program is as follows:

- Remuneration of € 0.873 per share<sup>2</sup> in 2018. Repsol paid out a gross total of €253 million to shareholders and distributed 68,777,683 new shares, worth €1,095 million, to those shareholders opting to take their dividend in the form of new company shares.
- Remuneration of €0.761 per share<sup>3</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.

In addition, in January 2019, under that program, replacing what would have been the interim dividend from 2018 profits, Repsol paid out €175 million in cash (€0.411 gross per right) to those shareholders opting to sell their bonus share rights back to the Company and delivered 31,481,529 shares, worth €453 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 bonus share issue on the same dates as those on which the company has traditionally paid the final dividend and the relevant share capital reduction through the redemption of treasury shares to offset the dilutive effect of those share capital increases.

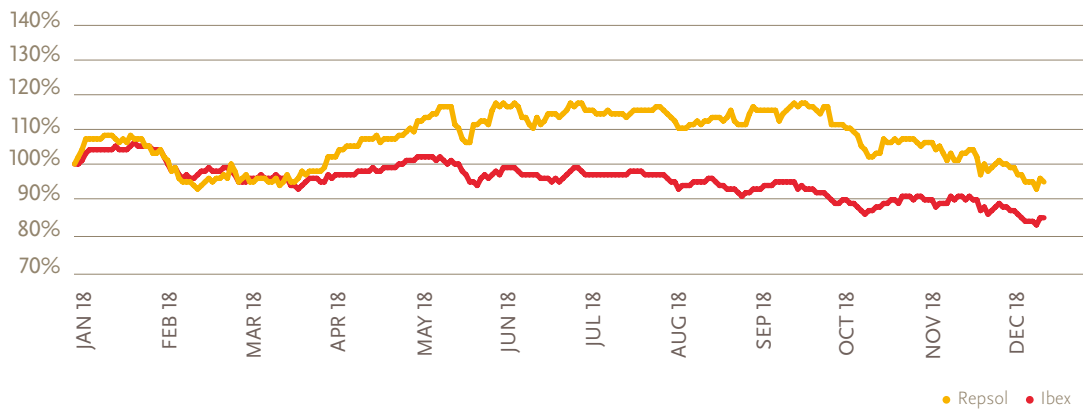
1. For additional information on the total remuneration received by shareholders and the aforementioned capital increases issued under the "Repsol Flexible Dividend" program, see section "Share capital" of Note 7 "Equity" of the 2018 consolidated financial statements.

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 2018 (€0.388 and €0.485 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 2017 (€0.335 and €0.426 gross per right, respectively).



### Repsol shares compared with the Ibex 35



Source: Bloomberg

**15%** ↑  
shareholder  
returns

## Our share price

The average share price during the period was 8% higher than in 2017. However, the price at the end of 2018 declined by 4.5%, beating the performance of the Ibex-35 index and the sector in Europe, which fell by 15% and 6.6%, respectively.

During the first nine months of the year the price of Repsol shares was driven upwards by the progress made in attaining the company's strategic objectives and the recovery of oil prices. Brent crude rose from \$67 per barrel at the start of the year to around \$85 in October, while ending the year at approximately \$55 due to the macroeconomic uncertainties that have had a negative impact on the price of Repsol shares and those of its European peers.

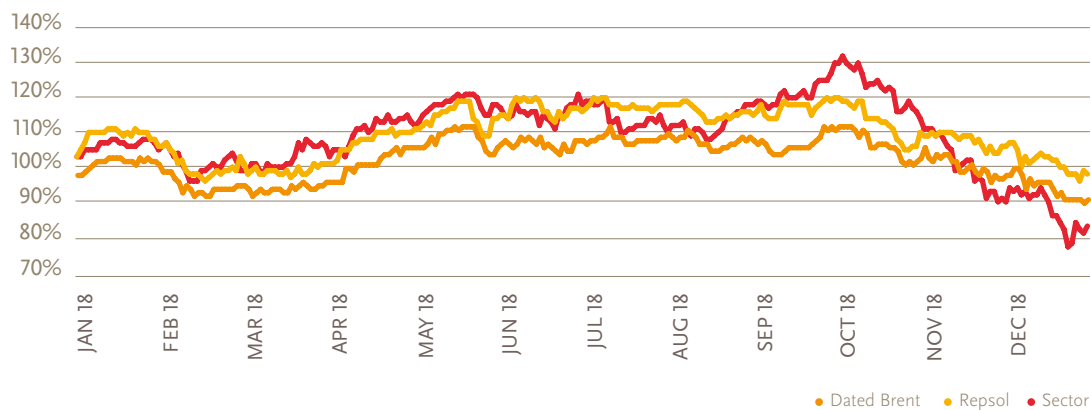
The Group's main stock market indicators in 2018 and 2017 are detailed below:

Main stock market indicators	2018	2017
Shareholder return <sup>(1)</sup> (€/share)	0.87	0.76
Share price at period-end <sup>(2)</sup> (euros)	14.08	14.75
Period average share price (euros)	15.78	14.57
Maximum price during the period (euros)	17.29	16.16
Minimum price during the period (euros)	13.74	13.40
Number of shares outstanding at end of the year (million)	1,527	1,527
Market capitalization at end of the year <sup>(3)</sup> (million euros)	21,506	22,521
PER <sup>(4)</sup>	9.7	10.9
Dividend yield <sup>(5)</sup> (%)	6.2	5.7
Book value per share <sup>(6)</sup> (euros)	19.2	19.5

- (1) For each period, shareholder return includes 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 on the Spanish stock exchanges.
- (3) Year-end closing market price per share, times the number of outstanding shares.
- (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.

**8%** ↑  
average  
share price

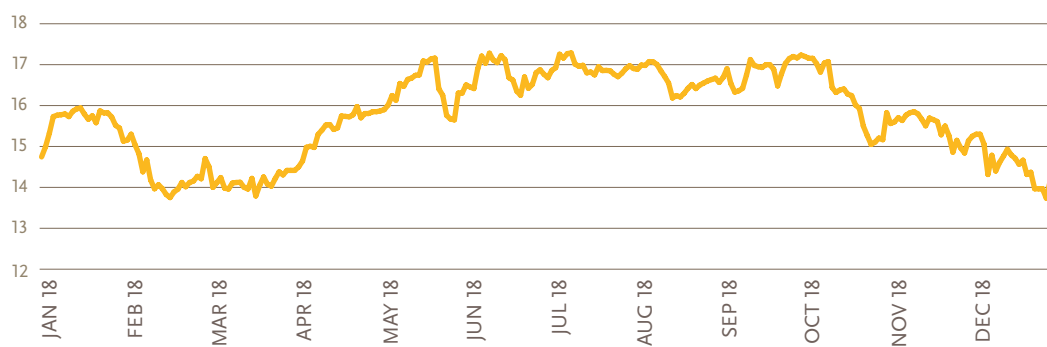
**Repsol share price vs. European oil sector<sup>(1)</sup> and crude**



Source: Bloomberg

(1) European companies in the sector taken into consideration: BP, Shell, Total, Eni, Equinor, Galp and OMV.

**Share price evolution**



# 5. Business performance

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

### Our activities

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

### Main operating figures

	2018	2017
Net undeveloped acreage (Km <sup>2</sup> )	232,331	199,599
Net developed acreage (Km <sup>2</sup> )	5,494	5,783
Reserves of crude oil, condensate and LPG (Mbbbl)	638	617
Natural gas reserves (Mboe)	1,702	1,738
Proven reserve replacement ratio (%) <sup>(1)</sup>	94	89
Net production of liquids (kbbbl/d)	261	255
Net production of gas (kboe/d)	454	440
Net production of hydrocarbons (kboe/d)	715	695
Average crude oil price (\$/bbl)	63.9	49.6
Average gas realization price (\$/bbl)	3.4	2.9
Bonds, dry boreholes, general and administrative expenses <sup>(2)</sup>	457	457

(1) Reserve replacement ratio: (quotient between the total incorporations of proven reserves in the period and the production of the period).

(2) Only direct costs allocated to exploration projects.

### Our performance in 2018

Millions euros	2018	2017	Δ
Profit from operations	2,514	1,009	1,505
Tax on profits	(1,211)	(408)	(803)
Participating and minority interests	22	31	(9)
<b>Adjusted Net Income<sup>(1)</sup></b>	<b>1,325</b>	<b>632</b>	<b>693</b>
Special items	(326)	(151)	(175)
<b>Net Income</b>	<b>999</b>	<b>481</b>	<b>518</b>
Effective tax rate (%)	(48)	(40)	(8)
<b>EBITDA</b>	<b>4,801</b>	<b>3,507</b>	<b>1,294</b>
<b>Investments</b>	<b>1,973</b>	<b>2,089</b>	<b>(116)</b>

(1) Adjusted Net Income by geographical area.

Geographical area	2018	2017	Δ
Europe, Africa and Brazil	768	355	413
Latin America - Caribbean	501	386	115
North America	212	(43)	255
Asia and Russia	264	161	103
Exploration and others	(420)	(227)	(193)
<b>Adjusted Net Income</b>	<b>1,325</b>	<b>632</b>	<b>693</b>

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

- **Development:** Drilling of production wells and facilities for the production of reserves.
- **Production:** Production of hydrocarbons.
- **Dismantling:** Abandonment and refurbishment of all facilities to leave the area in the same environmental condition as prior to the commencement of E&P operations.

### Main events of the period

2018 was a year marked by volatility in crude oil prices. In this sense, in the *Upstream* segment, Repsol has focused its efforts on improving efficiency, reducing the cash breakeven figure and the optimization of the portfolio.

- The **production average** increased by 3% compared to 2017, reaching 715 kboe/d in 2018. This increase is mainly due to ramp-up of production in Libya, the implementation of organic development projects TROC and *Juniper* (Trinidad and Tobago), *Reggane* (Algeria) the acquisition of the *Visund* field (Norway), *Shaw and Cayley* (United Kingdom), and the production of new wells in *Marcellus* (USA). This was offset by the effect of lower production in Venezuela and divestitures in the SK field (Russia).
- **Exploratory campaign:** In 2018 21 exploratory and 1 delineation/appraisal drillings were completed, 5 with positive results (4 exploratory in Colombia and 1 appraisal in Russia), 16 with negative results and 1 under evaluation (Norway).
- **Acreage:** New exploration blocks have been awarded in different bidding rounds in Mexico, Brazil, Norway, Greece, Bulgaria and Alaska and by direct award in Indonesia, and participation in Romania, Gabon and Angola has ceased.
- The incorporation of **proven net reserves** in 2018 was 246 Mboe, mainly from extensions and discoveries in the United States, Trinidad and Tobago and Canada; and revisions of prior estimates in Brazil, the United States, Norway, Algeria and the United Kingdom, including the change in the methodology for calculating net reserves for certain service contracts in Latin America. The **total Reserve Replacement Ratio** was 94% in 2018 (89% in 2017)

**715 kboe/d**  
net output

**246** ↑  
**Mboe**  
addition  
of reserves

# North America

**64 Mboe**  
net output

**9,998 km<sup>2</sup>**  
exploration acreage

**535 Mboe**  
proven reserves



<b>Operations performance</b>	<b>2018</b>	<b>2017</b>
Net developed acreage (Km <sup>2</sup> )	2,134	2,199
Net undeveloped acreage (Km <sup>2</sup> )	12,562	8,538
Net development acreage (Km <sup>2</sup> )	4,698	5,234
Net exploration acreage (Km <sup>2</sup> )	9,998	5,503
Proven reserves (Mboe)	535	504
Completed and ongoing exploratory wells <sup>(1)</sup> :		
Positives	-	1
Negatives	2	-
Under evaluation	-	-
In progress	-	2
Development wells completed:		
Positives	136	153
Negatives	-	-
Under evaluation	-	-
Net production of liquids (Mbbbl)	17	18
Net production of natural gas (bcf)	261	256
Total net output (Mboe)	64	63
Oil production wells	1,439	2,657
Gas production wells	2,795	2,219
Average crude oil realization price (\$/bbl)	58.5	47.4
Average gas realization price (\$/boe)	14.0	14.6

(1) Does not include appraisal wells: 1 ongoing in 2018 and 1 positive in 2017.

<b>Sustainability performance</b>	<b>2018</b>	<b>2017</b>
No. of employees <sup>(1)</sup>	923	961
% of women	32	33
% of women in leadership positions	23	24
Spilled hydrocarbons (>1bbl) (t)	12.72	17.63
CO <sub>2</sub> e Emissions (Mt)	1.5	1.23
TFR	4.26	3.16
PSIR	2.82	3.08
Voluntary social investment (thousands of €)	981	1,083

(1) Includes data of the newly acquired company Viesgo.



Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
EEUU	Shenzi	28.00%	P	L-G	Deep waters of the Gulf of Mexico south east of Louisiana.
EEUU	Eagle Ford	28.97%	P	L-G	Non-conventional onshore gas with associated liquids to the south of the state of Texas
EEUU	Marcellus	84.55%	P	G	Non-conventional shale gas in the states of Pennsylvania, New York and West Virginia, mainly.
EEUU	Buckskin	22.50%	D	L-G	Deep waters of the Gulf of Mexico south-east of Louisiana.
EEUU	North Slope - Pikka	49%	E	L-G	Area with discoveries in appraisal phase
EEUU	North Slope - Horseshoe	25.00%	E	L-G	Exploratory area that includes the Horseshoe discovery in northern Alaska
EEUU	North Slope (rest)	Average 33.22%	E	-	Extensive exploratory area, mainly onshore, in northern Alaska
EEUU	Leon	60.00%	E	L-G	Deep-sea exploratory asset in the Gulf of Mexico south west of Louisiana State
Canadá	Edson& Wild River	Average 65.77%	P	L-G	Productive area in the heart of the state of Alberta. Unconventional
Canadá	Chauvin	Average 67.02%	P	L-G	Heavy crude oil located in Alberta/Saskatchewan. Unconventional
Canadá	South Duvernay	100%	P	L-G	An area in the development phase, with oil and gas production, in the central Alberta region. Unconventional

(1) More information in Appendix IC of the Consolidated Financial Statement.

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

## Main events of the period

- **USA: start of *Buckskin* development, departure from *Midcontinent* and new blocks in Alaska**

It has been announced that the drilling operations included within the development and production program of the ***Buckskin*** deep water project (Repsol holds a 22.5% stake, the operator being LLOG) in the Keathley Canyon area in the US Gulf of Mexico will commence. The Seadrill West Neptune drilling platform (sixth generation class DP3 cutting-edge vessel for deepwater drilling) was used for the development drilling at Buckskin. Buckskin is expected to commence production in the second half of 2019. Also, Repsol's departure from the ***MidContinent*** project located between the states of Kansas and Oklahoma in the US onshore has been made final.

In addition, 69 exploration blocks have been obtained in the North Slope area in Alaska, of which Repsol operates 34 of them with a 100% stake and the rest are operated by Oil Search with a 25% stake of Repsol and, by the end of the year, another 12 blocks to the east (9 blocks) and the south (3) of Pikka Unit. All of them were obtained through bidding rounds.

In January 2019, it was announced that the latest exploratory work conducted by Repsol in Alaska confirmed the presence of hydrocarbons in the southern part of the Pikka Unit, where the first appraisal well, known as Pikka-B, has been completed.

- **Canada: average daily production**

The average daily production for the year was 61,500 Boed.

- **Mexico: new exploration blocks**

Repsol, together with different consortiums, has acquired 3 new exploration blocks (Blocks 10, 14 and 29) in deep waters in the Gulf of Mexico, in which the corresponding Social Impact Assessments were presented to the Ministry of Energy.

In addition, the National Hydrocarbons Commission (CNH) has announced the results of the tender for shallow waters in the Gulf of Mexico in which Repsol obtained exploration rights for Areas 5 and 12 located in the Burgos Basin. In both cases, the minimum work commitment includes carrying out seismic acquisition campaigns in the period of 2019-2022.

All the blocks are operated by Repsol.

# Latin America - Caribbean

**125Mboe**  
net output

**90,959 km<sup>2</sup>**  
exploration acreage

**1,419Mboe**  
proven reserves



<b>Operations performance</b>	<b>2018</b>	<b>2017</b>
Net developed acreage (Km <sup>2</sup> )	682	688
Net undeveloped acreage (Km <sup>2</sup> )	95,104	51,550
Net development acreage (Km <sup>2</sup> )	4,827	4,475
Net exploration acreage (Km <sup>2</sup> )	90,959	47,763
Proven reserves (Mboe)	1,419	1,490
Completed and ongoing exploratory wells <sup>(1)</sup> :		
<i>Positives</i>	4	3
<i>Negatives</i>	6	4
<i>Under evaluation</i>	-	-
<i>In progress</i>	1	5
Development wells completed:		
<i>Positives</i>	28	69
<i>Negatives</i>	1	2
<i>Under evaluation</i>	3	3
Net production of liquids (Mbbbl)	36	38
Net production of natural gas (bcf)	504	498
Total net output (Mboe)	125	127
Oil production wells	771	873
Gas production wells	227	241
Average crude oil realization price (\$/bbl)	59.6	47.0
Average gas realization price (\$/boe)	15.9	13.3

(1) Does not include appraisal wells: no activity in 2018 and 1 negative in 2017.

<b>Sustainability performance</b>	<b>2018</b>	<b>2017</b>
No. of employees <sup>(1)</sup>	1,218	1,234
% of women	24	25
% of women in leadership positions	20	20
Spilled hydrocarbons (>1bbl) (t)	0.32	11
CO <sub>2</sub> e Emissions (Mt)	0.84	0.96
TFR	1.41	1.71
PSIR	0.19	0.80
Voluntary social investment (thousands of €)	4,156	5,250

(1) Includes data of the newly acquired company Viesgo.



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	Columbus offshore Basin
Brazil	BM-S-9 (Sapinhoa)	15.00%	P	L-G	Ultra-deep waters in the pre-salt of the Santos Basin
Brazil	BM-S-9A (Lapa)	15.00%	P / D	L	Ultra-deep waters in the pre-salt of the Santos Basin
Brazil	BM-S-50 (Sagitario)	12.00%	E	L-G	Ultra-deep waters in the pre-salt of the Santos Basin
Brazil	BM-C-33 (C-M-539)	21.00%	D	L-G	Ultra-deep waters in the pre-salt of the Campos Basin
Brazil	Albacora Leste	6.00%	P	L-G	Deep Waters in the Campos Basin
Bolivia	Margarita - Huacaya (Caipipendi)	37.50%	P	L-G	Southern Sub-Andean Basin to the south of the country
Bolivia	Sábalo	24.17%	P	L-G	Southern Sub-Andean Basin to the south of the country
Bolivia	San Alberto	24.17%	P	L-G	Southern Sub-Andean Basin to the south of the country
Colombia	Equion	Average 28.94%	P / E	L-G	Llanos Basin in the center of the country
Colombia	CPO-9 Akacias	45.00%	P / D	L	Llanos Basin in the center of the country
Colombia	Cravo Norte	5.63%	P	L	Llanos Basin next to the border with Venezuela
Peru	Camisea (Blocks 56 and 88)	10.00%	P	L-G	Ucayali Basin, in the Andean region
Peru	Block 57 (Kinteroni & Sagari)	53.84%	P / D	L-G	Madre de Dios Basin in the Andean region
Venezuela	Cardón IV (Perla)	50.00%	P / D	L-G	Shallow waters of the Gulf of Venezuela Basin
Venezuela	Quiriquire (E.M)	40.00%	P	L-G	Maturin Onshore Basin
Venezuela	Quiriquire Gas	60.00%	P	G	Gas in the onshore Basin of Maturin
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 crude oil from the Orinoco oil belt, in the south east of the country

(1) More information in Appendix IC of the Consolidated Financial Statement.

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

### Main events of the period

- **Bolivia: Extension of Caipipendi and new exploratory area in Iñiguazu**

The official ratification of the extension of the of the Caipipendi License in the Margarita field has been received for 10 years (until 2041) plus 5 additional years depending on the volume of reserves to be incorporated and includes exploratory investments in the projects *Boyuy* and *Boicobo South*. This extension was previously approved by the Bolivian Assembly in December 2017.

The Assembly also approved the law that awarded the Exploration and Exploitation contract for the Iñiguazu area, of which Repsol is the operator and owner of 37.5% (15% directly and the rest through its stake in YPFB Andina S.A.). This area is located within the Traditional Hydrocarbon Zone of Bolivia, south of the Caipipendi Block, in the department of Tarija (Southern Sub-Andean).

- **Brazil: New exploration blocks and declaration of commerciality for the Saphinoá environment**

The National Agency of Petroleum (ANP) has announced the winners of the BR-15 Round . Repsol has obtained 3 new exploration blocks with a 40% stake in all of them in association with Chevron (40%) and Wintershall (20%). Two of the blocks are in the Campos Basin (C-M-821 and 823) and will be operated by Repsol and the third (S-M764) is in the Santos Basin and will be operated by Chevron.

Petrobras has submitted the Declaration of Commerciality for the "Sapinhoá Environment" to the ANP. This area was obtained in the second bidding round of the Production Sharing Contract (PSC) in October 2017 by the consortium formed by Petrobras (45% WI and operator), Shell (30%) and Repsol Sinopec (25%), with the company Pre-salt Petroleo Brasileiro (PPSA) as contract administrator. The "Sapinhoá Environment" consists of three fields "Sapinhoá Northeast", "Sapinhoá Northwest" and "Sapinhoá Southeast" being adjacent to the Sapinhoá block, which is currently in production and operated by the same consortium. The joint exploitation of both areas "unitization" needs this Declaration of Commerciality as a requirement of the ANP.

● **Colombia: discoveries in the Llanos Basin**

After the tests carried out in the exploratory well Lorito-1 in block CPO-9 (Ecopetrol: 55% WI and operator; Repsol: 45%), has been confirmed as a commercial discovery. The same block has announced the approval of the start of Phase 1 of the Development Plan for the Akacias project. This plan includes the drilling of 19 production wells and the expectations with this campaign, which began with the drilling of the AK-12 well, are to reach a production of 16,000 boe/d (including existing wells).

In addition, three other exploratory discoveries have been made in the Cosecha block, with Cosecha-V-01, REX-NE-01 and Cosecha-C-01.

● **Perú: new production well in Sagari**

As part of the Sagari Field Development Plan the production of a new well in block 57 has begun and the Compression project has been completed. This field located in the Ucayali-Madre de Dios Basin one of the most prolific gas areas in the country, is operated by Repsol with a 53.84% stake and began production at the end of 2017.

● **Trinidad and Tobago: installation of the production platform and approval of new developments**

The Angelin non-operated production platform reached the country's waters and was installed in the West Block field, 60 km from the south-eastern coast. The facilities will be operated remotely. and the gas generated will flow to the Serrette platform through a new 21 km pipeline and then to the Cassia Hub for processing. The first gas extraction is expected in the first half of 2019.

Two new developments for existing gas production blocks were approved in December ("*Cassia Compression*" in the "*SEG Cassia block*" and "*Matapal*" in the "*East Mayaro*" block).

● **Venezuela: a difficult environment**

In 2018, Repsol's average production in Venezuela amounted to 62 thousand equivalent barrels of oil and day, and its proven reserves at December 31 amounted to 514 equivalent barrels of oil.

During the period, the situation of political instability, economic recession and inflation continued (with successive extensions of the State of Economic Emergency). Extraordinary write-offs of Group assets in Venezuela were recognized, partly as a result of the modification of the operating plans of production assets. For further information, see Note 20.3 of the 2018 Consolidated Financial Statements.





# Asia and Oceania

**29 Mboe**

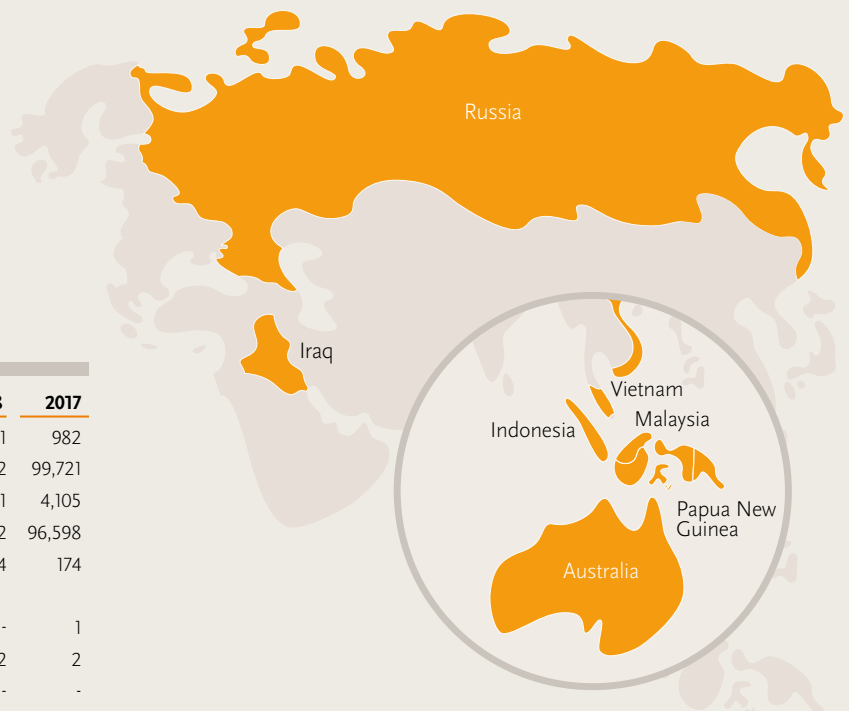
net output

**98,152 km<sup>2</sup>**

exploration acreage

**154 Mboe**

proven reserves



## Operations performance

	2018	2017
Net developed acreage (Km <sup>2</sup> )	1,051	982
Net undeveloped acreage (Km <sup>2</sup> )	100,052	99,721
Net development acreage (Km <sup>2</sup> )	2,951	4,105
Net exploration acreage (Km <sup>2</sup> )	98,152	96,598
Proven reserves (Mboe)	154	174
Completed and ongoing exploratory wells <sup>(1)</sup> :		
Positives	-	1
Negatives	2	2
Under evaluation	-	-
In progress	1	-
Development wells completed:		
Positives	48	31
Negatives	-	1
Under evaluation	1	3
Net production of liquids (Mbbbl)	10	9
Net production of natural gas (bcf)	108	122
Total net output (Mboe)	29	31
Oil production wells	625	606
Gas production wells	82	78
Average crude oil realization price (\$/bbl)	67.3	51.2
Average gas realization price (\$/boe)	37.7	29.6

(1) Does not include appraisal wells: 1 positive in 2018 and no activity in 2017

## Sustainability performance

	2018	2017
No. of employees <sup>(1)</sup>	736	1,038
% of women	32	27
% of women in leadership positions	18	18
Spilled hydrocarbons (>1bbl) (t)	-	-
CO <sub>2</sub> e Emissions (Mt)	7.83	8.38
TFR	0.73	1.16
PSIR	0.37	0.25
Voluntary social investment (thousands of €)	602	1,779

(1) Includes data of the newly acquired company Viesgo.



Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Russia	SNO	49.00%	P / D	L	Various assets located in the Volga-Urales Basin
Russia	TNO	48.79%	P	L	Various assets located in the Volga-Urales Basin
Russia	Karabashsky	71.51%	E	L-G	Exploration 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	Production block in the offshore west of the Malay Basin
Malaysia	Kinabalu	60.00%	P	L	Production block in the offshore 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	51.75%	D / E	L-G	Exploratory block containing CRD development area in the Nam Con Son offshore Basin

(1) More information in Appendix IC of the Consolidated Financial Statements.

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

### Main events of the period

- **Malaysia: extension of the contract for the sale of gas in PM-3 CAA and production of new wells**

Repsol is the operator of the *offshore block* PM-3 CAA with a stake of 41.44%. For this block an extension of the gas sales contract in accordance with the extension until December 2027 of the production sharing contract signed in 2016 and gas production has begun in the Bunga Pakma gas development project.

In addition, new wells have been put into production in the project to redevelop the Kinabalu offshore block in the west of the Malay Basin. In 2017, crude oil production began in this project in which Repsol is the operating company with a 60% stake. Annual average production in the block in 2018 was 17,050 boe/d.

- **Russia: positive survey in the West Siberia Basin**

The evaluation/appraisal 10-R survey in the Karabashsky 2 block in the West Siberia Basin was positive.

- **Vietnam: interruption of activities in Ca Rong Do**

Repsol has been instructed, for the time being, not to continue with the implementation of the activities programmed for the Ca Rong Do development project in the offshore Block 07/03, (for more information see Note 20.3 to the consolidated Financial Statements).

- **Indonesia: new exploration block new development wells and an important discovery.**

The awarding of the South East Jambi onshore exploration block, in which Repsol will be the operating company with a 67% stake, and the other partner being the company Mitsui Oil Exploration, has been formalized.

In the Corridor block, three development wells were completed in the Corridor block, one in the Sumpal field and two in the Suban field. Two of these wells (Sumpal-8 and Suban-16) began producing in 2018 and the third one (Suban-18) will be connected at the end of the first half of 2019. The progress of the Compression project in the Suban field has exceeded 80% in 2018 and the start-up is estimated to take place in the second half of 2019.

In **February 2019**, the announcement was made of a major discovery of the Kaliberau Dalam-2X (KBD-2X) exploratory well in the Sakakemang onshore block in the south of the island of Sumatra in Indonesia, where Repsol is the operator with a 45% stake. Preliminary estimations of recoverable resources are of about 2 trillion cubic feet of gas, which makes it one of the largest hydrocarbon discoveries in the world of the past twelve months and the largest discovery of gas in Indonesia in the past 18 years.



# Europe

**22 Mboe**

net output

**11,922 km<sup>2</sup>**

exploration acreage

**102 Mboe**

proven reserves



## Operations performance

	2018	2017
Net developed acreage (Km <sup>2</sup> )	533	680
Net undeveloped acreage (Km <sup>2</sup> )	12,511	15,891
Net development acreage (Km <sup>2</sup> )	1,122	1,199
Net exploration acreage (Km <sup>2</sup> )	11,922	15,373
Proven reserves (Mboe)	102	59
Completed and ongoing exploratory wells <sup>(1)</sup> :		
<i>Positives</i>	-	-
<i>Negatives</i>	3	2
<i>Under evaluation</i>	1	-
<i>In progress</i>	1	-
Development wells completed:		
<i>Positives</i>	4	4
<i>Negatives</i>	-	-
<i>Under evaluation</i>	-	-
Net production of liquids (Mbbbl)	16	16
Net production of natural gas (bcf)	31	17
Total net output (Mboe)	22	19
Oil production wells	231	222
Gas production wells	12	6
Average crude oil realization price (\$/bbl)	71.2	55.2
Average gas realization price (\$/boe)	46.8	34.2

(1) No activity during 2017 and 2018.

## Sustainability performance

	2018	2017
No. of employees <sup>(1)</sup>	908	886
% of women	32	31
% of women in leadership positions	25	24
Spilled hydrocarbons (>1bbl) (t)	-	-
CO <sub>2</sub> e Emissions (Mt)	0.05	0.06
TFR	4.77	1.88
PSIR	-	1.92
Voluntary social investment (thousands of €)	444	340

(1) Includes data of the newly acquired company Viesgo.



Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Norway	Operating Assets (Varg, Gyda, Yme...)	Average 64.68%	P	L-G	Offshore assets located in the North Sea to the south of the country
Norway	Non-Operated Assets (Visund, Brage, Gudrun...)	Average 18.26%	P	L-G	Offshore assets located in the North Sea to the south of the country
United Kingdom	RSRUK operated assets (Beatrice, Claymore, Orion, Piper ...)	Average 40.18%	P	L-G	Offshore assets located mainly in the Central North Sea Basin
United Kingdom	RSRUK Non-operated assets (Balmoral, Cawdor...)	Average 5.81%	P	L-G	Offshore assets located mainly in the Central North Sea Basin

(1) More information in Appendix IC of the Consolidated Financial Statements.

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

## Main events of the period

### • Bulgaria: new exploration block

Repsol has acquired a 20% stake in the Khan Kubrat block that Shell operates with 50%, with the remaining 30% belonging to Woodside. This block is located to the south of the Han Asparuh block in the deep waters of the Black Sea, in which Repsol has a 30% stake together with Total, operator with 40% and OMV with 30%.

### • Spain: Casablanca extension platform

The Spanish authorities have approved the extension for 10 years of the operating permit for the Casablanca platform located in the waters of the Mediterranean off the coast of Tarragona.

### • Greece: exploration block award

Repsol has been awarded the Ionian offshore exploration block in which it has a 50% stake with the national company Hellenic. This award is pending ratification by the country's authorities.

### • Norway: entry into Visund and Mikkel, approval of YME development plan and new exploration blocks

Repsol has acquired 7.7% of the Visund field from Total, situated in the waters of the North Sea of Norway. The field, operated by Equinor, is an oil and gas field located 22 kilometers off the coast of Norway. In September, two months ahead of schedule, the first well of the "Visund Nord IOR (improved oil recovery)" secondary recovery project was put into production.

In addition, the Norwegian authorities have approved the Development Plan for the YME field (located in blocks PL 316

and PL 316B of the Egersund Basin), presented at the end of 2017 by the consortium led by Repsol as the operating company.

In addition, drilling of well 15/03-11 (Sigrun) in the North Sea has been completed under license PL 025 (Gudrun), which is operated by the consortium formed by Equinor (36% WI and operator), Neptune Energy (25%), OMV (24%) and Repsol (15%). The profitability of the discovery is currently being analysed with a possible development connected to the Gudrun field. Sigrun is located 10 kilometers south east of this camp and 225 kilometers west of Stavanger Harbor.

Repsol has also obtained 3 new exploration blocks in the Egersund and South Viking Graben marine Basins, operating two of them, PL-909 and PL-910 (with a 70% and 61.11% stake, respectively), and in consortium with OMV (operator) in the third, PL-913, with a 50% stake. In January 2019, the Norwegian Ministry of Petroleum and Energy announced the award to Repsol of a stake in three new exploratory licenses and the extension of an existing license.

In February 2019, Repsol announced that it had reached an agreement for the acquisition from Total of 7.65% of the Mikkel field in Norway, which currently produces a total of 50,000 oil equivalent barrels a day.

### • Romania: exploration blocks output

Repsol's participation in the exploration activity of its four blocks in which it had a 49% stake together with the operating partner OMV Petrom has been discontinued.

# Africa

**21Mboe**

net output

**10,590 km<sup>2</sup>**

exploration acreage

**129Mboe**

proven reserves



<b>Operations performance</b>	<b>2018</b>	<b>2017</b>
Net developed acreage (Km <sup>2</sup> )	1,095	1,234
Net undeveloped acreage (Km <sup>2</sup> )	12,100	23,899
Net development acreage (Km <sup>2</sup> )	2,605	2,744
Net exploration acreage (Km <sup>2</sup> )	10,590	22,389
Proven reserves (Mboe)	129	128
Completed and ongoing exploratory wells <sup>(1)</sup> :		
<i>Positives</i>	-	-
<i>Negatives</i>	3	1
<i>Under evaluation</i>	-	-
<i>In progress</i>	-	1
Development wells completed:		
<i>Positives</i>	7	12
<i>Negatives</i>	-	1
<i>Under evaluation</i>	-	-
Net production of liquids (Mbbbl)	16	12
Net production of natural gas (bcf)	26	8
Total net output (Mboe)	21	14
Oil production wells	94	248
Gas production wells	93	84
Average crude oil realization price (\$/bbl)	71.1	52.8
Average gas realization price (\$/boe)	29.5	27.1

(1) Does not include appraisal wells: No activity in 2018 and 2017.

<b>Sustainability performance</b>	<b>2018</b>	<b>2017</b>
No. of employees <sup>(1)</sup>	163	172
% of women	14	15
% of women in leadership positions	3	4
Spilled hydrocarbons (>1bbl) (t)	-	-
CO <sub>2</sub> e Emissions (Mt)	-	0.0001
TFR	-	-
PSIR	-	-
Voluntary social investment (thousands of €)	2,672	3,990

(1) Includes data of the newly acquired company Viesgo.



Country	Main assets <sup>(1)</sup>	% Repsol	P/D/E <sup>(2)</sup>	L/G <sup>(2)</sup>	Description
Algeria	Tin Fouyé Tabankort (TFT)	22.62%	P	L-G	Production block located in the Illizi Basin in the south east of the country.
Algeria	Reggane Nord	29.25%	P / D	G	Gas assets in the center of the country in the Reggane Basin to the south of the country
Algeria	Greater MLN/ Menzel Ledjmet Sud-Est	35.00%	P	L	Assets located in the Ghadames/Berkine Basin, east of the country
Algeria	South East Illizi	72.50%	E	L-G	Exploration block located in the Illizi Basin in the south east of the country.
Libya	NC-115	20.00%	P	L	Asset located in the Murzuk Basin in the south west of the country.
Libya	NC-186	16.00%	P	L	Asset located in the Murzuk Basin in the south west of the country.

(1) More information in Appendix II of the Consolidated Financial Statements.

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

### Main events of the period

- Algeria: TFT license extension

Repsol and Total have reached an agreement with the Algerian state-owned company Sonatrach to extend for 25 years the license for the Tin Fouye Tabankort (TFT) gas and condensate field in the Illizi Basin.

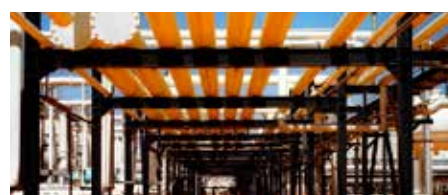
- Libya: production disruption

The situation of political uncertainty continues, affecting the security conditions of the country and the oil industry, for further information, see Note 20.3 to the 2018 Consolidated

Financial Statements. During the month of December there has been an interruption in production. Repsol's net crude oil production in 2018 amounted to 35,700 boed (vs. 25,400 boed during the same period in 2017).

- Angola and Gabon: Relinquishment of exploratory blocks

Repsol's participation in this exploratory activity has been discontinued.



## 5.2. Downstream

### Our activities

- **Refining:** obtaining fuels, combustible materials and other petroleum derivatives.
- **Chemicals:** to produce and market a wide variety of products, ranging from base petrochemicals to derivatives.
- **Trading:** transport and supply of crude oil, and products to the refining system, marketing of crude oil, products outside the proprietary system.
- **Marketing:** marketing and sale of the company's petroleum products and other products through its network of service stations (SS) and other sales channels that provide a differentiated service to sectors such as aviation, marine, large industries and final consumers.
- **LPG:** production, distribution and sale of both wholesale and retail liquefied petroleum gases (LPG).
- **Lubricants, Asphalts and Specialized Products:** national and international production and marketing of lubricants, lubricant base oils, asphalt bitumens, extender oils, sulfur, paraffin waxes and propellant gases.
- **Wholesaler, marketing and Trading Gas:** supply and trading of LNG and natural gas, regasification of LNG and wholesale marketing and trading of natural gas in North America and Spain.
- **Electricity and Gas:** low emission power generation and trading of electricity and gas, as well as development of renewable energy projects.

Main figures	2018	2017
<b>Refining capacity (kbb/d)</b>	<b>1,013</b>	<b>1,013</b>
Europe (Includes stake in ASES)	896	896
Rest of the world	117	117
<b>Conversion rate in Spain (%)</b>	<b>63</b>	<b>63</b>
<b>Spain conversion refining use (%)</b>	<b>107</b>	<b>104</b>
<b>Spain distillation refining use (%)</b>	<b>93</b>	<b>94</b>
<b>Crude oil processed (millions of t)</b>	<b>46.6</b>	<b>47.4</b>
Europe	41.6	41.9
Rest of the world	5.0	5.4
<b>Refining margin indicator (\$/Bbl)</b>		
Spain	6.7	6.8
Peru	3.0	5.4
<b>Number of service stations</b>	<b>4,849</b>	<b>4,709</b>
Europe	4,121	4,219
Rest of the world	728	490
<b>Sales of petroleum products (kt)</b>	<b>51,766</b>	<b>51,836</b>
Europe	45,316	45,081
Rest of the world	6,450	6,755
<b>Sales of petrochemical products (kt)</b>	<b>2,610</b>	<b>2,855</b>
Europe	2,137	2,412
Rest of the world	473	443
<b>LPG Sales (kt)</b>	<b>1,330</b>	<b>1,375</b>
Europe	1,304	1,356
Rest of the world	26	19
<b>Gas sales in North America (Tbtu)</b>	<b>520</b>	<b>496</b>
<b>Regasified LNG (100%) at Canaport (Tbtu)</b>	<b>16</b>	<b>15</b>
<b>Electricity generation capacity (MW)</b>	<b>2,952</b>	<b>600</b>

### Our performance in 2018

Millions euros	2018	2017	Δ
Profit from operations	2,143	2,467	(324)
Tax on profits	(526)	(572)	46
Participating and minority interests	(34)	(18)	(16)
<b>Adjusted Net Income<sup>(1)</sup></b>	<b>1,583</b>	<b>1,877</b>	<b>(294)</b>
Inventory Effect	(68)	104	(172)
Special items	25	(121)	146
<b>Net Income</b>	<b>1,540</b>	<b>1,860</b>	<b>(320)</b>
Effective tax rate (%)	25	23	2
<b>EBITDA</b>	<b>2,859</b>	<b>3,386</b>	<b>(527)</b>
<b>Investments<sup>(2)</sup></b>	<b>1,831</b>	<b>805</b>	<b>1,026</b>

(1) Detail by geographical area:

Geographical area	2018	2017	Δ
Europe	1,500	1,852	(352)
Rest of the world	83	25	58
<b>Adjusted Net Income</b>	<b>1,583</b>	<b>1,877</b>	<b>(294)</b>

(2) Includes investment in Viesgo and Valdesolar in 2018

Sustainability performance	2018	2017	Δ
Nº of employees <sup>(1)</sup>	18,851	18,604	247
% woman	35.8	35.8	0
% women in leadership positions	26.1	26.1	0

(1) Includes data of the newly acquired company Viesgo.



# 51,766Mt

sales of  
petroleum  
product  
2018

Sales of petroleum products <i>Thousand metric tons</i>	Europe		Rest of the world		Total	
	2018	2017	2018	2017	2018	2017
<b>Own marketing</b>	<b>21,754</b>	<b>21,186</b>	<b>2,681</b>	<b>2,288</b>	<b>24,435</b>	<b>23,474</b>
Light products	17,978	17,868	2,473	2,077	20,451	19,945
Other products	3,776	3,318	208	211	3,984	3,529
<b>Other sales<sup>(1)</sup></b>	<b>9,506</b>	<b>8,471</b>	<b>1,358</b>	<b>1,393</b>	<b>10,864</b>	<b>9,864</b>
Light products	9,337	8,257	995	1,143	10,332	9,400
Other products	169	214	363	250	532	464
<b>Exports<sup>(2)</sup></b>	<b>14,056</b>	<b>15,424</b>	<b>2,411</b>	<b>3,074</b>	<b>16,467</b>	<b>18,498</b>
Light products	5,903	6,433	440	740	6,343	7,173
Other products	8,153	8,991	1,971	2,334	10,124	11,325
<b>TOTAL</b>	<b>45,316</b>	<b>45,081</b>	<b>6,450</b>	<b>6,755</b>	<b>51,766</b>	<b>51,836</b>

(1) Includes sales to operators of petroleum products and bunkers.

(2) Expressed from the country of origin

### Main events of the period

- Repsol has announced its **collaboration with Google Cloud** for the launch of a project that will use big data and artificial intelligence to optimize the management of the Tarragona refinery, providing the latest technological solutions from Google's cloud. The objective is to improve the overall performance of refinery operations.
- The polyolefin chemical plant in Tarragona has been awarded the **Food Safety Certification (ISO FSSC22000)** after a series of investments and changes in processes and procedures over the last few years.
- The first production of high-impact polypropylene copolymers (**TPOs**) has been **successfully completed and will be marketed under the Repsol ImpactO brand name**, mainly for the automotive market.
- Repsol has coordinated and managed in Cartagena the two **largest LNG bunkering operations** to date in Spain (425 m<sup>3</sup> of LNG and 430 m<sup>3</sup> of LNG). The number of cisterns supplied in a single LNG bunker operation has been exceeded, with a total of 11 cisterns being supplied. In this way, Repsol strengthens its position as a supplier of LNG for use as marine fuel.
- The Chemicals Business **adheres to the Voluntary Commitment "Plastics 2030"** that PlasticEurope presented to increase circularity and resource efficiency in products, following the publication of the European Commission's plastics strategy.
- The acquisition at the end of 2017 of the 70% stake in Klikin, a startup that has developed a digital platform for booking, payment and promotion management to connect local businesses with their customers, has enabled Repsol to boost its mobile payment channel **Waylet** ending the year with more than 1 million registered users, close to 2,400 linked shops and a final amount of payments of 261 million euros.
- Repsol has integrated the El Corte Inglés (ECI) purchasing card into the Repsol application **Waylet**, so that the 11 million users who have this purchasing card can pay at Repsol's service stations and accrue 4% of the total amount consumed for their purchases at ECI.
- Repsol and Kia Motors Ibérica have set in motion **WiBLE (Widely Accessible)**, a new carsharing operator that will enhance sustainable mobility in and around cities. The service began in July and has been operational in the second half of the year in the city of Madrid with a fleet of 500 units of Kia Niro plug-in hybrids. In addition, there are 3 bases on the periphery (Las Tablas, Villaverde and Pozuelo) and agreements with 8 urban car parks.
- The direct sale of Jet A1 to the **French Army** has begun, reaching sales of 44,000 m<sup>3</sup>. This agreement is an important milestone as a Spanish company has obtained a contract with one of the most demanding and prestigious institutions in France and has been renewed for another year.

Mobility and  
Digitalization:  
WiBLE and  
Waylet



- The **first service stations in Mexico** were inaugurated in March, with which Repsol is initiating a long-term project with the aim of achieving a market share of 8-10% within the next five years. At year-end, 168 service stations in the country had been put into operation, out of 226 flagging contracts already signed. This project has been accompanied by the deployment of a social strategy.
- In September, the **La Pampilla refinery** completed the project to adapt to the new quality specifications in Peru, **starting up the gasoline production units**. By October 2016, the low-sulfur diesel production unit was up and running. In total 11 million man hours of work with '0' accidents with sick leave.
- In November, the agreement for the **acquisition of 40% of the Mexican company Bardahl**, was completed, once all the necessary regulatory authorizations had been obtained. This Joint Venture will produce and distribute Bardahl and Repsol products in the Mexican market, as well as exporting Repsol products to other countries in the Americas.
- In November Repsol acquired the unregulated low emission **electricity generation businesses of Viesgo** (hydroelectric and combined-cycle plants) and its regulated and unregulated gas, and electricity trading companies, for more information see section 2.2.
- In November the online sale of **Repsol lubricants** began through its own channel on Amazon Spain. It is expected for products to be able to be sold through this platform in Portugal, the United Kingdom, France and Germany from the first quarter of 2019.
- In November, Repsol Comercial del Peru acquired the business of **Puma Energy Peru**, a subsidiary of Trafigura, which allows it to increase its sales by 10%.
- Repsol acquired the company **Valdesolar Hive, S.L.**, which is carrying out a photovoltaic Project in Valdecaballeros (Badajoz), which would have an installed capacity of 264 megawatts (MW) and could be operational in either 2019 or 2020.
- In the area of biofuels, **the International Sustainability** and Carbon Certification has been renewed at the five refineries in Spain, extending its scope to include new raw materials for the manufacture of advanced biofuels after carrying out the necessary industrial tests to guarantee the safety of operations.

- Repsol has signed an agreement with **Venture Global LNG** for the supply of approximately one million tons of liquefied natural gas (LNG) per year for 20 years from the Calcasieu Pass facility, which Venture Global LNG is developing in Cameron Parish, Louisiana. Repsol will purchase LNG from the date of commercial operation of the installation planned for 2022, which will be used both to supply gas to industrial complexes in Spain and to market it anywhere in the world. This contract is subject to Venture Global LNG's final investment decision in the facility and to compliance with various administrative milestones with the relevant authorities (Department of Energy and Federal Energy Regulatory Commission)..

### 5.2.1. Refining

The lines of action of the Refining business are framed within the update of the 2018-2020 Strategic Plan, which is as follows continuing to drive actions in safety, environment, reliability and optimization, with a clear objective to reduce energy costs and CO<sub>2</sub> emissions. The investments made in the Cartagena and Bilbao refineries, as well as the corresponding improvement in the global margin of the refining system, have placed Repsol at the head of the European integrated companies in terms of efficiency, creation of guaranteed value and resilience in the face of low crude oil price scenarios.

In addition to a large number of efficiency improvement and optimization measures, the competitiveness of the business continues to improve through the digitization of processes, the management of markets and access logistics, and the relationship with the business environment, all based on proper management of people and an active policy of safety, environment and innovation.

The investments made in recent years have enabled Repsol to win a position as one of the most complex and efficient refining systems of Europe. It boasts the capability to minimize fueloil consumption and maximize the production of lower carbon intensity and higher added-value products, and is also prepared to produce low-sulphur marine fuel. This means that the reduction in the sulphur specification of approved by the International Maritime Organization (IMO) for marine fuel-oil in 2020 offers a future opportunity for the Group.

# Mexico

+168 S.S.  
in 2018

# 6.7 \$/bbl

refining  
margin  
index in  
Spain

**59%**  
conversion  
rate

**Assets**

The Repsol Group owns and operates five refineries in Spain (Cartagena, A Coruña, Bilbao, Puertollano and Tarragona), with a total distillation capacity of 896 thousand barrels of oil/day (including the stake in Asfaltos Españoles S.A. in Tarragona). At the La Pampilla refinery (Peru), in which Repsol is the operator and has a stake of 82.38%, the installed capacity rises to 117 thousand barrels of oil/day after the inauguration of the low-sulfur diesel production unit in 2016.

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

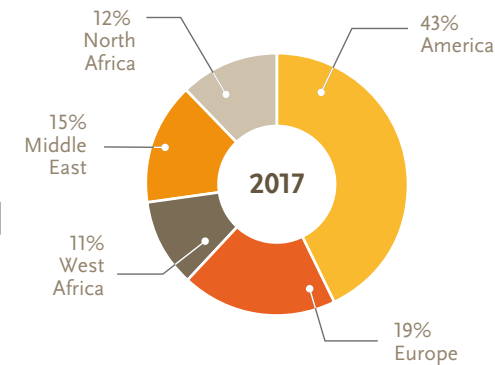
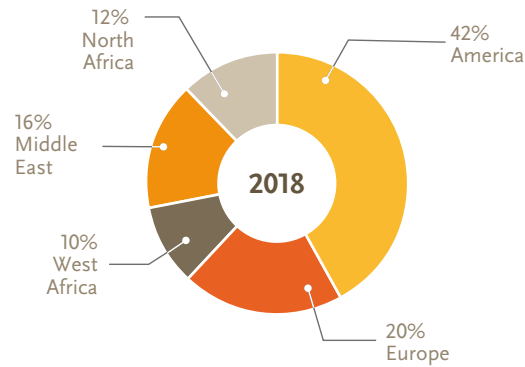
(1) The capacity of Tarragona includes 50% of the capacity of Asfaltos Españoles S.A. (ASESA), a company 50% owned by Repsol and CEPSA.

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

**Performance**

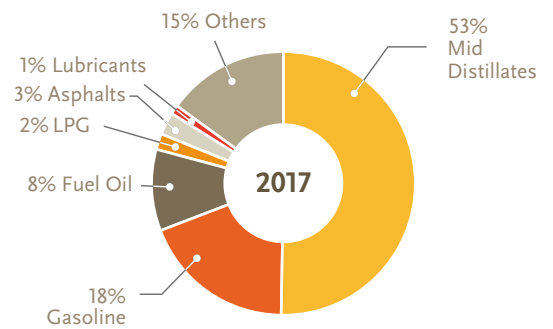
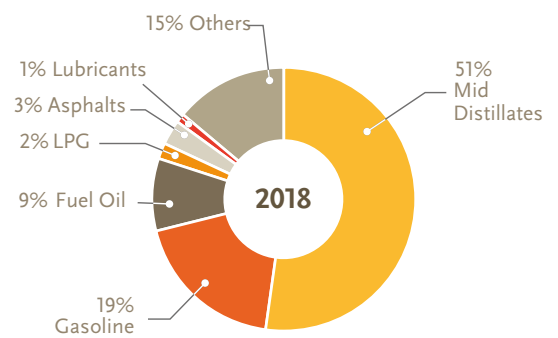
The refining margin index in Spain in 2018 stood at \$6.7 per barrel, lower than in 2017 (\$6.8 per barrel). For Peru, the annual refining margin index stood at \$3.0 per barrel, compared to \$5.4 per barrel in 2017.

Source of processed crude oil



**1,013kbbbl/d**  
primary  
distillation

Refining production



During 2018, refining margins were similar to those of 2017 thanks to the strengthening of the average distillate differential, which compensated for the increase in the price of Brent and the weakening of naphtha and gasoline differentials. The high margins of middle distillates are supported by their higher world demand, while naphthas and gasolines have weakened due to increased supply, lighter crude processing and high utilization to meet the demand for mid distillates.. In Peru, the indicator has been impacted by price mechanisms in the country.

In this context, the Group's refineries in Spain processed 41.6 million tons of crude oil, 12% less than in 2017, and their average use of distillation was 93% in Spain compared with 94% the previous year. In Peru, the level of use was lower than in 2017, rising from 89.8% to 81.7% in 2018.

(Thousand metric tons)

Processed raw material	2018	2017
Crude oil	46,565	47,357
Other raw materials	8,292	8,565
<b>TOTAL</b>	<b>54,857</b>	<b>55,922</b>

(Thousand metric tons)

Refining production	2018	2017
Intermediate distillates	27,127	26,830
Gas	9,515	9,881
Fuel oil	4,716	4,996
LPG	987	990
Asphalts <sup>(1)</sup>	1,631	1,537
Lubricants	266	265
Others (including petrochemicals) <sup>(2)</sup>	7,078	7,913
<b>TOTAL</b>	<b>51,320</b>	<b>52,412</b>

(1) Includes 50% of ASESAs production

(2) Includes petrochemicals (1,758 thousand tons in 2018 and 1,849 thousand tons in 2017).

Sustainability performance	2018	2017
Spilled hydrocarbons (>1bbl) (t) <sup>(1)</sup>	31.52	5.28
CO <sub>2</sub> e Emissions (Mt) <sup>(2)</sup>	8.99	9.11
TFR	2.11	2.08
PSIR	0.37	0.46
Peru Refining TFR	1.14	0.92
Peru Refining PSIR	-	0.31
Voluntary social investment (thousands of €)	2,433	1,496

(1) This data does not include Peru.

(2) This indicator does not include the cracker plant emissions included in Chemicals in the following section.

## 5.2.2. Chemicals

### Assets

The production of Repsol's Chemicals business is concentrated in three petrochemical complexes, located in Puertollano, Tarragona (Spain) and Sines (Portugal), in which there is a high level of integration between base chemicals and derived chemicals, as well as with the Group's refining activities in the case of the Spanish complexes. Repsol also has different subsidiaries and affiliates, through which it has plants dedicated to the manufacture of polypropylene compounds, synthetic rubber and chemical specialities, the latter through Dynasol, a 50% alliance with the Mexican group KUO, with plants in Spain, Mexico and China, the latter together with local partners.

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 petrochemical</b>	<b>2,235</b>
Polyolefins	
Polyethylene (1)	793
Polypropylene	505
Intermediate products	
Propylene oxide, polyols, glycols and styrene monomer	937

(1) Includes copolymers of ethylene vinylacetate (EVA) and ethylene butylacrylate (EBA).

### Performance

Throughout 2018 the chemical activity has experienced a drop compared to the good results obtained in the 2015-2017 period, in a year marked by a good situation in the international environment, although with some weakening compared to the historical highs of recent years in terms of both demand and margins. The year has been impacted by both programmed shutdowns (multi-year planned shutdown of the Sines complex and the propylene oxide/styrene plant in Tarragona) and by unscheduled shutdowns that have negatively impacted both the business's results and the turnover.

**2.6Mt**  
basic  
petrochemical  
capacity

**2.6Mt**  
sales of  
petrochemical  
products

**7%**   
**sales of petrochemical products in the rest of the world**

For the scheduled shutdowns, investments have been made to improve efficiency as well as reliability, safety and the environment. Along these lines, in March, the company obtained in its Tarragona complex the first food safety certification (FSSC 22000) granted to a polyolefin production center worldwide, which is evidence of Repsol's commitment and leadership in food safety.

The volume of sales to third parties in 2018 amounted to 2.6 million tons, 8.6% lower than the volume in 2017. This drop in sales was mainly the result of shutdowns during the year.

Thousand metric tons		
Sales by product:	2018	2017
Base petrochemicals	808	978
Petrochemical derivative	1,802	1,877
<b>Total</b>	<b>2,610</b>	<b>2,855</b>
Sales by region	2018	2017
Europe	2,137	2,412
Rest of world	473	443
<b>Total</b>	<b>2,610</b>	<b>2,855</b>

In terms of investments, these were mainly aimed at improving and optimizing assets, boosting efficiency, reducing costs, differentiating and improving quality, safety and environmental standards. The main disbursements for the year have been made in projects aimed at improving efficiency as well as projects undertaken in the multi-year shutdowns both in the Sines complex as well as in the propylene oxide/styrene plant in Tarragona.

During the year there were also advances in differentiation, including the consolidation of the production of the Repsol Resistex range of metallocene polyethylene, advances in the Repsol Healthcare range and the first production of high-impact polypropylene copolymers (TPOs) to be marketed under the Repsol Impacto® brand. This new range, designed for high impact and weight reduction requirements, is mainly intended for the automotive market.

In line with the Company's commitment to sustainability, the Chemicals business has adhered to the Voluntary Commitment "Plastics 2030", an initiative of the PlasticEurope association to increase the circularity and resource efficiency

of products, following the publication of the European Commission's strategy for plastics. In this sense, work is being done on different projects in the line of biodegradable polyolefins as well as the recovery of polymers after their useful life.

In terms of recognition, in May 2018, has received the award for Best European Producer of Polypropylene by the association of transformers European Plastics Converters (EuPC) and in November, Repsol was awarded for its project "Analytics Polyolefins" in the Data Science Awards in the category "Best Big Data Business Enterprise in Spain 2018".

Sustainability performance	2018	2017
Spilled hydrocarbons (>1bbl) (t)	-	-
CO <sub>2</sub> e Emissions (Mt) <sup>(1)</sup>	3.10	3.40
TFR	1.65	1.42
PSIR	0.50	0.61
Voluntary social investment (thousands of €)	456	906

(1) This indicator includes cracker emissions.

### 5.2.3. Trading

The main function of Trading is to optimize the supply and marketing of the Group's positions in international markets (integrated supply chain) and its activity consists of i) the supply of crude oil and products for Refining systems and other Group needs, ii) the marketing of crude oil and surplus products from its own production, iii) the maritime transport of crude oil and derivative products associated with these activities, and iv) the management of product hedges in the financial derivative markets.

Its activity is developed globally through several offices established in the most relevant strategic markets of Europe, America and Asia.

In 2018, a total of 1,489 vessels were chartered (1,515 in 2017) and 333 voyages were made through the fleet in Time Charter (270 in 2017).

#### Sustainability performance

In the area of safety and the environment in 2018 by the *Vetting*<sup>1</sup> department, the protocol of unannounced safety inspections has been

1. The procedures apply to time, voyage, or spot charters, or vessels owned by Repsol, to vessels that transport Repsol freight, and to vessels visiting terminals owned or operated by Repsol.

**1,489**  
**vessels chartered in 2018**

consolidated and extended to vessels operating in the Group's marine terminals, including each month an area of the vessel, process or operation not normally included in the protocol.

In addition, the following initiatives have been carried out:

- Repsol Trading's certification has been renewed (*International Sustainability and Carbon Certification*<sup>1</sup>) with zero non-conformities and/or observations and the agreement for the certification of Repsol Trading Singapore for 2019 has been produced.
- In terms of Circular Economy, Trading has started the process of registering as a waste manager in the role of waste 'negotiator' and in compliance with Law 22/2011.
- Two substances newly imported into Europe have been registered with the European Chemicals Agency and the process of registering additional substances has begun, thus contributing to the high protection of human health and the environment against the dangers posed by the substances in accordance with Regulation (EC) 1907/2006.
- Safety and Environmental Due Diligence (SMA) procedure implemented in *Ship-to-Ship* (STS) Operations through a new evaluation and approval process of all operations controlled by the business.
- The Trading control panel has been developed to monitor the accident rate of contracted vessels and storage facilities.
- Repsol accompanies the construction process of all the storage facilities contracted to ensure that they comply with SMA regulations. A total of 25 storage facilities have been inspected in 2018 and a report has been drawn up to monitor them.

### 5.2.4. Wholesaler and trading gas

#### Assets and operations

On 31 December 2018, the Group has regasification and transport assets in its North American marketing businesses, including the Canaport regasification plant and the Canadian and US gas pipelines. In addition, the Group has gas contracts for internal supply.

In the north-east of the USA, where the supply of natural gas is usually restricted, cold weather scenarios can cause significant spikes in the area's reference prices, as is the case with the Algonquin quotation (reference for the Boston area). The company's activity in the north-east concentrates on optimizing the margin obtained from the commercialization of LNG by taking advantage of the flexibility offered by the Canaport regasification plant to produce regasified LNG and concentrate gas sales on those days with the highest winter prices (peaks).

In addition, Repsol markets and trades natural gas in North America from its own production in the USA (Marcellus) and Canada (Alberta), and production acquired from third parties .

#### Performance

	2018	2017
Regasified LNG (TBtu) at Canaport (100%)	16	15
Gas Traded in North America (TBtu)	520	496

The volume traded in North America increased by 5% compared to 2017.

During 2018, commercial activity in the north east of the USA was greatly boosted in the first few weeks of the year, as a result of a significant increase in demand due to extreme temperatures. In the other regions of North America, the trading of natural gas behaved differently as a result of irregularities in certain regions. In Canada, prices were very low for most of the year, while in the US Gulf Coast there were significant increases in demand, which allowed us to obtain good results for our own production gas in the Marcellus region.

In 2018, long-term third-party supply contracts were signed with two gas distribution companies of the northeast US, the first contracts signed by Repsol in North America in more than a year.

Finally, in 2018 the Repsol Group signed long-term LNG purchase contracts with producers in the US Gulf Coast that will enable it to cover the needs of industrial and electricity generation complexes and the marketing of natural gas in Spain and to trade LNG worldwide in the coming years.

**5%** ↑  
gas traded in North America

**New long-term LNG purchase contracts**

1. Certified to guarantee compliance with sustainability, traceability and zero deforestation requirements established by the RED (Renewable Energy Directive) 2009/28/CE regarding the incorporation of biofuels into fossil fuels.

**4,849**  
worldwide SS

## 5.2.5. Energy trading

### 5.2.5.1. Marketing

#### Assets

At 31 December 2018, Repsol had 4,849 service stations according to the following geographical distribution:

Country	No. of points of sale
Spain	3,350
Peru	560
Portugal	465
Italy	306
Mexico	168
<b>Total</b>	<b>4,849</b>

#### Performance

Repsol's challenge is to continue leading the sector in Spain by offering the best service to its clients, strengthening the level of results and achieving all the goals set out in the "Transforming while Performing" plan. All of this is aimed at implementing the initiatives considered in the five pillars of the new 2018-2020 Strategic Plan and in line with the NEXT execution plan. The solidity of the business model has been demonstrated during the year in both operations and results:

- In Service Stations, despite the limited growth in market share of over 30% (in volume) by province, the level of sales of the previous year has been maintained, highlighting the good performance of Premium products and the sale of non-oil products and services.
- In Direct Sales there has been an increase in volume compared to 2017 with high levels of unit margins.
- In International Aviation, the increase in sales and results compared to the previous year is noteworthy, with good performance in all countries (Spain, Portugal and Peru).
- In Portugal, the Service Station and Direct Sales businesses continued to perform well in both sales and results despite a more complex competitive environment.

In 2018, Waylet was promoted as an integrated services management application for customers, in addition to being a universal payment method via mobile phone. At present, it can be used in our 3,350 stations and in nearly 2,400 shops outside our network of service stations, and it can be linked to different payment and loyalty methods, such as the El Corte Inglés card.

In March 2018, the first Repsol service station in Mexico was inaugurated, being the first point of sale of an ambitious plan that foresees reaching a market share of between 8 and 10% in 2022 with total investments of around 400 million euros. The 2018 plan has been carried out, ending the year with 168 operating service stations out of a total of 226 formalized flagging contracts.

The Company maintains its policy of partnering with market-leading companies such as El Corte Inglés, Starbucks, Nespresso, Amazon, Correos and Disney. A strategic agreement has been signed with El Corte Inglés that is allowing us to create the franchise of proximity and convenience stores in the service stations of the Company, under the brand name "Supercor Stop&Go", reaching 152 Service Stations in 2018. In the case of Correos, the agreement implies the development of the parcel consignment service in our Service Stations. With Amazon the alliance consists of locating "Amazon Lockers" in our stations where customers can pick up orders placed through their website.

Sustainability performance	2018	2017
Spilled hydrocarbons (>1bbl) reaching the average (t)	7.7	5.05
Spilled hydrocarbons (>1bbl) reaching the average (t) Repsol Peru <sup>(1)</sup>	58.75	46.35
CO <sub>2</sub> e Emissions (Mt)	0.04	0.03
TFR	0.95	1.12
TFR Marketing Peru	0.38	0.39
% de contratos con cláusulas de derechos humanos, ambientales y anticorrupción	100	100

(1) Including refining and marketing Peru.

**International expansion of SS (Mexico and Peru)**

### 5.2.5.2. Liquefied Petroleum Gases (LPG)

Repsol is one of the leading LPG retail distribution companies<sup>1</sup>, being top in Spain and maintaining leading positions in Portugal.

LPG sales in 2018 amounted to 1,331 thousand tons. Total sales in Spain decreased by 3% compared to the previous year. In Portugal it reached sales of 151 thousand tons, making the company the third largest operator.

Thousand metric tons

LPG sales volume by geographical area	2018	2017
<b>Europe</b>	<b>1,304</b>	<b>1,356</b>
Spain	1,154	1,218
Portugal	150	138
<b>Latin America</b>	<b>26</b>	<b>19</b>
Peru (Autogas)	26	19
<b>TOTAL</b>	<b>1,330</b>	<b>1,375</b>

In Spain, Repsol distributes bottled LPG, bulk LPG and AutoGas, with around 4 million active customers. Bottled sales represented 73% of LPG retail sales in Spain and were made through an extended network of agencies. In Portugal, Repsol distributes bottled LPG, bulk and AutoGas to the final customer and supplies other operators.

Thousand metric tons

LPG sales volume by product	2018	2017
Bottled	678	670
Bulk, channeled and others <sup>(1)</sup>	652	705
<b>TOTAL</b>	<b>1,330</b>	<b>1,375</b>

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

In Spain there are 73,140 cars registered, powered by LPG (Autogas), which shows that they are a real alternative, but its implementation is still modest,

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 9kg, excluding bottled mixtures for using LPG as fuel. For further information on the applicable legal framework in Spain, see Appendix III of the 2018 consolidated financial statements.

although much higher than that of other alternative energies.

The main milestones of this business line in 2018 are:

- Transformations of gasoline vehicles: actions with Reparatucoche (MKD) in shopping centers and service stations to encourage vehicle adaptations.
- Participation in different forums and exhibitions: Automobile Fair (Madrid Auto), European Mobility Week and several forums dedicated to the adaptation of gasoline vehicles in AutoGas.
- Carsharing: the corporate carsharing service has been renewed with a new fleet of vehicles that are committed to sustainability. This is a new free rental service consisting of six electric vehicles that run on 100% renewable electricity and six AutoGas vehicles.

In addition, in 2018, the marketing of the New Lightweight Packaging (NEL in Spanish) reached more than 10 million containers.

Repsol has supported the acquisition of new customers for the electricity business through training in what is known as PMR in Spanish (start-up, maintenance and repair of gas appliances) and by adapting the digital tools of the different external LPG marketing channels.

In Portugal, a regulation for a pilot test of the "Social Package" was approved in 2018.

In December 2018, the agreement to sell the LPG business in the islands of Portugal signed with the Rubis Group in June 2017 was closed, after having received authorization from the Portuguese Competition Authorities.

Sustainability performance	2018	2017
Spilled hydrocarbons (>1bbl) reaching the average (t)	-	-
CO2e Emissions (Mt)	0.01	0.01
TFR	1.83	1.91
PSIR	-	-
of contracts with human rights, environmental and anti-corruption clauses	100	100

3<sup>rd</sup> largest LPG operator in Portugal

>10 M of new packaging NEL



### 5.2.5.3. Lubricants, asphalts and specialized products

The objective of this business unit is to maximize the value of the entire chain of petroleum products from refining. The production is concentrated in Spain, although in the case of Lubricants, in certain strategic countries there are agreements with local producers to manufacture some products on site. In addition, following the

acquisition in 2018 of 40% of Bardahl in Mexico, production of lubricants has begun in this country since the end of the year.

Commercial management has a strong international component, with operations in more than 90 countries around the world. Sales by geographical destination are presented below.

**90** countries  
international presence of the lubricants business

Thousand metric tons

Country	Lubricants	Asphalts	Specializeds <sup>(1)</sup>	Total 2018	Total 2017
Spain	85	511	260	857	656
Europe	28	267	195	489	624
Africa	2	2	273	277	240
Americas	26	-	8	34	25
Asia and Oceania	35	-	117	151	78
Sales to Traders	-	102	-	102	203
<b>Total</b>	<b>176</b>	<b>881</b>	<b>853</b>	<b>1,910</b>	<b>1,826</b>

(1) Bases for lubricants, extender oils, sulfur, paraffins and propellant gases.

Regarding the business **performance** in 2018, it should be noted that in Lubricants sales grew by 3% in Spain, once again improving its leading position in the domestic market and by 13% in international markets. For Asphalts, sales of bitumens have grown by 2% and those of asphalt specialities by 8%, despite the fact that the natural markets (Spain, France and Portugal) have been at minimum demand levels. For Specialized Products, sales of Group II and III base oils have reached historic highs, with this product line growing 38% in comparison to 2017, as well as sales of gases (8%) and anti-ozon waxes (1%).

The primary milestones are as follows:

- On 1 November, we completed the **acquisition of a 40% stake in Mexican firm, Bardahl**. This joint venture will manufacture and sell Bardahl and Repsol lubricants in Mexico. Furthermore, it will serve as a production center for Repsol lubricants destined for the rest of the American

continent. This transaction will contribute to our objective of doubling sales volumes to 300,000 tons by 2021.

- We continued to **invest in improving the production capacity of the Puertollano lubricant plant**, making it possible to reach production of 132,000 t in 2018 (127,000 t in 2017).
- The **online sale of Repsol lubricants has now begun through a dedicated channel on Amazon in Spain** (in 2019, we expect to be able to extend these sale to Portugal, United Kingdom, France and Germany) and, in parallel, we have developed a Digital Store.

In terms of **sustainability**, it is worth noting that all international agreements include clauses related to human rights, safety, the environment and anti-corruption. Audits to ensure compliance with these clauses are carried out periodically: in 2018, 20 were performed.

**acquisition of 40% of Bardahl**



Sustainability performance	2018	2017
Spilled hydrocarbons (>1bbl) reaching the average (t)	-	-
CO <sub>2</sub> e Emissions (Mt)	0.01	0.01
TFR	0.83	0.83
% of contracts with human rights, environmental and anti-corruption clauses	100	100

### 5.2.5.4. Electricity and Gas

Repsol, having completed the acquisition of the non-regulated low emission electricity production, and gas and electricity marketing businesses from Viesgo (see section 1), has enhanced its position as a multi-energy provider, embarking upon electrical generation and marketing activities of gas and electricity.

Amongst the services offered, Repsol has an attractive range including cutting-edge digital solutions, electricity certified as 100% low emissions, exclusive benefits for customers and discounts at our network of service stations.

Repsol is a relevant player in the Spanish **electricity generation** market with a total installed capacity of 2,952 MW at December 31.

The objective over the coming years is to obtain 4,500 MW in 2025. In this connection, in 2018, the Group has obtained a stake in Valdesolar Hive, S.L. to develop a photovoltaic project that would entail investing in a photovoltaic plant in Valdecaballeros (Badajoz) with an installed capacity of 264 megawatts (MW), and that could be operational in 2020.

Repsol **sells electricity and gas** in the retail sector with a portfolio of nearly 750,000 customers (market share of more than 2%), that are distributed throughout the Spanish territory, mainly in Cantabria, Galicia, Andalucía, Asturias, Castilla y Leon and the Madrid Region. The objective is to have 2.5 million customers by 2025 (market share of 5%).

**2,952MW**  
installed capacity

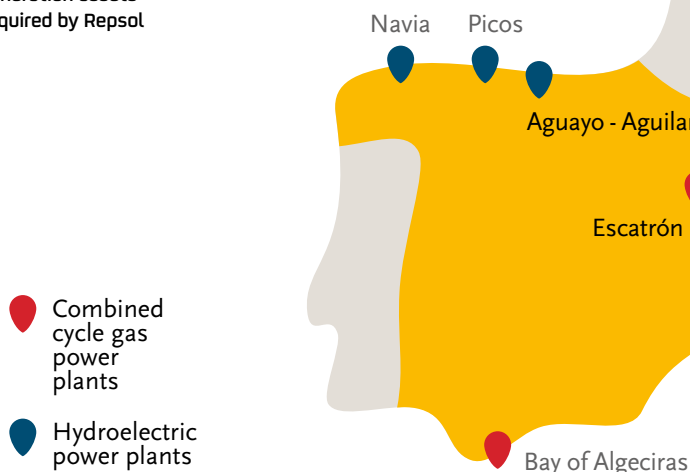
Hydroelectric plants <sup>(1)</sup>	Installed capacity (MW)
Oviedo – Navia	202
Picos de Europa – Picos	114
Aguilar – Aguayo Aguilar	388
<b>Total</b>	<b>704</b>
Combined cycle plants	
Zaragoza – Escatrón	818
Algeciras – Bahía de Algeciras	830
<b>Total</b>	<b>1,648</b>
Cogeneration plants <sup>(2)</sup>	
<b>Total</b>	<b>600</b>
<b>Total</b>	<b>2,952</b>

- (1) Hydroelectric plants are a renewable and efficient source of electricity and serve to store usable electricity in times at which there is a deficit in other renewable sources.
- (2) Plants belonging to the Group located in industrial complexes in Tarragona, Santander and Cartagena and their Chemical and Refining activities.

Sustainability performance <sup>(1)</sup>	2018
CO <sub>2</sub> e Emissions (Mt)	0.2
TFR	0.5
Employees	386
Women	114
Men	172

(1) Data only for Viesgo assets.

Generation assets acquired by Repsol



**2%**  
market share  
Electricity  
and gas retail  
in Spain

**3,816M€**  
sale of 20%  
shares in  
Naturgy

### 5.3. Corporate and other

Mainly relates to the operating costs of Corporate and financial results.

#### Our financial performance

Millions of euros	2018	2017	Δ
Corporate and adjustments	(261)	(262)	1
Financial result	(462)	(356)	(106)
Income tax	168	242	(74)
Investees and non-controlling interests	(1)	(2)	1
<b>Adjusted Net Income<sup>(1)</sup></b>	<b>(556)</b>	<b>(378)</b>	<b>(179)</b>
Special items	358	158	200
<b>Net Income</b>	<b>(198)</b>	<b>(220)</b>	<b>(21)</b>
Effective tax rate (%)	(23)	(39)	16
<b>EBITDA</b>	<b>(147)</b>	<b>(170)</b>	<b>23</b>
<b>Net investments</b>	<b>70</b>	<b>42</b>	<b>32</b>

#### Sustainability performance

	2018	2017
Personas		
Nº of employees	2,489	2,190
% of women	53.6	53.9
% of women in leadership positions	42.1	42.5

#### Main events of the period

- In May, all shares in **Naturgy Energy Group, S.A.**, representative of 20.072% of its share capital, were sold to Rioja Bidco Shareholdings, S.L.U. for the total sum of €3,816 million.
- In June, the **2018-2020 strategic update** was published.
- During the financial year, Repsol's long-term debt **credit rating** improved: i) Moody's has improved the rating from Baa2 to Baa1 with a stable outlook; ii) Fitch has changed the outlook from "stable" to "positive" (rates as BBB); and iii) Standard & Poor's has changed the outlook from "stable" to "positive" (rates as BBB).

**>90M€**  
in Digitalization

- In July 25, the Board of Directors approved the restructuring of its **management team**, adapting its organization to the updated Strategic Plan.
- At the next General Meeting of Shareholders, the Board of Directors will propose the reelection of Mr. Antonio Brufau Niubó as the Chairman of the Board and Mr. Josu Jon Imaz San Miguel as the CEO for four-year terms and to reduce the number of Board members to 15.
- In November, a capital decrease was executed via **redemption of treasury stock**, as approved in the 2018 General Meeting of Shareholders. The purpose was to offset the dilutory effect of the bonus capital issues carried out in 2018 in the framework of the "*Repsol Flexible Dividend*" scheme (see section 4.4).
- In 2018, CaixaBank, S.A. announced the sale of **its stakeholding in Repsol, S.A.** following the agreement adopted by its Board of Directors and following which, its Board members have resigned from their positions on Repsol's Board of Directors.
- The **first green bond monitoring report** has been published, following the issuance of this bond in 2017 ([www.repsol.com](http://www.repsol.com)). At December 31, 2017, €252 million had been invested in Refining and Chemicals, which represents an estimated emission reduction of 663,000 tons of CO<sub>2</sub> per year into the atmosphere.
- On January 28, 2019 the exclusion of Repsol, S.A. shares from the Argentine Stock Market took effect.
- In 2018, more than 90 million euros were invested in 130 actions which were undertaken.

## 6. Sustainability<sup>1</sup>

Repsol works to provide accessible, efficient and safe energy to meet growing energy demand without compromising future generations. Sustainability, a key factor in our vision of the future as an energy company, is integrated in the Company's strategy, and has the support and engagement of senior management. Repsol's **Sustainability Policy** reflects the company's commitment to best practices in sustainability, defines guidelines for managing and controlling impacts generated in society, the environment and in the safety of operations throughout the value chain. This policy

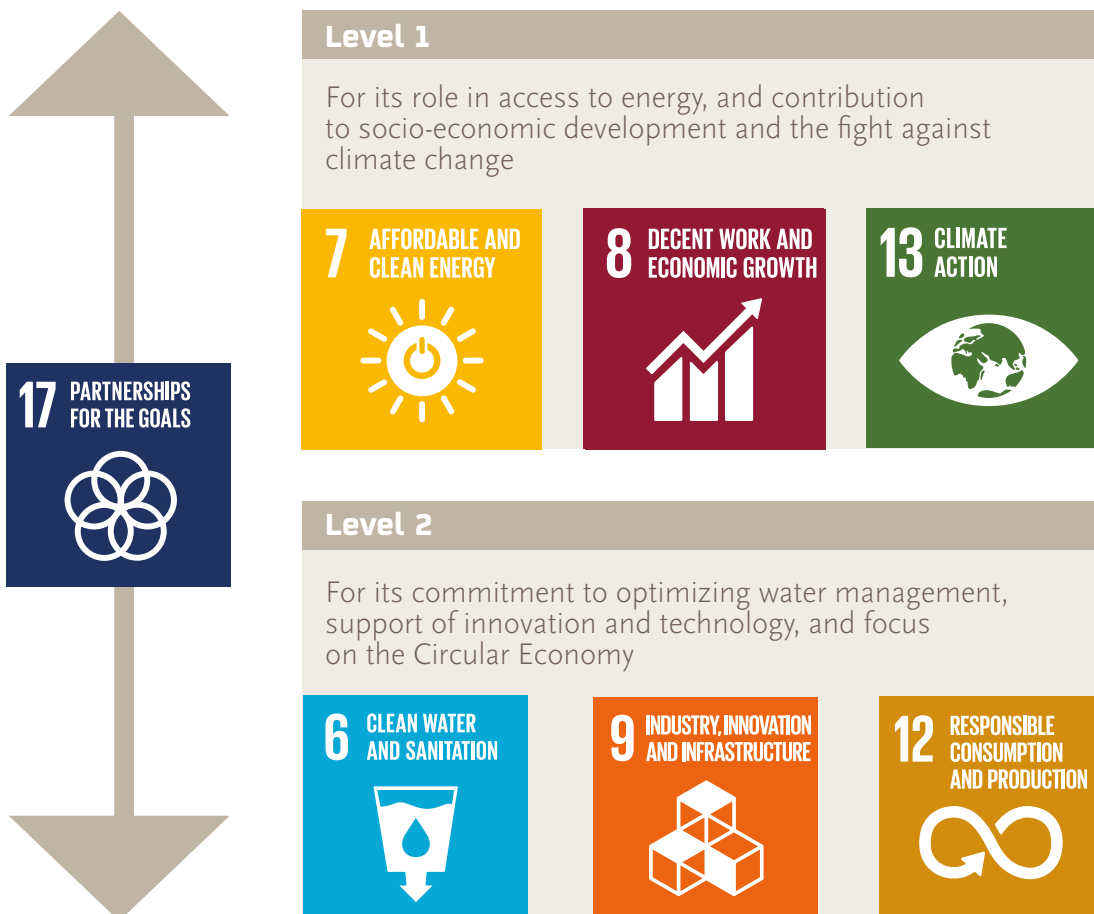
is implemented through internal standards and procedures in each pillar of the Sustainability Model.

Repsol supports the **2030 Agenda for Sustainable Development of the United Nations** and uses the 17 Sustainable Development Goals (SDGs) as a reference when defining its Sustainability priorities. This prioritization has been established taking into account the SDGs considered most relevant by the company and its stakeholders, concluding that its efforts must be aimed at:

### Sustainability

For further information on Sustainability, see Appendices II and IV and [www.repsol.com](http://www.repsol.com)

### SDG prioritization



1. The figures in this chapter, unless stated otherwise, exclude amounts relating to assets acquired from Viesgo on November 2, 2018, as the process of consolidation that will provide such information is currently under way.

### Sustainability objectives

In 2018, between 10% and 20% of businesses' variable remuneration

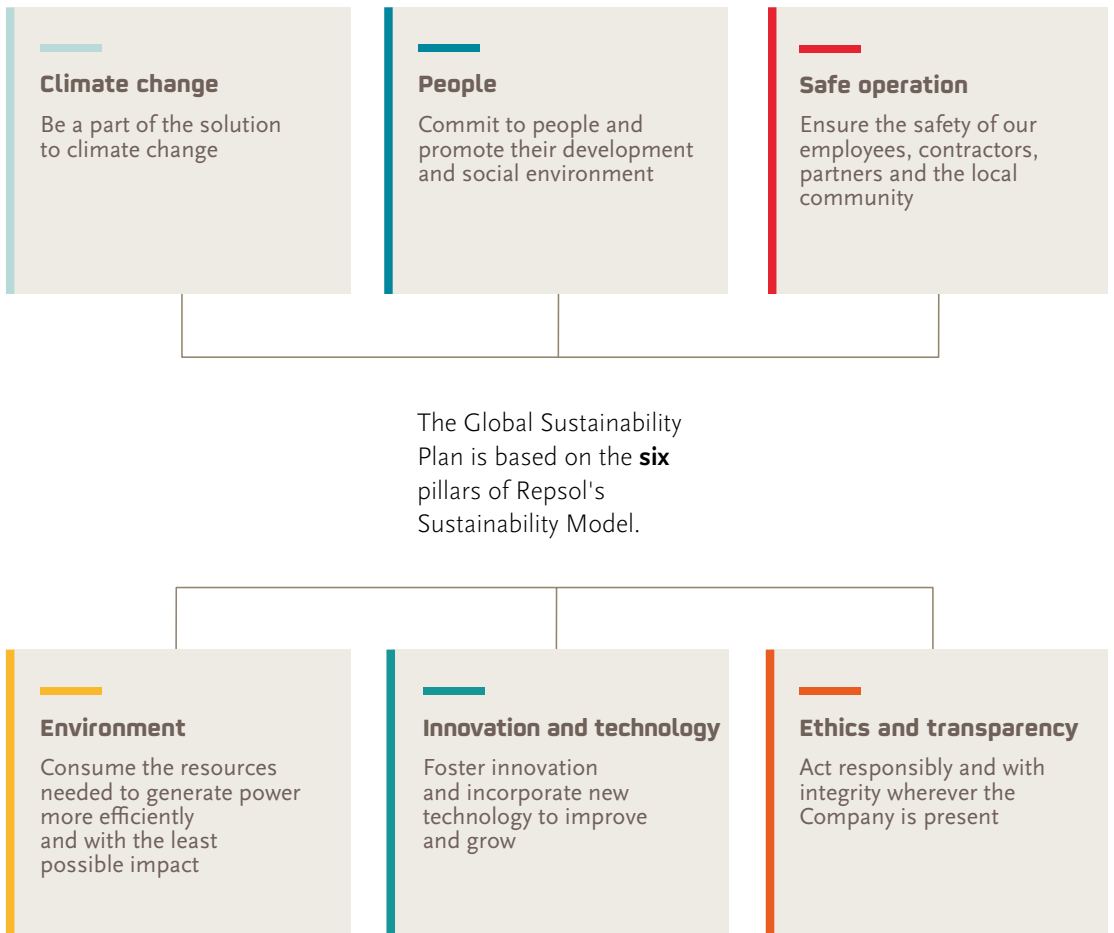
For Repsol, the most efficient manner of contributing to the 2030 Agenda is by collaborating with other public and private institutions to exchange knowledge and technologies. To do this, the Company sees it as vital to align efforts within the framework of the SDG 17 (alliances to achieve goals). In this regard, 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).

## Sustainability Model

Since 2016, Repsol has defined a **Sustainability Model** structured around six pillars that correspond to the material aspects of sustainability, in line with the type of company we are, the expectations of stakeholders and the main international standards.

The Sustainability Model is set out each year in the **Sustainability Plans**, which include Repsol's commitments to Sustainability in all its forms, both at a company-wide level (Global Sustainability Plan) and at a local level (Local Sustainability Plans).

### Sustainability model



**The Global Sustainability Plan (GSP)** defines the ambitions, medium-term objectives (2020) and specific annual lines of action that respond to the material aspects of sustainability for the Company. The GSP is the roadmap used to deploy Local Sustainability Plans in countries and in the main industrial facilities. These local plans, which Repsol has published since 2010, also include commitments relating to the local context.

In 2018, new local plans have been published for Vietnam, Malaysia, Indonesia, Norway, Libya and the industrial facility in Sines (Portugal).

Given our conviction that the Environment and Safety are the basis for creating value, excellence and responsibility, in 2018, we have embarked upon a process of reflection, headed up by Repsol's Safety and Environment Committee (SMA), and through a series of working groups, comprising people from different Businesses and Corporate areas, with the direct involvement of the Company's industrial complexes and assets.

Following exhaustive internal and external diagnostics, and with the involvement of the Executive Committee, a series of **Key Lines of Action** have been defined, on which the Company will focus its efforts through to 2025 in terms of Safety and Environment.

These lines includes different topics, including an integrated safety culture throughout the company in which leadership plays a key role, focusing on process safety as a way of anticipating and preventing serious accidents, including the environment in the decision-making process through the quantification of impacts and environmental dependencies, the development of Circular Economy projects and initiatives and the implementation of sustainable water management that ensures this resource is available for everybody.

## Governance Model

The Board of Directors and the Sustainability Committee play a critical role in the Sustainability Model. The Board approves, at the proposal of the Sustainability Committee, the Company's strategy and policy in sustainability and corporate governance, and the Committee, among other duties, knows and orients the policies, objectives and guidelines of environment, social and safety matters. In 2018, the Committee met four times

and discussed the following matters, among others:

- Supervision of non-financial information: 2017 Integrated Management Report.
- Supervision of Company sustainability strategy: proposal of 2018 targets and monitoring, evaluation and closure of 2017 targets
- Global Sustainability Plan
- Sustainability risk map.
- Sustainability communication plan
- Safety culture in Repsol
- Strategic thinking on safety and the environment for 2025
- Setting emission reduction targets for 2025
- Analysis and periodic monitoring of performance in:
  - Safety scorecard and accidentability indicators.
  - Energy and climate change
  - Community Relations and Human Rights
- Analysis of international sustainability standards
- Energy transition
- Analysis of initiatives related to the Task Force on Climate-related Financial Disclosures (TCFD).

In addition, the Company's maintains an on going dialogue on social, corporate governance and environmental matters (ESG — Environmental, Social and Governance) with different stakeholders (including, among others, investors, associations, representatives of financial institutions, analysts and proxy advisors) to gain first-hand knowledge of their opinions and positions regarding these matters, as well as to explain the Company's practices. Some of these roadshows are led by the CEO.

The conclusions, messages and feedback obtained through the roadshows and other events such as Sustainability Day are presented to the Board of Directors on a regular basis.

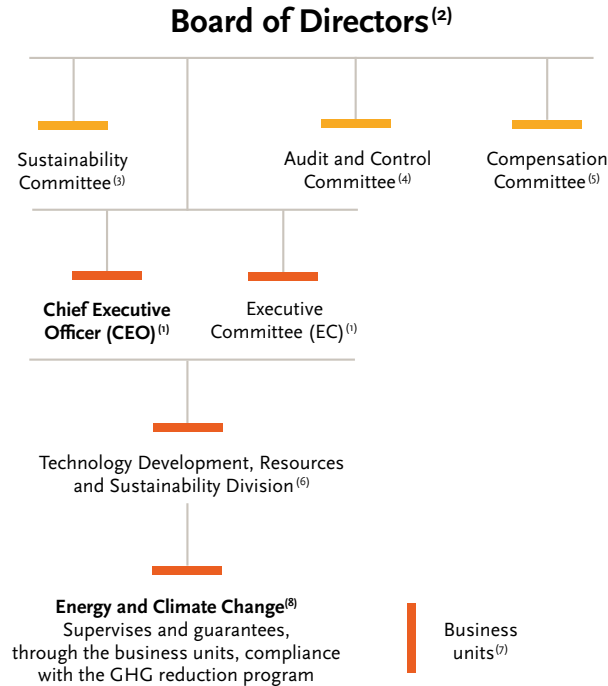
In ethics and transparency matters, the Audit and Control Committee and the Ethics and Compliance Committee oversees compliance with the Code of Ethics and Conduct, and they examine proposed codes of ethics and conduct and reforms thereof,

**Local Sustainability Plans:**  
13 Countries  
6 Industrial Centers



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

## Governance in climate change



- (1) Proposes climate change strategy and targets, and supervises their implementation.
- (2) Approves, at the proposal of the Sustainability Committee, the climate change strategy.
- (3) Oversees the climate change strategy and periodically reviews emerging risks associated to climate change
- (4) Oversees effectiveness of the risk management and internal control system, including emerging risks and climate change risks.
- (5) Proposes Board and Executive Management remuneration linked to energy and climate change targets.
- (6) Coordinates and develops with all business units the climate change strategy, proposed targets, and tracking of the action plans.
- (7) Implements GHG reduction plans.
- (8) Technical unit for the performance of General Management, Technology Development, Resources and Sustainability activities. Also oversees and ensures compliance with GHG reduction programs in the businesses.

**Repsol is committed to accessible, affordable and low-carbon energy.**



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 in 2018 accounted for up to 5% of the CEO's annual variable remuneration and up to 10% of the 2015-2018 long-term incentive program for all executive personnel and other employees, including the CEO and General Council Secretary. For 2019, the sustainability targets of the annual variable remuneration of the CEO account for 15% and 15% of the 2019-2022 long-term incentive program.

## 6.1. Climate change<sup>123</sup>

This section aims to fulfil the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), to which the Company adhered in April 2018.

### Governance

The Board of Directors, prior supervision of the Sustainability Committee, approves the climate change strategy proposed by the company's top management. In addition, the Sustainability Committee's duties include analyzing the expectations of the Company's stakeholders and reporting them to the Board, and orienting

- 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 SE matters. As a general rule, safety and environmental information includes 100% of the data from companies in which the we hold a controlling interest or control over operations.
- 2. This section aims to meet the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), which the Company joined in April 2018.
- 3. Repsol publishes additional climate change information in the CDP (Climate Disclosure Project) survey available at [www.cdp.net](http://www.cdp.net).

and monitoring the Company's climate change objectives, action plans and practices.

Strategic decisions on climate change and lines of action are set at the highest executive level. The Executive Committee (EC) has direct responsibility in the management of matters related to climate change. The EC 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 EC and the Sustainability Committee review information on execution of the climate change strategy and CO<sub>2</sub> emission.

The Technological Development, Resources and Sustainability Division, which reports directly to the CEO, coordinates the climate change strategy and the development of this strategy with all units involved; this strategy is integrated into the company's strategy, in addition to the proposal of objectives and monitoring of action plans to reduce Repsol's GHG emissions.

The Audit, Control and Risks Division has a systematic process that allows identifying and assessing emerging and climate change risks at the Company in the short, medium and long-term. Management of such risks is overseen by the Sustainability Committee and by the Audit and Control Committee, each within the scope of their respective responsibilities.

The Company's sustainability objectives, including actions regarding the reduction of GHG emissions, have a weight of between 10% in corporate areas and up to 20% in Business areas. These objectives directly affect the variable remuneration of all employees at the Company. Furthermore, Repsol has a long-term bonus for the 2018-2021 period, 5% of which is linked to compliance with the GHG emission reduction Plan. This bonus is received by the CEO and the General Counsel Secretary in addition to executive personnel and other employees.

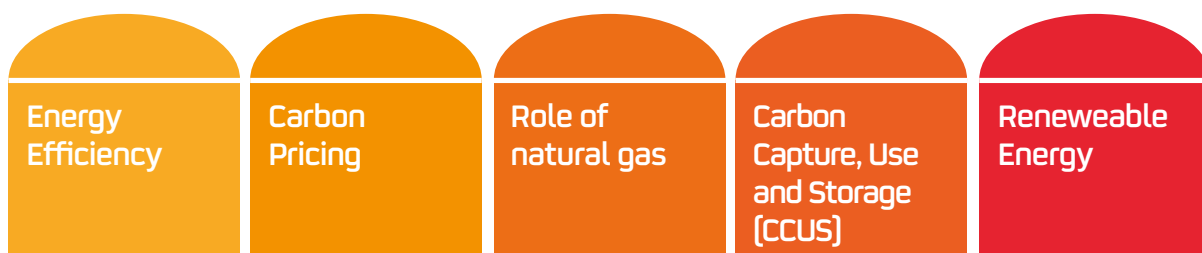
## Strategy

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 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 emerging and available technologies without prejudging which of them will ultimately succeed. There are many possible paths towards a low-emissions future, in which Repsol has identified three common elements: enhanced energy efficiency and energy savings; emission reduction 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 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. In this connection, following the 2018 update to the 2016-2020 Strategic Plan, Repsol anticipates large trends, such as the increase in demand for electricity and the key role of natural gas in the energy transition (Repsol has an Upstream gas portfolio of around 63% of production and 70% of reserves).

The **short-medium term strategy** is influenced by climate change issues that are more closely related to competitiveness (energy and CO<sub>2</sub> costs), and by the regulatory framework of its activities. Repsol operates in areas with strict legislative requirements for energy and carbon (approximately 65% of our direct emissions of CO<sub>2</sub> come from its



**40 \$/t CO<sub>2</sub>**  
 internal price  
 CO<sub>2</sub> in 2025

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** on the current business are worthy of note:

- In Europe, the 2020 and 2030 Energy and Climate<sup>1</sup> packages, include a number of key directives, notably the Directive that regulates the Emissions Trading System (EU-ETS), the Energy Efficiency Directive and the Renewable Energies Directive.

Specifically, the EU-ETS scheme affects our refineries and chemical facilities in Europe; their emissions are subject to carbon pricing on the European market.

To mitigate these impacts, Repsol is reducing its CO<sub>2</sub> emissions through energy efficiency actions, which allowed to reduce 4.9 million tons of GHG emissions in the 2006-2018 period. In this regard, Repsol has issued a green bond of €500 million applied to refinancing in the 2014-2020 period and financing in the 2017-2022 period for energy efficiency projects in its Refining and Chemical business units in Europe<sup>2</sup>.

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, more efficient than conventional combined cycles.

The Directive on Renewable Energies entails, amongst other objectives, the incorporation of biofuels in automotive fuels (up to 8.5% in energy content by 2020). Repsol fulfills these objectives with the required guarantees of sustainability and integrating efficiently the biofuel processes in its refineries, such as the production of HVO (hydrogenated virgin oil).

- Regulations on the *Promotion of clean and efficient energy in 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 to 95 gr of CO<sub>2</sub>/km by 2020.

Thus, Repsol has invested in its Refining business in order to have an advanced scheme in terms of complexity and flexibility to enable it to compete in changing scenarios of adaptation to future fuel demand scenarios de combustibles. 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.

**In the medium to long term**, legislative developments on a international level (EU energy and climate roadmap for 2050, Sustainable finance: Action Plan of the European Commission for a greener and cleaner economy, and national contributions of other countries to the Paris Agreement) and local level (draft Climate Change and Energy Transition bill in Spain) will gradually be transposed in future legislative packages over the years. With regard to Spain, the draft bill sets the targets of reducing by 2030 the greenhouse gas emissions of the entire Spanish economy by at least 20% compared to 1990; achieving penetration of renewable source energy in final energy consumption of 35%; achieving by 2030 an electricity system with at least 70% of generated based on renewable source energy and improve energy efficiency by reducing the consumption of primary energy by at least 35% compared to the baseline pursuant to EU regulations., It also contains a proposal to prohibit from the year 2040, the registration and sale in Spain of cars and light comercial vehicles with direct CO<sub>2</sub> emissions. Repsol advocates staying aligned with the targets set by the EU and adopting cost-efficient measures and maintaining technology neutrality in order to successfully tackle the energy transition.

Repsol's strategy is focused on boosting the Company's resilience to these regulatory, frameworks, adapting its products and services

1. The EU's 2030 Energy and Climate Package sets targets for at least at 40% reduction in greenhouse gas emissions (compared to 1990 levels); at least 32% of the quota of renewable energies and at least a 32.5% improvement in energy efficiency

2. For further details regarding the specific energy efficiency measures, see the Green Bond report at [www.repsol.com](http://www.repsol.com).



to the evolution of the use of different energy sources to mitigate the impact of climate change.

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 investments, 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 this regard, the company is analyzing different medium and long-term climate scenarios. The analysis of these scenarios is a very important tool for anticipating how the energy sector will continue to adapt to sustainably supply the energy that society will need in the future. Repsol works with scenarios that are compatible with a 2°C future in order to identify new risks and opportunities in this transition and analyze the key levers and technologies that will contribute to achieving a low-emission future for the company.

The analysis of scenarios is complex as, when starting with a global approach, it is necessary to drill down to a regional study that makes it possible to understand the deployment of energy sources and the type of products required.

Repsol believes that these new scenarios offer a significant opportunity for innovation and investment in low GHG emission solutions. To this end, Repsol collaborates with different companies both directly and through international associations, including the *Oil and Gas Climate Initiative (OGCI)*.

As a result of these analyses, in the short and medium-term, Repsol establishes emission reduction plans to reduce carbon and energy intensity through the efficiency of its operations. The company recently extended its 2014-2020 plan for a new 2018-2025 plan, including, amongst other factors, units energy integration projects, process optimization and efficient facility operation. At the same time, objectives have been defined to reduce methane emissions and flared gas by 2025.

Future scenarios foresee a significant replacement of coal by natural gas for power generation, as it is a fuel with lower CO<sub>2</sub> emissions per energy unit, and offers greater performance in the generation of electricity. 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.

Aligned with the energy transition, Repsol has taken the decision to enter into new ways of low carbon business such as renewable generation and the commercialization of natural gas and electricity, performing the first investments and setting growth targets by 2025.

It also invests in sustainable mobility and contributes to the reduction of emissions through production and R&D into biofuels and advanced fuels.

In the medium and long-term, CO<sub>2</sub> 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. Repsol participates in R&D and demonstration projects of these technologies that may allow its industrial application on a large scale in the future. It also explores new technological ways of "zero emissions" or even negative emissions, such as the so-called "e-fuels", "green hydrogen", or natural carbon sinks.

In short, the company's climate change strategy is supported on the following pillars or measures to be developed over time:

- Improvement of the energy efficiency of our operations
- Reduction of methane emissions
- Reduction of flared gas
- Transition to a portfolio of low emissions with greater presence of gas and increasing non-energy uses.
- Production and incorporation of biofuels and advanced fuels
- Development of sustainable mobility projects
- Incorporation of new low carbon businesses adapted to the energy transition, such as renewable power generation and the commercialization of gas and electricity.
- Monitoring and execution of R&D projects and demonstration of emerging technologies that contribute to mitigate climate change.

Finally, through the investment fund OGCI - Climate Investments, Repsol, in coalition with other Oil & gas companies, continues 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. To

### Methane Guiding Principles

Applying guidelines for proper management of methane emissions in terms of measurement, mitigation and transparency in reporting, among others

this end, OGCI will invest more than €1,000 million over ten years.

Furthermore, the Technology and Corporate Venturing Units invest in low-emissions technologies, such as bio-fuels and advanced mobility, amongst others (see section 6.5 Innovation and Technology).

### Risk management

It is essential to integrate energy and carbon management in the business model and the risk management system, given that climate change is a variable that must be considered in the strategic decision-making process.

Repsol has an Integrated Risk Management System (see 2.5 Risk Management), enabling the Company to identify, analyze and control risks arising from climate change. The Company has in place the necessary processes for managing emerging and climate change risks at the Company in the medium and long-term, including the following:

- The establishment of future scenarios for the evolution of the energy mix, taking as reference those of the International Energy Agency (IEA), which are assigned probabilities based on expert judgment.
- The identification of the most relevant emerging and climate change risks for the Company in the medium and long-term (2030 and 2040, respectively).
- The effect of these risks on the Company's results in any scenario.

To determine its exposure to these risks, Repsol has developed its own analysis method, given that no standard methodology is available in the industry, adjusting the risk analysis methodology in the short term (5-year horizon typical of a cycle of strategic planning) in order to extend its scope to medium and long-term risks.


Probabilistic analysis of scenarios and assessment of emerging and climate change risks identified is carried out by a Company panel of experts in strategy, markets, technology and sustainability. It should be noted that such risks may adversely or positively affect depending on the risk mitigation and adaptation strategies to the climate scenario adopted by the Company with the new business opportunities that arise.

The main emerging risks and climate change risks identified are as follows:

- Changes in the end use of energy that entail a reduction in demand for products supplied by the Company due either to the natural dynamic of the markets or driven by regulation. Causes for this phenomenon include energy savings and efficiency initiatives throughout the value chain of the energy sector, the electrification of the vehicle fleet, users' preferences for innovative forms of mobility and so on.
- Changes in primary energy sources towards lower carbon-intensive alternatives that involve an increase in their share and a reduction of the contribution of fossil fuels, due either to the natural dynamic of markets or driven by regulation.
- Late adoption by the Company of new or not yet mature practices / processes / technologies, oriented at the production of energy (including renewable energies), their distribution and storage, which are finally imposed on the market, or in reverse, the premature adoption of technologies that are ultimately "non-winning" ones.
- Regulatory changes that affect operations and/or future investments, understood as those which directly affect the Company's results, arising either from the obligation to adopt measures to mitigate climate change, or changes relating to the environment, taxes or other.
- Fundraising risks in the development and transition to a low-emission future at the Company. These may arise from the position of the financial sector or of investors in relation to the energy sector, within the framework of their initiatives, whether voluntary or regulator-mandated, to contribute to climate targets.
- Late adoption by the company of new practices / processes / technologies oriented to the development of new non-energy products, understanding as such new materials that allow an oil use decoupled from CO2 emissions.

Repsol is taking measures to minimize these risks as well as the magnitude of potential impacts of climate change in natural resources, facilities and in

Repsol is a member of this initiative for collaborating on climate action, sharing best practices and technology solutions.



<https://www.oilandgasclimateinitiative.com>

the climate phenomena to which we are exposed: drought, flooding, temperature change, etc.

To cite just two examples, Repsol operates in areas that may be affected by the water stress, which would affect the correct operation of our facilities. Thus, Repsol is developing adaptation plans aimed to anticipate and mitigate such situations as much as possible.

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).

Repsol has established a new emission reduction target of 3 million tons of CO<sub>2</sub>e for the 2018-2025 period. This plan is a continuation of the 2014-2020 plan, although it is even more ambitious.

The new target broadens the scope of action, which in the past has focused on energy efficiency measures, and is based on the following levers:

- Reduction of methane emissions in *Upstream*.
- Reduction of routine flared gas in *Upstream*
- Energy efficiency both in *Upstream* and *Downstream*.
- Low carbon technologies and renewable energies.

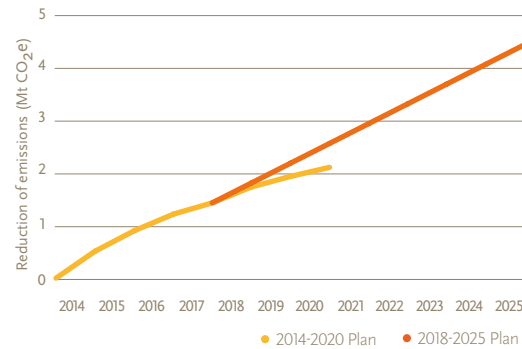
## Objectives and metrics

Below are the different metrics and objectives defined by the Company to make progress with its commitment to mitigate climate change.

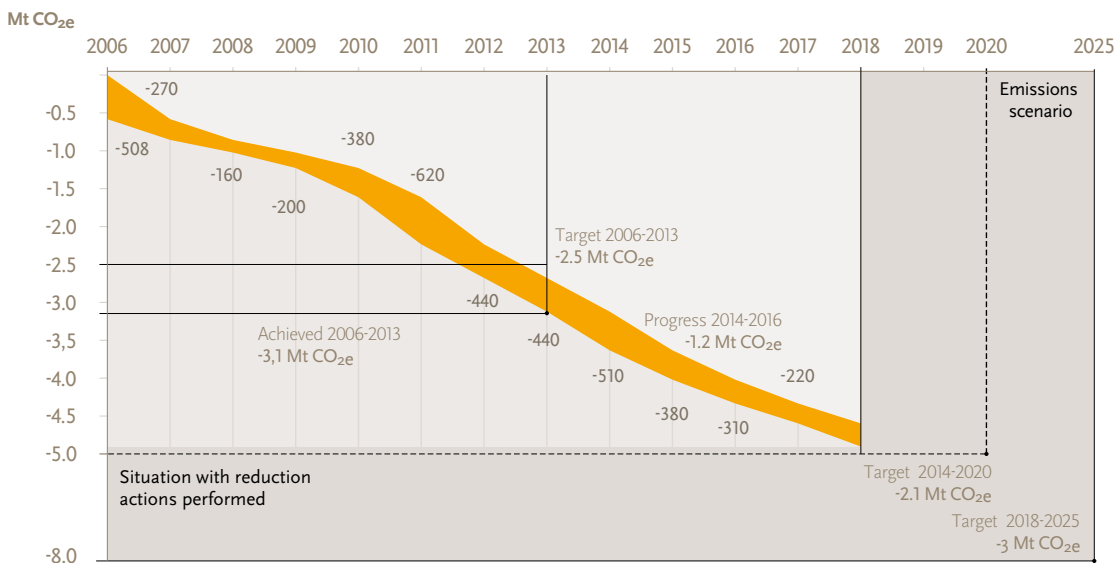
### GHG emissions reduction Plan

The main commitment to climate change is reflected in the goal of reducing 2.1 million tons of CO<sub>2</sub> equivalent by the end of the 2014-2020 period. In 2018, Repsol is continuously improving and taking actions that avoided the emission of 309.8 kt of CO<sub>2</sub>e, which means that since 2014, a reduction of nearly 85% of the target set for the entire period has been met.

Reduction of emissions



## Reduction of CO<sub>2</sub>e emissions (millions of tons)



**3 Mt CO<sub>2</sub>e**

new emissions reduction target 2018-2025

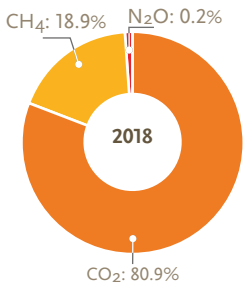
**85%** ↓

compliance with the 2014-2020 Plan

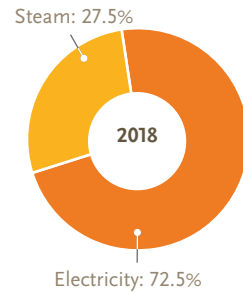
**4.9 Mt** ↓

CO<sub>2</sub>e reduction between 2006 and 2018

**Scope 1**



**Scope 2**



**Our emissions**

	Downstream										Total	
	Upstream			Refining			Chemical			Other <sup>(4)</sup>		
Scope 1 <sup>(1)(2)</sup>	10.16 Mt			8.82 Mt			3.00 Mt			0.014 Mt	<b>21.9 Mt</b>	
	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
	59.4%	40.4%	0.2%	99.3%	0.5%	0.2%	99.7%	0.1%	0.2%	99.4%	0.04%	0.5%
Scope 2 <sup>(1)(3)</sup>	73 kt			170 kt			108 kt			55 kt	<b>406 kt</b>	
Scope 3 <sup>(5)(6)</sup>											<b>2018</b>	<b>2017</b>
Indirect CO <sub>2</sub> emissions associated with the purchase of goods and services (including hydrogen) (Mt)											8.24 <sup>(1)</sup>	7.84
Transportation and distribution of products <sup>(7)</sup> (Mt)											0.51	0.52
CO <sub>2</sub> emissions deriving from the sale of products <sup>(8)</sup> (Mt)											148	149

(1) Direct and indirect emissions (Scope 1 and Scope 2) of the Company's 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 2018 relate to an external energy content of approximately 2.21 million TJ.

(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, we have only included diesel locomotive voyages, 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 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.

Repsol is a signatory to the international initiative Climate & Clean Air Coalition - Oil & Gas Methane Partnership of the UN Environment, to reduce methane emissions, remove barriers and find technically and economically viable solutions.



<https://www.oilandgasclimateinitiative.com>

**Reduction of carbon intensity**

Repsol has defined a long-term carbon intensity indicator in terms of tCO<sub>2</sub>/GJ, which gages the company's commitment to providing society with the energy it demands (GJ) with the lowest possible emissions (tCO<sub>2</sub>). Repsol intends to reduce its carbon intensity (tCO<sub>2</sub>/GJ) in alignment with the International Energy Agency-IEA's Sustainable Development scenario (a 40% reduction by 2040), without forsaking the fact that it must simultaneously supply the energy

society needs for its development and welfare.

In order to demonstrate its commitment in the short run, the Company has also established a 3% carbon intensity reduction target by the year 2020.

**Reduction of methane emissions**

Convinced of the importance of the role of natural gas in energy transition, Repsol has undertaken the objective of reducing methane emissions in its operated assets by 25% by the year 2025. Methane emissions in 2018 totaled 164kt(169kt in 2017).

This commitment is in line with the joint OGCI Initiative (Oil and Gas Climate Initiative), which was presented at the annual event for CEOs of member companies in September 2018 in New York.

Achievement of the objective is based on three lines of action:

- Implementation of more precise emission detection and quantification technologies
- Identification and use of technologies for the reduction of emissions
- Transition to a lower emissions portfolio

### Reduction of flared and vented gas

Repsol, aware that routing gas flaring entails not only larger emissions of CO<sub>2</sub>, but also losses of energy that is not used in our processes, signed up to the World Bank's Zero Routine Flaring by 2030 Initiative in June 2016. Thus Repsol undertakes to seek solutions that are technically and economically viable to minimize routine gas flaring as soon as possible, and no later than 2030 at E&P facilities.

In 2018, Repsol worked on segregating routine/non-routine gas flaring data, and this enabled the company to establish a routine flaring reduction target of 50% by 2025 in terms of our operated E&P assets. The main lines of action are as follows:

- Improvement of the design and operational procedures of the facilities
- Reutilization of gas as a fuel, to generate electricity or for reinjection
- Commercial solutions to make use of the gas once it has been treated

Globally, a total of 0.38 million tons of gas was sent for flaring in 2018, while 0.29 million tons were sent in 2017. This increase was due to the larger number of exploratory campaigns and scheduled stoppages in downstream units.

With respect to venting, a total of 3.28 million tons were vented in 2018. The majority of these emissions come from an asset in Malaysia, where the venting is CO<sub>2</sub> that contains the extracted natural gas itself, and which is separated and vented to obtain commercial gas. The company is currently studying the best options for minimizing

this venting. In 2017, 3.52 million tons of gas were vented.

### Energy consumption

In 2018 the Company carried out investment and operational improvements in all operations. This enabled it to save approximately 5 million GJ, which amounts to an accumulated savings of 28.2 millions of GJ since 2014. The Company generates renewable energy (see section 5.2.5.2), although it does not use it in its operations.

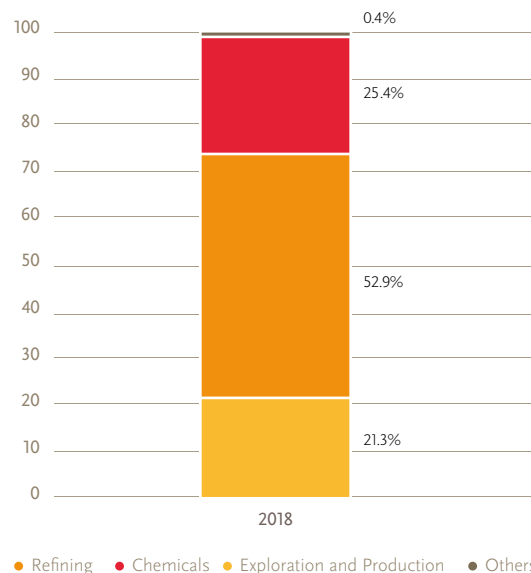
Internal energy consumption	2018 <sup>(1)</sup>	2017
Fuel (millions of toe) <sup>(1)</sup>	4.87	5.02
Electricity purchased (10 <sup>6</sup> MWh) <sup>(2)</sup>	0.83	0.72
Steam purchased (10 <sup>6</sup> GJ) <sup>(3)</sup>	1.87	1.71

(1) Data on fuel consumption required for energy generation.

(2) Includes electricity purchased for consumption.

(3) Includes steam purchased for consumption. This does not include Dynasol. The 2017 data were recalculated according to this criterion.

### Energy consumption by activity



Source: Business Units

### 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

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

to compare best practices in management of methane emissions

Principles for Responsible Investment

www.unpri.org

GSP  
20  
20

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

**25,288**  
number of employees

Repsol strives to promote a working environment based on equal opportunities, diversity and inclusion.



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.

	2018 <sup>(1)</sup>	2017
Energy intensity in Refining (GJ/t processed crude oil) <sup>(1)</sup>	2.66	2.63
Energy intensity in Exploration and Production (GJ/boe produced) <sup>(1)(2)</sup>	0.294	0.298

- (1) This indicator includes the energy consumption associated with the consumption of fuel, flaring, fugitive emissions and venting.
- (2) The figures have been calculated using gross production of our operated assets, as reported energy consumption includes 100% of consumption of such assets, irrespective of Repsol's percentage of them.

**GHG emissions intensity**

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

	2018	2017
Greenhouse gas emissions intensity in Refining (tCO2e/t processed crude oil) <sup>(1)</sup>	0.193	0.191
Greenhouse gas emissions intensity in Exploration and Production (tCO2e/ thousands of boe produced) <sup>(2)</sup>	60.5	62.7

- (1) This indicator does not include cracker emissions.
- (2) The figures have been calculated using gross production of our operational assets, as reported energy consumption includes 100% of consumption of such assets, irrespective of Repsol's percentage of them.

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

**6.2.1. Human capital**

Criteria to meet strategic objectives are based on 4 lines of work: technology, an ambitious digitalization program, employee talent and an even more efficient corporation. Future competitiveness is guaranteed with a new organization, new and less structured and less bureaucratic ways of working,

speedier and more flexible, with new capacities, to help us move forward in terms of energy transition.

At year-end 2018, Repsol had 25,288 own employees<sup>2</sup>, compared to 25,085 in 2017, and their average age is 42.5 (40.3 for women and 43.7 for men). In 2018, 3,810 new employees joined the company,<sup>3</sup> compared to 3,157 in 2017

**Value proposal**

The value proposal for our employees who generate competitive edge compared to other companies to attract and retain talent are as follows:

**1. A diverse team**

The total workforce is distributed among 35 countries, representing more than 83 nationalities. 63% of Repsol's staff are male, and 37% female. At present more than 1,357 employees work in a country other than their own, making the value contribution of a multicultural environment increasingly tangible.

Variety of gender, nationality, culture, different capacities, sexual orientation, age and professional profile make their contribution to the company's results. It is for this reason, and to promote equal opportunities, that we have a policy which respects people and their diversity. In 2018 the **Diversity and Balance Committee<sup>4</sup>** established an action plan with targets up to the year 2020, in five working lines: different abilities, gender, age, cultural diversity, flexibility and work-life balance.

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.). Data of the newly acquired company Viesgo is not included, except for the main demographic indicators (n° of employees at the end of the year). Societat Catalana de Petrolis SA (formally called Petrocat) is not included as a managed company.

2. The total workforce at December 31 is 26,818 and the total managed workforce is 24,485 (26,644 and 24,216 at December 31, 2017, respectively). The accumulated average managed workforce in 2018 numbered 24,679 (24,664 in 2017). Unlike the number of employees, workforce figures are calculated on the basis of the percentage employment of each employee.

3. Only includes new permanent and temporary hires with no prior employment relationship with the company. 39.5% of the new employees of 2018 and 31% of 2017 were permanent. The 2018 figure mainly relates to new hires in Peru.

4. The objective of the Diversity and Reconciliation Committee is to manage inter-cultural diversity.

The countries with the largest number of nationalities (excluding those of their own country):

Destination country <sup>(1)</sup>	2018	2017
Spain	62	58
Canada	20	25
USA	24	24
Algeria	17	18
Singapore	13	12
Portugal	12	12
Norway	12	10
Brazil	11	10
Malaysia	9	13
Libya	9	8
UK	7	-
Peru	7	7
The Netherlands	7	6
Bolivia	7	6
Vietnam	6	16
Russia	6	8
Indonesia	6	7
Colombia	5	3
Mexico	4	-
Italy	4	-
Ecuador	4	4
Venezuela	3	6
France	3	-
Belgium	2	-
Aruba	2	-
Angola	2	1
Trinidad and Tobago	1	2
Switzerland	1	-
Luxembourg	1	-
Germany	1	-
Guiana	1	-
Greece	1	-
Gabon	1	-

(1) In certain countries, labor law does not require requesting certain personal information from employees. This is the case of Canada and the United States with respect to nationality.

With respect to **different abilities**, Repsol has an integration action plan up to 2020 for disabled people in all areas of the organization. At December 31, 2018 the Company had 570 employees with disabilities, representing 2.29% of the workforce. In Spain, the Company surpassed the requirements of the General Law on Disability (LGD) in 2018 with 2.52%, and 485 employees hired directly.

Integration	2018	2017
Nº of employees with disabilities in Spain	487	492
Nº of employees with disabilities in the rest of the world	83	84
Total Nº of employees with disabilities	570	576
Nº of new employees with disabilities	40	37

The different initiatives adopted in this area include an **accessibility audit at the central offices**, with the ultimate objective of drawing up a diagnosis of the level of accessibility of the environment, services and management, as per the requirements of the UNE 170001 Universal Accessibility standard. Another measure adopted is the **incorporation of criteria for compliance with the LGD in the grading of suppliers**.

With regard to **gender diversity**, the percentage of women continues to increase in all groups and businesses. Repsol commitment is for 31% of leadership positions to be held by women by the year 2020.

Repsol has a plan for equal opportunities plan between men and women in Repsol group companies in Spain aimed at improving women's employment and career prospects in Group companies.

Another boost to Repsol's commitments in terms of equality is its renewal of DIE<sup>1</sup> a certificate that is granted to entities that make a prominent and significant contribution to the application of equality policies. Repsol has also adhered to the Ministry of Equality and Social Affairs' anonymous curriculum protocol, which is designed to

1. 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.

employees  
in more than  
**35** countries  
of 83  
different  
nationalities

GSP  
**20  
20**

**Objective:**  
Exceed legal obligations in labor integration of people with disabilities.



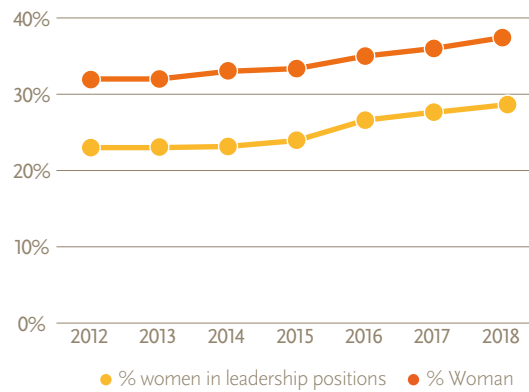
GSP  
20  
20

**Objective:**

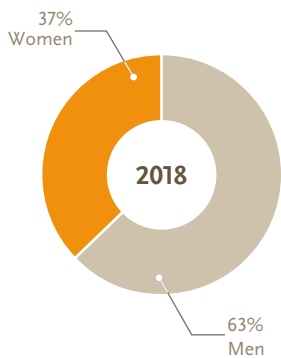
increase by 30% the proportion of women in leadership positions.

eliminate any gender bias in personnel recruitment processes. Work has also been ongoing to devise female talent maps in areas of business with specific initiatives to boost female leadership by 2020.

**Women in Repsol**



**Women in Repsol [%]**



**Gender indicators <sup>(1)</sup>**

	2018	2017
% women in the Company	37.4	36.0
% women among new hires	50.7	50.0
% of women in worldwide leadership positions <sup>(2)</sup>	29.2	28.2
% women in leadership positions in Spain <sup>(2)</sup>	34.7	33.1
% of women in worldwide management positions <sup>(3)</sup>	41.1	35.7
% women in management positions in Spain <sup>(3)</sup>	39.6	38.5

(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).

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

**Teleworking indicators**

	2018	2017
Nº of teleworkers worldwide	2,267	2,003

In 2018 specific commitments were introduced in terms of work-life balance and diversity in the sustainability plans in the countries in which we operate. Some of the achievements in terms of a work-life balance were worldwide hour flexibility adapted to the usages and customs of each country.

Spanish facilities acknowledged the **right to disconnect** since there is a risk that availability may interfere with personal and professional balances, and to this end we have defined certain information and awareness tools for supervisors and staff, even though there is no specific policy on disconnection.

In 2018 Repsol won the flexible company award for its flexibility policies, arranged by Added-Value Communication with the assistance of the Ministry of Health, Consumption and Social Welfare's Department of Family and Infancy Services..

**2. Compensation**

Repsol has undertaken 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 long-term variable compensation.



The average pay of staff in Spain<sup>1</sup> is shown below, by categories, age and gender:

**Remuneration broken down by category**

Job category	Average remuneration <sup>(1)</sup>		Wage gap by gender <sup>(2)</sup>
	Women	Men	
Executives <sup>(3)</sup>	284,856	319,688	0.89
Technical managers	95,361	104,908	0.91
Technicians	56,686	61,901	0.92
Collective bargaining agreement <sup>(4)</sup> <sup>(4)</sup>	42,329	47,967	0.91

**Remuneration broken down by age**

Job category	Average remuneration <sup>(1)</sup>		Wage gap by gender <sup>(2)</sup>
	Women	Men	
<35 years	40,042	43,589	0.92
35-50 years	49,131	56,288	0.87
>50 years	57,461	69,398	0.83

- (1) All remuneration items that are taxable in Spain (as per tax form 190) have been used to determine average remuneration.
- (2) The salary gap has been determined by dividing average male remuneration by that of female remuneration, in accordance with the model of GRI 405-2.
- (3) Includes all executive personnel except two executive directors, whose remuneration is disclosed in section B.5 of the Corporate Governance Report, in detail and broken down by items, in both their functions as executives and as directors.
- (4) Repsol operates in Spain through different companies subject to different collective bargaining agreements, which results in quite different wage levels in different companies or sectors. Remuneration of employees under collective bargaining agreements, to whom are directly applied the levels specified in the agreements, and in no case do these establish remunerative differences on the basis of gender. It is not advisable to seek to analyze in aggregate different wage situations under different collective bargaining agreements, so the table shows medians of average remuneration by gender. The value of the wage gap shown in the table is the weighted average ratio of wage gaps by gender of the entirety of these companies.

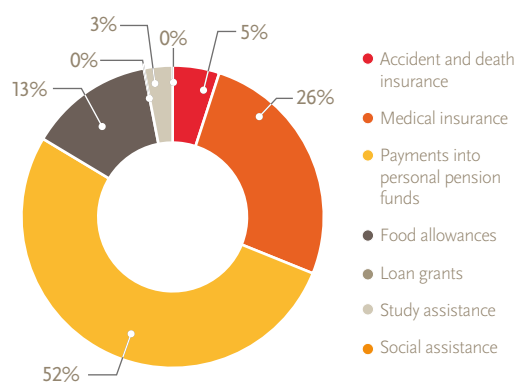
**Adjusted wage gap of all employees in Spain 0.95**

An analysis with a more detailed breakdown by companies, categories and ages allowing for gender comparison of increasingly similar situations yields result of 0.95 for all employees of the Repsol Group in Spain (weighted average ratio of women's average remuneration divided by men's average remuneration

Average staff costs per employee<sup>2</sup> stood at 70.7 thousand euros in 2018 (71.6 thousand euros in 2017). In 2018 total spending on social welfare<sup>3</sup> was 106.2 million euros, as against 102.6 million euros in 2017. Repsol is committed to a flexible remuneration system that is applicable to a majority of companies that is adapted to the needs of each employee, such as the Share Purchase Plan<sup>4</sup> and other features such as a crèche, medical insurance and extra contributions to the Pension Plan.

Repsol also has a model of performance and merit-based annual variable remuneration:

**Distribution of social benefits by type [%]**



**3. Professional development and leadership**

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 2018, profiles and capacities were identified that are critical in the medium term to furnish a response to the Company's strategic challenges. This entailed feedback from 35 executives and 120 employees, in interviews and workshops. The information will assist selection or mobility processes, and will help develop capacities depending on the needs identified by areas of business, or transversal issues such as digitalization.

- 2. Relates to personnel expenses from the average accumulated workforce under management. Personnel expenses include social security costs and other expenses except severance pay, director's remuneration and travel expenses.
- 3. Expense of employees of managed FTE's (Includes societat Catalana de Petrolis S.A.).
- 4. For further information, see Note 29.4 of the consolidated financial statements.

1. For other relevant countries, the information is available in Appendix II of this report (indicator GRI 405-2)

**GSP**  
**a**

**Ambition:**  
Commit to people and support their development

The **leadership** model has been revised in accordance with cultural trends, in order to drive the company's strategic plan. This also entailed an update of the various mechanisms used to assess and assist the development of leaders. In 2018, 180<sup>o</sup> assessments were conducted of 1,768 Leaders/Technical Advisors and 125 Area Leaders/Senior Technical Advisors promoted after the assessment carried out in 2017.

A review was also carried out of leadership assistance programs, and they were applied to 440 Area Leaders in 2018. This, and other initiatives for the development of leaders, enabled 79% of Area Leaders and 72% of Managers to undergo at least one critical professional development training program in 2018.

The company's **internal mobility** is an essential feature of employee development which assists with the learning curve and professional development. It is for this reason that Repsol encourages its employees to undertake new responsibilities inside and outside the same line or area of business. It also promotes international assignments, which have helped extend best management practices and assisted with employees' cultural integration.

Mobility	2018	2017
Number of assignments	2,665	3,214
% of women (of number of assignments)	37%	43%

In order to comply with internal rules and regulations that establish criteria and processes the company makes available to employees to identify and manage their **training** needs, the Company maintains a complete and up-to-date training schedule in order to improve its employees' skills throughout their professional careers, and this assists effective achievement of Repsol's strategy. Programs carried out in 2018 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.

Training	2018	2017
Investment per employee (€)	600	519
Total investment in training (millions of euros)	14.5	12.4
Hours of training per employee	45	40
Dedication rate <sup>(1)</sup>	2.60%	2.34%
% of employees receiving training	81.50%	94.5%

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

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

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

Young talent	2018	2017
New professionals completing our Master program	66	52
University internship agreements to consolidate training	497	444
Medium and higher level vocational training internships <sup>(1)</sup>	88	100

(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 2018, Repsol continued the commitment it had undertaken with the FP Dual program.

The criteria for **promotion** at Repsol include performance, potential and development. In 2018, 869 employees were promoted, as against 742 in 2017.

Promotions	2018	2017
Number of promotions	869	742
% of women (of number of promotions)	42%	38%

Retaining talent	2018	2017
Total turnover rate <sup>(1)</sup>	23% <sup>(2)</sup>	9%
Voluntary turnover rate <sup>(2)</sup>	6%	4%
Total executive turnover rate <sup>(3)</sup>	8%	11%

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

(2) The scope of the figure for 2018 has been modified pursuant to a legal requirement (Spanish Law 11/2018 on reporting of non-financial and diversity information), with the rate calculation including both permanent and temporary employees

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

(4) Corresponds to the total turnover rate of executives out of the total number of executives at year-end.

This proposal sets out to make a contribution to a stable working environment, where a positive work atmosphere heightens employee commitment and satisfaction. Repsol has identified the need to work on measures to encourage **health and wellness** programs for employees, **financial savings plans and progressive retirement**.

The Diversity and Balance Committee has reflected on demographic trends in society, and how average age affects business and its projection in the medium run.

#### 4. Collective bargaining

The Company continues to work towards its objective of permanent adaptation to the **new realities of the working environment**, encouraging communication with trade union organizations. This led to the signature of Collective Bargaining Agreements among Group companies in the course of the year, to ratify agreements within the scope of the **gth Framework Agreement** (to run between 2017 and 2019).

The Collective Bargaining Agreements include, among other issues, pay reviews for the period agreed, a link between variable remuneration and Company targets, a link between the pay review and the Company's net results, flexibility measures to bring balance to personal, family and working life, and an attempt to develop equality policies

and improve the situation of women in terms of employment and professional careers.

This includes measures to introduce a solvent forward-looking company project within the scope of sustainability and the promotion of a satisfactory employment climate

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

Repsol operates in highly sensitive social, political and cultural contexts. The Company continues to implement the commitments it has undertaken in its **Human Rights and Community Relations Policy**, which complies with the United Nations Guiding Principles for Business and Human Rights.

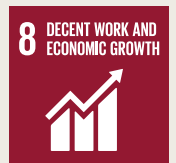
#### Our responsibility: to respect and remedy

Repsol 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, in case they are produced.

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. The Company's internal regulations

<sup>1</sup>. For further community relations and human rights framework, see [www.repsol.com](http://www.repsol.com).

Repsol is a responsible company. Which respect for human rights, and works to adopt inclusive and participative decisions with its local Communities.



### Human rights impact assessment in La Guajira

## Colombia

The impact assessment was carried out with a participatory approach including respect for local culture. The Repsol methodology was presented beforehand to the traditional authorities (the Wayuu ethnic group). Interviews were conducted with ensuring diversity, in order to ensure the active participation of local communities throughout the process. The outcomes of the study were shared with communities at mass meetings in the local add (wayunikki) after local language, singling out aspects in relation to territoriality, loss of young people's identity, employment rights,

economic rights, women's rights and environmental rights. The major impact identified, however, was the protection of sacred spaces and the cultural impact, where no mitigatory measures were possible. The company took the decision to discontinue its operations in this block, in coherence with its policy of acknowledgement and respect for the cultural diversity of communities. The case was presented in a private audience to the European Parliament in 2019 at the "Multisectorial Dialog: European enterprises and Due Diligence in Latin America" private.

GSP  
a

**Ambition:**

Establish strong relationships with communities based on recognition, trust, mutual respect and shared-value, through proactive dialogue.

addresses the human rights due diligence and constitutes the mainstay of the action taken by Repsol concerning human rights and community relations. The framework focuses on risks, impacts and opportunities, avoiding reactive conflict-resolution strategies and implementing prevention and permanent dialogue for all players involved.

In 2018 a review was conducted of guidelines for the identification of social risks, human rights impact assessment (HRIA) and management of opportunities in connection with social performance, facilitating their comprehension and application to projects and assets. All significant operations administer opportunities and risks, with due consideration given to at least one of the following mechanisms: development plans, impact assessments or the stakeholder engagement. All the impact assessments performed in 2018 included social and human rights issues. Some mention should be made of the HRIA carried out for our operated asset in Colombia.

Likewise, 100% of joint operations reviewed in 2018 included human rights clauses. The human rights performance of counterparties was also assessed in all asset acquisition due diligence processes carried out in 2018, as established in our internal regulations.

**Operational grievance mechanisms**

Answering the grievances, concerns and complaints of communities within the influence area of projects and assets (mostly produced by operational impacts) is one of the priorities of the Company which also helps anticipate and respond to potential impacts of activities and thus to prevent impacts on human rights and future conflicts. The nature of such mechanisms is special and unique in each asset. They are designed on the basis of informed participation, and must be legitimate, accessible, transparent, compatible with human rights and based on dialogue.

In 2018 Repsol made improvements to grievance mechanisms for its most significant operations following the United Nations Guiding Principles for Business and Human Rights.

**Economic impact on communities**

The company identifies and strengthens positive impacts and the shared value of regions where Repsol is present as a result of a consensus with communities. The context determines the scope and focus of the investment. In 2018 social investment totaled €43.3 million. Here are a few examples:

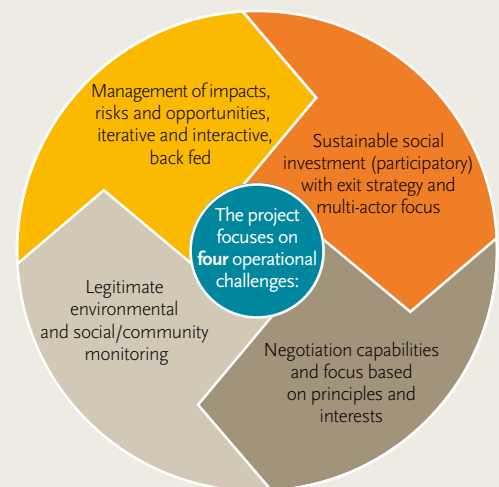
**Sustainable co-existence project**

A project for the continuous improvement of the company's social performance through active participation by local stakeholders to:

1. Reinforce the social management system - improving processes on the basis of greater knowledge of the context.
2. Generate measurable benefits and drive multi-actor cooperation in social investment projects..

**Peru**

3. Assist the empowerment of community environmental monitoring teams, encouraging the exchange of reliable objective information on the positive and negative impacts of activities..
4. Develop capacities to conduct negotiations with communities in conditions that are fair and in the interests of both parties.



Country	Project
Colombia	<p><b>Program to the benefit of communities within the area of influence of Block CPOg</b></p> <p>With an investment package in excess of 880,000 euros, the project focuses on promoting sustainable economic growth in rural areas, with the consequent improvement of the living conditions of rural families (30% increase in their earnings) and better production capacities (9 associative companies created and consolidated).</p>
Brazil	<p><b>“Costa Atlántica-Fundación SOS”</b></p> <p>In collaboration with experts from the local university, the project focuses on conservation of the natural and cultural heritage of coastal and maritime areas. 10 projects were carried out on this initiative in 2018, on a 200,000-euro investment package to help protect an area of over 500,000 hectares: the Araranguá Coast, Itapea State Park, the Ipanema National Forest and the Azure Jay Routes, among others.</p> <p><b>“Repsol-Sinopec educational platform”</b> Itinerant education program for the social and economic development of fishing communities. In 2018 a total of 3,998 people from communities in Bertioga, Perúibe, Iguape, Cananéia and San Vicente were the beneficiaries of this project. The investment package exceeded 406,000 euros.</p>
Ecuador	<p><b>Community Education Assistance Programs</b></p> <p>Development and cooperation program with the Waorani people, alongside the Peruvian State and its institutions, in order to give school-age locals access to education services. The program helped over 800 students in the Waoranis' more than 40 communities, on a investment package that topped 140,000 euros.</p>
Peru	<p><b>Electrical interconnection in the Nuevo Mundo Community</b></p> <p>Electrical interconnection project between the Bajo Urubamba Transmission Network and the Nuevo Mundo Community's Distribution Network. The objective is to guarantee a constant 24-hour supply of electricity for domestic use and street-lighting. The project benefits some 1,200 people within the area of influence of the Company's operations Kinteroni and Sagari and a compression plant), helping to safeguard sustainable development.</p> <p>Investment: over €1.3 million.</p>
Indonesia	<p><b>Community against forest fire</b></p> <p>A project carried out alongside local firefighters, the forestry agency and local hospitals to capacitate the community to deal with forest fires in close proximity to company operations. Training is given and work is ongoing to establish tanks as sources of firefighting water. More than 9,000 euros were invested in the project in 2018, and 60 people received training.</p> <p><b>“Development program for the Suku Anak Dalam indigenous people”</b> to develop their sustainable autonomy and carry out healthy practices campaigns, in addition to housing programs to boost their standard of living. 25 families are taking part in the two-year program, with an investment package of over 90,000 euros. More than 20,000 euros were invested in 2018.</p>
Libya	<p><b>Provision of medical equipment</b></p> <p>With an investment package of over 660,000 euros, the project sets out to revamp the Uberi and Rujban hospitals with a supply of specific medical equipment for intensive care units, pediatric units, gynecology and emergency units, and also labs and operating theaters. This benefits around 120,000 people.</p>

**49.1%**  
voluntary social investment vs. total social investment

**GSP**  
**a**

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



**Our priority: obtaining and maintaining the social license for our operations**

The Company establishes long-term agreements with communities; it currently operates long-term agreements with indigenous communities in Peru (block 57), Bolivia (agreement with the Guaraní People's Assembly) and Ecuador (block 16 Waemo Kewingi).

As the result of the company's commitment to participatory dialog and shared value with communities, and in accordance with Sustainable Development Goal 17, Revitalize the Global Partnership for Sustainable

Development, in 2018 Repsol signed agreements with the United Nations Development Program (UNDP) and the Organization of Iberoamerican States (OEI). Both agreements will assist cooperation and development projects. This will foster prosperity in the communities and attract other players (government bodies, international cooperation, NGOs, investment funds and tools, other companies, etc.).

GSP  
20  
20

**Objective:**

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

**Security and human rights**

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

Repsol requires the employees of private security firms providing services at its facilities to have training or take courses in human rights. The Company provides the training or provides courses for security staff in aspects of respect for and protection of human rights. In addition, in some countries such as Colombia and Peru, the public security forces receive specific training in human rights, and this year training was received there by 207 members of these forces.

Human rights	2018	2017
Number of employees trained in human rights (online)	266	519
Number of training hours in human rights (online)	532	1,040
Number of cases of violations of indigenous peoples' 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 (%)	100	98
Security providers evaluated according to human rights criteria (%)	100	100

(1) No incidents related to violations of indigenous peoples rights have been reported through the Company's whistleblower channel

**Repsol and UN sign and global agreement to promote sustainable development**

This is one of the first international agreements that the United Nations Development Programme (UNDP) has signed with an Oil and Gas company. The partnership facilitates cooperation between UNDP offices and our local teams in over twenty countries where both institutions operate for a period of two years.

The agreement identifies four common areas of work in the countries where both institutions are present:

1. Support for the implementation of initiatives to ensure community development and support the Sustainable Development Goals communities.
2. Exchange of information and analysis on collaborative projects that support sustainable development.
3. Participatory dialog with community stakeholders to define the local priorities for sustainable development
4. Development of knowledge and strengthening of dialog based on networks and exchange of experiences.

One of the projects that arose from this agreement will be carried out in Peru. The project aims to to promote sustainable development, respect for human rights, the preservation of biodiversity and to ensure, and to coordinated work with the government, communities and local players in areas near Repsol's operations, in the Amazon region of Cuzco.





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

In order to guarantee safety at Repsol's facilities and protect those involved in its processes, the company focuses on proactive risk management throughout its cycle of activities. This means guaranteeing proper identification, assessment and management of the risks associated with the processes and industrial assets throughout their entire lifespan. Repsol applies the most stringent international standards in the design of its facilities, and strict procedures are also employed for operation, maintenance and dismantling processes.

The 10 basic safety rules help avoid incidents with people during our activities. The rules are not merely applicable to all our employees and contractors, but they also represent the company's commitment to provide the best means to reduce exposure to hazards during its activities.

Repsol continues to work on revising its internal regulations with regard to Safety and

the Environment, with the intention of simplifying and clarifying the Company requirements. In 2018 a review was made of basic aspects such as road transport, product safety, operational safety and assessment of environmental, social and health-related impacts, and also the management of environmental situations.

The updated product safety regulation applies to all chemicals designed, supplied, manufactured, used and sold by Repsol. It establishes the need for an analysis of the hazards at each stage of product lifecycles, and specifies the criteria for reporting safety information in this regard.

#### Process safety

For some years the company has operated an anticipational safety program to manage safety of processes at any time to prevent industrial accidents, keeping risks under control and properly managed. This program will be boosted by means of initiatives in the three areas concerned - people, facilities and processes - as established in the Key Lines of Action defined up to the year 2025.

The **process safety** principle is reinforced at Repsol by guaranteeing the operation of safety barriers. To this end work is ongoing on proper management of critical processes and to guarantee proper design, implementation and maintenance of safety barriers, to ensure the integrity of our facilities. To guarantee

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 HSE matters. As a general rule, safety and environmental information includes 100% of the data from companies in which we hold a controlling interest or control over operations. Specifically, with regard to safety, data is provided on contractors that provide services under a direct contract.

Repsol strives to create a safe, well-protected working environment.



#### Process safety in E&P

An audit was carried out in 2018 as GRN partners [the Reggane Project in Algeria], focusing on process safety and led by the business unit's safety and environment manager and the E&P SMA's assurance group.

The benefits of the audit process include the implementation of key process safety procedures at GRN: procedures to render systems non-operational, alarm management and process safety KPIs.

### Algeria



**GSP**  
**a**

**Ambition:**  
0 accidents.

safe processes we apply international standards such as API, NFPA, ISO, EN, IEC, IOGP or CCPS.

Preventive maintenance and inspection programs are some of the tools applied by Repsol to run a check on the proper operation of safety systems and critical safety equipment.

Process safety indicators <sup>(1)</sup>	2018	2017
PSIR <sup>(2)</sup> TIER 1 + TIER 2	0.47	0.62

(1) A process safety accident is one in which the first line of control has been breached, with the following happening simultaneously: i) There is a process or a chemical involved ii) It occurs at a specific location, i.e. at a facility used for production, distribution, storage, auxiliary services (*utilities*) or pilot plants 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. steam, hot water, nitrogen, compressed CO<sub>2</sub> or compressed air, with certain levels of consequences. The process safety accident will be classified as Tier 1 or Tier 2 according to the defined thresholds.

(2) PSIR: Process safety incident rate.

Repsol's controls its safety management and monitoring through effective measurement of the indicators in alignment with the main international benchmarks in this field, such as IOGP, API and CCPS. It should be pointed out that the Company's process accidents decreased by 24% in 2018 against the previous year. This is 49% below the annual target set by the Company. The reduction was due to a decline in accidents and a 5% increase in operating hours.

## Occupational safety

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

Personal safety indicators <sup>(1)</sup>	2018	2017
Frequency Rate (FR) <sup>(2)</sup>	0.89	0.71
Lost time injury frequency rate for company employees	0.76	0.78
Lost time injury frequency rate for contractor staff	1.01	0.65
Total Incident Rate (TIR) <sup>(3)</sup>	1.59	1.43
Nº of company employee fatalities	-	0
Nº of contractor staff fatalities	2	0
Number of training hours	217,464	200,080

(1) Repsol's corporate regulations set out a common methodology and criteria for recording incidents, which is supplemented by an incident management indicator guide.

(2) Lost Time Injury Frequency Rate: (deaths and with lost days) number of lost time injuries and accidents per million work hours.

(3) Total Recordable Incident Rate: sum of personnel consequences (deaths, lost work days, medical treatment cases and restricted work) per million work hours.

Regrettably we must report two fatalities this year among our contractors. The deceased were the drivers of tankers in two accidents on 25 and 29 September. In the first accident the tanker left the road and overturned while unloading, and in the second the tanker collided with a truck parked on the hard shoulder. Investigations are ongoing for both incidents to analyze the causes and establish the necessary measures to prevent any repetition of this type of accident.

The Company has set TIR targets since 2014. This year, TIR rose by 11.2% compared to 2017 due to the two deaths, to 19.7% for incidents with day losses and a 1.9% reduction in hours worked, in spite of the 4.2% decrease in the number of incidents with no day losses. This has also had an impact on the 25.4% increase of the FR with respect to the previous year.

Indicators of occupational incidents are reported in accordance with Repsol's Internal Incident Management Normative, which is based on different international standards (IOGP, OSHA). Incidents are classified according to the seriousness of both their actual and potential consequences.



Employee accidents	2018
Very serious	2
Serious	1
Moderate	81
Minor	69
<b>TOTAL</b>	<b>153</b>

## Safety culture

Repsol continues to reinforce its **safety culture** as a basic lever to prevent mayor accidents. It is only possible to build a working environment in which safety is an essential aspect of all daily decisions and courses of action on the basis of the commitment of all those who make up the organization.

The safety culture diagnostics and reinforcement workshops introduced two years ago were boosted this year by diagnostics in the refinery and chemicals sections of the Tarragona Industrial Complex, at the Pampilla refinery and also the Repsol Technology Center in Móstoles. These processes to appraise the safety culture are carried out in accordance with best practices, by a special team working independently of the asset. The outcome of each diagnostic focuses on identifying the organizational factors that may limit the efficiency of work processes.

One area that is vital in terms of consolidation of a sturdy safety culture is the deployment of effective, visible leadership. The results of the Safety Culture diagnostics and the conclusions of strategic reflection on safety and the environment address the importance of moving towards a Safety Culture based on commitment and conviction, where leaders constitute the levers that will bring about transformation.

It was for this reason that work began in 2018 on a program for the transformation of leadership into worldwide high-impact safety, to be deployed at the Company as of 2019.

Simultaneously, Repsol continues to drive consideration of Human and Organizational Factors in its processes, and is an active participant in the main sectoral associations (CCPS, IOGP) and in specific working groups, focusing on aspects of Human Factors and Safety Leadership. Action has also been taken to publicize these issues at internal and external gatherings.

## Emergencies, crisis management and spills

The company does its utmost to prevent accidents, as already described. However, it cannot forsake preparations in the event such incidents actually occur. Therefore, in addition

## Crisis management simulation

A top-level Crisis Management simulation was carried out at Repsol in 2018 (CMT: Crisis Management Team), during which the CEO and Senior Management test-drove the suitability, preparation and operation of the Crisis Plan (model, resources, processes and people designated for the CMT and the Support Group). The exercise lasted one day and simulated a two-day crisis featuring impacts with maximum consequences. It was found that crisis management had become more professional and areas for improvement were identified for inclusion in the model being implemented, which demonstrated its potential and effectiveness in terms of crisis management during the simulation.



to its prevention activities, the Company works on mechanisms to facilitate early detection and rapid, effective emergency situations management. Robust safety management minimizes the probability and consequences of spills.

Spills <sup>(1)</sup>	2018	2017
Number of hydrocarbon spills > 1 barrel reaching the environment	25	17
Volume of hydrocarbon spills reaching the environment (tons) <sup>(1)</sup>	111	85

(1) Oil spills of more than one barrel reaching the environment.

There were two significant spills in 2018: One of 31.97 tons of B5 diesel fuel in the Marketing Peru business, as a result of a truck which overturned while transporting goods, and another of 20.99 tons of HVGO (heavy vacuum gas oil) caused by a drainage valve leakage in the refinery business in Peru. Appropriate remediation measures were taken in the areas around both incidents.

Repsol deploys preventive action such as automation and improvements to safety systems, analysis and application of the best available standards and technologies to prevent any breaches, leakages or spills. For spill scenarios, the company has internal and external mechanisms in place for emergency situations, with specialist trained units using state-of-the-art detection systems and specific management and training protocols. When the situation is under control, new preventive measures are established to prevent any repetition. These mechanisms are essential to reduce impacts on the environment and human beings as far as possible.

For sea spillages, in addition to its usual responses, Repsol operates contracts to ensure rapid action is taken by external specialists and equipment (OSRL, including access to the Global Dispersants stockpile, Wild Well Control, Helix etc.).

The company has implemented a comprehensive emergency and crisis management system featuring the industry's best practices, to manage emergency situations at the facilities, in businesses and in senior management for the most serious scenarios, with specific support units to assign the maximum priority required in each case.

This model is operated by means of numerous training courses, simulations and frequent exercises at all levels, including a top-level exercise at least

once a year. At its central offices and offices in countries in which the company operates, Repsol has resources, technology and areas that are exclusively used for crisis management support and training.

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

The Repsol priority is to carry out its activities while minimizing any potential environmental impacts, optimizing water management and waste management, minimizing atmospheric emissions and considering biodiversity as a key aspect.

### Circular economy

The Circular Economy is one of the main levers of Repsol's Global Sustainability Plan, and includes courses of action for the efficient use of natural resources, with criteria of maximum efficiency, maximum transparency and lesser environmental impact. Repsol's Circular Economy strategy was approved by the CEO in December 2016, and has now been ongoing for two years. Within the new strategic reflection, the Circular Economy also now forms part of key lines of action towards 2025.

With the Circular Economy, Repsol seeks to:

- **INCREASE** value by extending the lifespan of resources, products and materials, thereby generating profits.
- **REDUCE** waste generation as much as possible by closing up the lifecycle of the resources available.
- **REDUCE** demand for commodities, water and energy by recirculating them.

The main advances in terms of Circular Economy in 2018 were as follows:

- Extension of the external working network to more than 350 contacts that may contribute to the definition and implementation of projects.
- Active participation in over 10 national and international Circular Economy working groups (CEOE, Chamber of Commerce, COTEC, IPIECA, the World Economic Forum, Plastics

<sup>1</sup>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 SMA matters. As a general rule, safety and environmental information includes 100% of the data from companies in which the we hold a controlling interest or control over operations.

Repsol prioritizes efficient management of resources, focusing on the Circular Economy.



Europe, CEFIC, CONCAWE, the European Commission etc.).

- Extension of the internal working system with experts from different businesses and areas of the Company, comprising more than 100 people.
- 47 (of a total of 85) initiatives proposed by external partners and analyzed by the various areas of business.
- Addition of more than 40 additional Circular Economy initiatives to the Circular Initiatives Catalog (CIC). 78 of the CIC initiatives have already been deployed, in 12 company businesses and areas.

With the aim of framing and boosting the current initiatives, implementing new initiatives and working on the integration of circularity criteria in decision-making processes, Repsol has now consolidated the Circular Economy as one of its priority projects within the 2018-2025 strategic reflection process. This will involve work on the following areas:

- Moving towards a quantitative analysis of the Circular Economy initiatives by means of environmental and economic indicators enabling us to carry out better monitoring of the environmental resources saved, the profits generated and improvements to environmental parameters.
- Deploy procedures and streamline detection, analysis and implementation of Circular Economy opportunities.
- Implement business positionings with specific Circular Economy commitments.
- Move forward in the establishment of Circular Economy targets.
- Enhance industrial symbiosis and the collaborative economy among businesses and third parties
- Move forward in terms of the internal development of circular technologies as a priority line within the Company's Technology Hub.
- Continue to invest in circular technologies through the Corporate Venturing area.

GSP

a

**Ambition:**

Cause neutral environmental impact in management of resources.

GSP

2020

**Objective:**

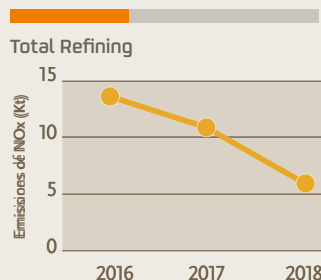
implement Circular Economy projects that make a positive impact in society.

## Reduction of NOx emissions

With the objective to reduce NOx emissions at our industrial facilities, a plan was deployed to replace burners with low-NOx units.

The investment package was approximately €35 million. The outcome was extremely satisfactory, as emissions fell from around 180-240 mg/Nm<sup>3</sup> to 10-20 mg/Nm<sup>3</sup>.

**This project has succeeded in reducing NOx emissions by more than 50% since 2016 at all Repsol's Spanish refineries.**



GSP  
2020

**Objective:**  
Minimize withdrawals and impact in discharges. Maximize recirculation.

## Areas of circularity

### 1. Redefinition of raw materials

Use of alternate raw materials in the production of Company products.

- Examples:
- Use of CO<sub>2</sub> to make polymers.
  - Streams of external waste as raw material for refining processes.



### 2. Process efficiency and innovation

Maximize the reuse of water, minimize water dumping and increase energy efficiency.

- Examples:
- Use of municipal water in refining processes.
  - Alternate uses of production water in *Upstream*.
  - Decontamination of drilling residue and diesel recovery.



### 5. New services and products

Search for new business opportunities.

- Example:
- Launch of Wible (car sharing for hybrid plug-in cars)



### 3. Redefinition of waste

Revalue waste as a raw material, product or energy.

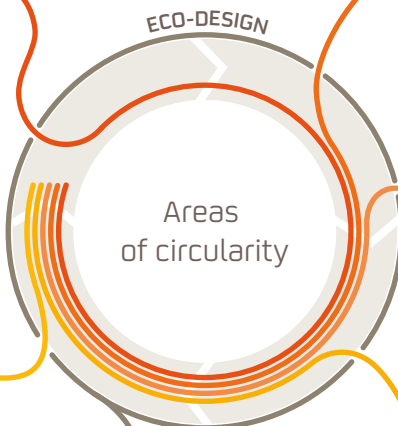
- Example:
- Recovery of hydrocarbon sludge from the TAR plant in the Conquer unit.



### 4. Reconsideration of the value chain

Search for new business opportunities.

- Examples:
- Use of waste plastic pyrolysis products for chemical recycling.
  - Work with the value chain to obtain waste plastic to be used in polymers
  - Application of circular economy criteria to dismantling activities and re-purposing equipment.



### Eco-design

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

- Example: 100% renewable asphalt



### Areas of impact

Products Processes Services



### Vectors

Water Energy Raw Material Waste



**Objective:**  
Minimize generation of waste and improve waste management.

GSP  
2020

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 SMA matters.

As a general rule, safety and environmental information includes 100% of the data from companies in which the we hold a controlling interest or control over operations.

## Natural capital

Since 2017 Repsol has been a member of the Natural Capital Coalition, a collaborative body composed of different kinds of organizations: academic, business-related, research, finance, etc., the objectives of which are to harmonize an approach to the concept of natural capital, tabling solutions which may be implemented rapidly on a large scale, and to encourage behavioral changes within society in favor of consideration of this concept.

Here the Company's objective is to continue to make progress in terms of inclusion of environmental criteria in the decision-making process.

Thus, to address these challenges, the Company intends to develop and implement a systematic quantification and environmental assessment model in order to:

- move forward in terms of management of Repsol's environmental impacts and dependences on natural resources, adhering to the concept of natural capital in consonance with the methodology established in the Protocol drawn up by the Natural Capital Coalition.
- add the real value of environmental management to the economic analyses of projects and operations in a bid to improve decision-making in relation to new projects, acquisitions, and the search for operational excellence within our assets.

## Water

Water is an essential commodity which plays a key role in economic growth. The protection and preservation of water form part of the United Nations' Sustainable Development Goals (SDG 6 - Clean water and sanitation). Growing pressure concerning water as a key component of the sustainability of businesses makes it one of the major environmental challenges facing the Oil & Gas sector.

Repsol uses water at its industrial centers and also in exploration and production activities. Ensuring a supply of this scarce resource with the proper quality and in the proper quantities is critical for maintaining operations at all its facilities.

For this reason Repsol is working on integral water management to minimize the risks and impacts associated with it. For years it has been managing the risks to which its industrial refineries and chemical plants and exploration and production operations have been exposed. These risks are attributable to internal factors (types of usages and consumptions of water in the various processes, discharge treatment and quality etc.) and also external factors (availability, quality and ecosystems which are water collection sources or discharge facilities, competence for water resources etc.). To appraise these risks, the company uses the "Repsol Water Tool" developed in 2012 and upgraded

## RECICLEX [Chemicals BU]

This initiative consisted of adding recycled material to our polymers from different sources, compatible with Repsol grades. The project is based on the Chemicals business unit's knowledge of its value chain and applications to select plastic waste with the greatest value and potential to be captured and added to our polymers. With this concept, we ensure that the quality of the material added is sufficient to guarantee the physical-chemical properties of the

final polymer by the business unit. This entails the generation of a new value chain within the collaborative economy, involving our customers.

The Reciclex initiative seeks to turn a problem into an opportunity, by way of an extension of our enhanced responsibility as producers, in order to help minimize the impact of plastic waste on our society. One recent example is the agreement with two waste managers for the reutilization of plastics used in automotive processes.



**34%**  
reused water  
as against  
withdrawn  
water

in 2018, to improve useability and update some methodological aspects.

Identifying and analyzing risks associated with water serves as a guide to implement and prioritize courses of action and initiatives at Company facilities to move towards sustainable water management. Initiatives are carried out in the following areas:

- Adaptation of water management to the most stringent international standards. Industrial facilities in Spain and Portugal are constantly carrying out specific courses of action and investing to adapt to the best available practices. All E&P assets also meet common internal requisites (EPP: Environmental Performance Practices) irrespective of their geographic area, and that establish discharge parameters for sanitation effluents and production water, their environmental impact and the prohibition of practices that may eventually pollute underground soil and water.
- Reduction of the intensity of the utilization of water per barrel processed or crude oil produced, as a way of becoming more efficient and competitive in the generation of Company products.
- Search for water alternatives that will guarantee supply. For shale gas assets, the amount of water to be used is assessed in order to seek out alternatives to fresh water, such as

underground water; reuse of waste water and production water; recirculation of flowback water and application of best technologies for water treatment. In areas where water is scarce, and for exploration projects, rainwater has been used as an alternative to surface water sources. The good practices of local communities have also been adopted, as they have taught us ancient techniques in the use of a natural resource that is so scarce in some parts of the world. The industrial complex in Tarragona uses non-fresh regenerated water from a wastewater treatment plant, thereby reducing the use of fresh water.

- Guaranteeing the integrity of facilities. In well construction, a risk assessment process is followed for the the protection of underground waters that discounts sites that are not apt for carrying out operations. In addition, during the execution phase, design standards are applied for the casing of wells that prevents leaking between the well and underground aquifers so as to prevent crossed contamination. Wells of potable water are generally at depths of 50 to 100 meters, which is far less than shale gas formations, which are normally several kilometers below the surface. For this reason, the probability of water pollution is remote.

## Water treatment in the Puertollano Refinery

### Spain

The Puertollano industrial center is a state-of-the-art water treatment facility in Spain, with a purification system that meets the highest quality standards because it is the country's only internal refinery. The ACTIFLO™ technology developed by Veolia Water Technologies was implemented at this treatment plant in 2018. This is a hi-tech ballasted decantation process to clarify water, which consists of using microsand (Actisand™) during the plant's last stage of treatment

prior to the formation of heavier flocs which are easier to decant, thus permitting higher decantation speeds. The new process will be able to treat 1,200 cubic meters of water per hour at the Puertollano industrial complex. The process will also boost the quality of the water taken to the River Ojailén and also of the water that is reutilized and recirculated for industrial use, producing considerable consumption savings for the facility. The investment package was €2.2 million.





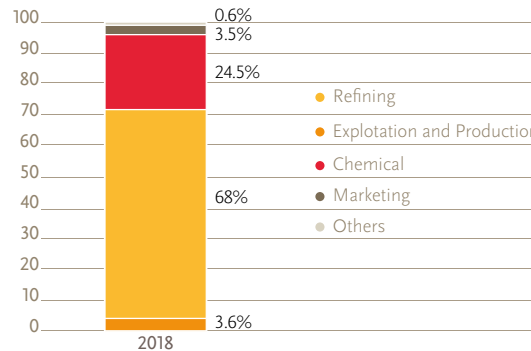
One example of this is the progress made on the La Pampilla Refinery Water Plan (Peru), as a result of a 2017 analysis of the usage and consumption of this resource at the facility to conduct a search for new areas of improvement. New initiatives have been implemented in relation to the monitoring of the quality of underground water, optimization of operation of the refinery's wastewater treatment plant, improvements to processes for taking and analyzing samples etc.

As part of the challenges identified in the strategic reflection process up to the year 2025, the following lines of action have been singled out for attention in the years ahead:

- Encouragement of internal reuse of water to minimize capture of fresh water.
- Analysis of options for alternative sources (such as, for example, urban wastewater).
- Trend towards use and optimum discharge.
- Quantification of the costs associated with water (and services rendered to ecosystems/society), and addition of this information to decision-making processes.

The main fresh water sources are the public network (60.6%), surface resources (34.2%), and, to a lesser extent, underground aquifers (5.2%). Consumption of withdrawn fresh water fell by 4% against the previous year.

Sweet water withdrawn, by activity



Water management	2018	2017
Fresh water withdrawn (kilotons)	51,320	53,497
Reused water (kilotons)	17,368	14,995
Water discharged (kilotons)	41,256	33,442
Hydrocarbons in water discharged (tons)	224	166
Water withdrawn in Refining/processed crude oil (tons)	0.75	0.74

The Refining and Upstream business account for 84% of total water discharges. Water discharges increased by 23% from 2017 due to the increase by 23% compared to 2017 due to the increase in production of assets in Malaysia, and the increase in offshore drilling activities in 2018. The majority of the water discharged in offshore drilling is cooling water.

### Preservation of Biodiversity and Ecosystem Services (BES)

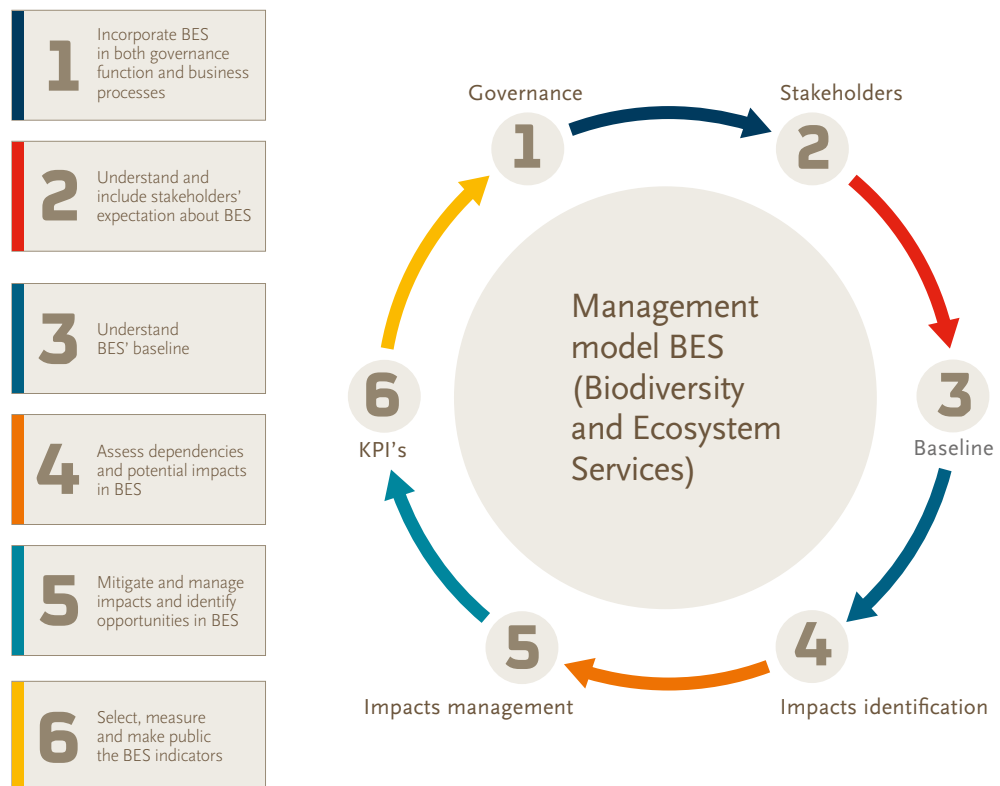
Repsol is committed to mitigating potential impacts on biodiversity and the resources it provides (ecosystem services) in its planning and execution of projects and operations. To do so, it is guided by the following United Nations principles for sustainable development in carrying on its activities:

- Preventing, minimizing and restoring environmental impact in all its operations, and especially in sensitive, protected or biologically diverse natural spaces.

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

- 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 involving research, conservation, education and awareness.
- Main new features in implementation during 2018:
- In January 2018 Repsol was awarded public recognition by the Unified Management Committee of the Megantoni National Sanctuary and the Machiguenga Communal Reserve (RCM) for its assistance in bolstering participatory management to contribute to management of natural areas during the projects carried out in Peru's Block 57.
  - Participation of Repsol at the International Workshop on the incorporation of Biodiversity and Ecosystem Services in the Energy Mining Sector in Bogotá, Colombia, in June. Repsol's Colombia BU attended in representation of IPIECA (International Petroleum Industry Environmental Conservation Association), which asked us to take part in the event to relate our experience in the identification of BES in the Siluro well offshore construction project (Colombia BU), in accordance with international guidelines to good practices ("Biodiversity and Ecosystem Services Fundamentals" / "Biodiversity and Ecosystem Services Management Ladder for Oil and Gas").

## Managementmodel BES (Biodiversity and Ecosystem Services)





## 6.5. Innovation and technology

### Innovation

The 2018-2020 upgrade of the Strategic Plan requires new capacities to be developed to move forward in terms of energy transition. Technological progress and digitalization require a transformation in work methods to enable the Company to maximize the effectiveness of these levers. This led to the creation of a Cultural Transformation Agenda in which the new work methods Lean and Agile are vital features.

The foundations were laid in the course of 2018 to enable the Company to work in a more agile and efficient manner:

- A framework was drawn up with the Lean and Agile principles, to be used in the internal transformation of each Business or Corporate Area.
- Specific awareness and training plans were devised. In the course of the year training was provided in innovation, continuous improvement and Agile for some 1,600 people in 18 countries, and awareness courses were taught to a further 1,800. More than 2,000 attended a workshop or initiative where they had the chance to practice the new work methods. A review was also conducted of the network of internal facilitators and of the training provided for each of them in accordance with the specific requirements of the Business or Corporate Area.

Some mention should also be made of implementation of the following initiatives:

- 'Project accelerator', conceived as an engine for the rapid resolution of the most common blockages in projects and deployment of the new work methods within the Organization.
- Repsol *Digital Workplace*, which visualizes the collaborative customized work station to help each Company employee get the most out of the digital collaborative tools available to all staff. More than 400 employees are now using the new facility.

### Technology

The world is in the midst of a process of change and transformation in which the development and incorporation of new technologies, their transfer and implementation are a guarantee that Repsol can offer quality products and services in the present, and also stay ahead of change. Specifically, in a context of transition towards a low-carbon economy in the wake of the climate change commitments undertaken following the Paris Agreement, technology is now a vital component for achievement of the objectives defined in the new strategy rolled out by the company.

To achieve its objective, in June 2018 the Board approved the new Technology and Corporate Venturing strategy to boost the Company's results and sustainability.

Repsol's new strategy in Technology and Corporate Venturing focuses on addressing the current challenges facing energy companies, which are as follows:

- Reduction of energy intensity and emissions of CO<sub>2</sub>
- Boosting the profitability of current assets through sustainable competitive production
- Differentiation of products vis-à-vis competitors
- Construction of differential solutions based on Data
- Providing customer-focused energy services

The model on which the Company has based its work to address these challenges and generate value is three-pronged:

- An integrated Technology Portfolio with a dual approach: internally through R+D+i projects, and externally through investment in technology start-ups.
- Assessment of potential future energy scenarios through screening and early testing of the technologies involved.
- Assessment of the new energy business models based on innovative start-ups

The main objective is to increase the pace of incorporation of technology and innovative business models in Repsol's businesses and practices.

Repsol considers that innovation and technology are key components of energy transition.



GSP

a

### Ambition:

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

**R&D projects:**

In terms of **reduction of energy intensity and emissions of CO<sub>2</sub>**, Repsol is working on the implementation of technologies focusing on reducing the operational costs of energy at industrial facilities, adopting renewable energy sources to achieve CO<sub>2</sub> reduction targets and providing state-of-the-art simulation tools and data analysis solutions as part of smart-energy industrial projects.

Major development work is also ongoing on low-carbon intensity processes, and on obtaining advanced biofuels with a low carbon footprint from vegetable waste in projects such as ReWofuel.

Some mention should also be made of development in the SUN2HY project to obtain H<sub>2</sub> with a low carbon footprint using artificial photosynthesis processes. Following the initial lab pilots, in July 2018 Enagás was brought on board as a partner in the value chain to accelerate development of the production of hydrogen, using solar energy as the main source.

Repsol is still working on the launch of projects in line with Circular Economy policies in relation to the Chemicals division's business, to offer increasingly sustainable products. These projects focus on reducing the volumes of waste discharges, and therefore bringing about a reduction of the emissions of CO<sub>2</sub> associated with the discharges. The following R+D projects are an example of this:

- Projects geared towards boosting the biodegradability of polyolefins through the use of peptide-based additives.
- *MADRASS project with Ecomobilier*, seeking a biotechnology solution to the challenge of the sustainability of polyurethane foam (PU) in the comfort sector. Applications were filed for the first patents in 2018, along with a definition of the business model to upgrade this technology.
- A project was also launched to develop a plastic waste pyrolysis technology.

The area of development of CO<sub>2</sub> polymer technology to replace commodities originating from fossils included the project to develop a polycarbonate *polyol with a high molecular weight (max. 30%*

CO<sub>2</sub>), which was used as a basis to develop a range of other applications, such as adhesives. New applications were developed in 2018, such as fireproof polyols, along with the initial marketing of polypropylene for a 3D powder-printing system.

In 2018 the Technology Department carried out a number of **advanced mobility** projects to reduce the impact of transport greenhouse gas emissions, developing an exclusive high-octane gasoline formulation, Efitec 100, to improve the efficiency of combustion engines, development of technology to use **fuels with a low carbon footprint** based on autogas mixtures for heavy goods vehicles, the design of new fuel-economy oils and, in the field of transport electrification, projects on new electrochemicals and control systems for batteries.

In connection with **better profitability of the current assets**, the company continues to work on shortening and optimizing exploration and development projects through the application of geophysical technologies; on the integration of data and multiple sources to reduce subsoil uncertainty and improve decision-making processes; on the implementation of advanced simulation and optimization techniques to optimize field development plans and operations; and on the application of digital petrophysics to shorten the field characterization cycle and optimize production methods.

With respect to the optimization and flexibilization of industrial assets, Repsol is working on the optimization of planning and operations, using hi-tech analysis, simulation, modeling and control solutions. One example of this is the project to optimize management of the Company's refineries' water treatment plants, using biotechnology tools and other technological improvements applied to any discharge deviations singled out as priorities.

The Company continues to develop tools based on the use of electrogenic bacteria to limit environmental impacts by means of active barriers or sensors to detect and monitor hydrocarbon leakages in subsoils.

Development work has also been carried out on the maximization of flexibility for commodities and production, and the use of kinetic statistical models for the smart use of big data geared towards reliability and prolongation of the lifecycle of catalysts.

In the field of construction of **differential solutions based on Data**, Repsol has been hard at work developing proprietor solutions based on mathematics and artificial intelligence to give the Company a solid competitive edge.

A new area has also been created, known as Energy transition, to develop critical technologies in the new distributed-generation model: Energy Management System (EMS) and Virtual Asset Management (VAM).

Repsol's R&D investment has amounted to €84 million.

Operative indicators	2018	2017
R+D Investment (millions of euros) <sup>(1)(2)</sup>	84	72
N° of external scientific collaboration agreements	82	52
Projects supported by the Spanish government	15	6
Projects supported by the EU	19	8

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

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

All this activity is driven by over 230 researchers, 200 projects, 8 initial investments, 20 patents and 190 alliances and associations with leading institutions worldwide, and has been led by the Repsol Technology Lab, the scientific heart of the company, which is located on a campus of more than 192,000 m2 and has over 56,000 m2 of built-up space of facilities and laboratories, bringing Repsol international renown for its technology.

**Investment in Start-ups (Venture Capital):**

Repsol Corporate Venturing aims to quicken the pace of incorporation of technologies and innovative business models in Company practices through an investment fund which will be used to buy into *start-ups* offering solutions of advanced mobility, energy diversification, new materials, the Circular Economy, the reliability of our operations or digital technologies applied to exploration and production.

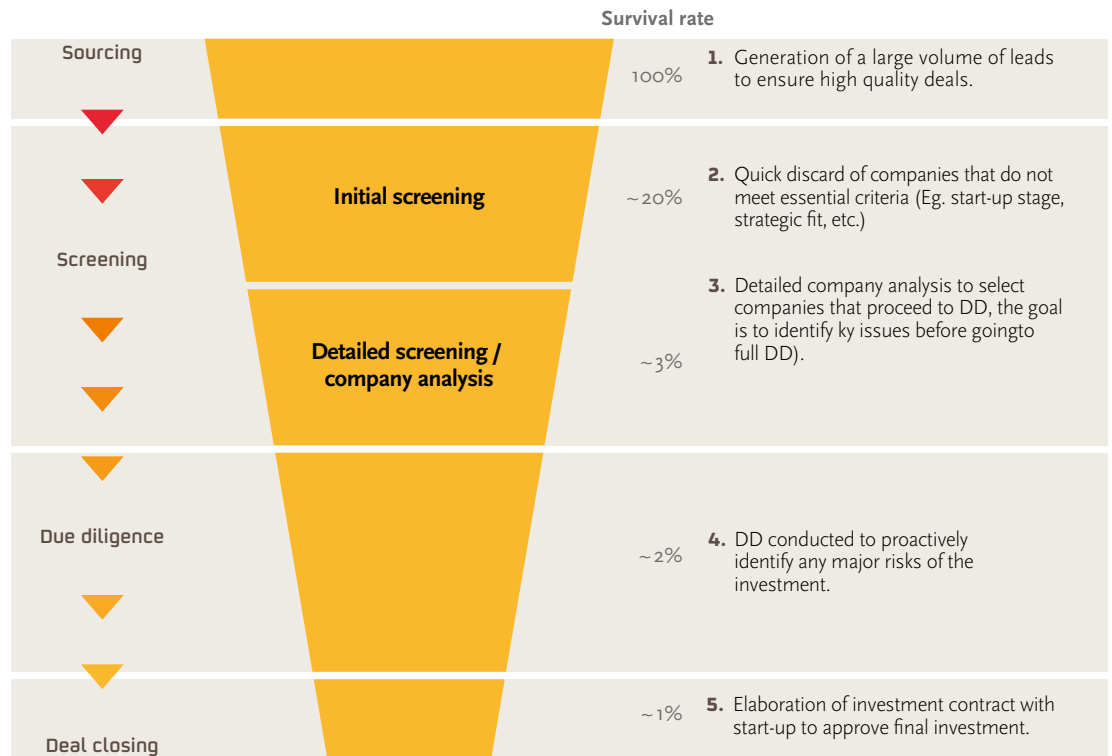
The Corporate Venturing operating model focuses on those 6 areas in order to complement Repsol's internal R+D capacities by bringing in external innovation. This is carried out by five-year funds investing in Start-ups. For the 2016-2020 fund, Repsol has committed to making a contribution of €85 million. In 2018, the fund had [€19] million invested. It currently holds over ten stakes and joint development projects in the fields defined in the model.

## The Corporate Venturing Value Proposal

Searching for disruptive opportunities	Investing in innovative start-ups	Accelerating efficient deployment
<p>Focus on search fields aligned with your business challenges.</p> <p>Continuous search of opportunities and surfacing of new developments.</p> <p>Thought partnership to test assumptions on how your business might evolve and support in assessing value in potential new business areas.</p>	<p>Collaboration with Technology Lab Repsol to provide holistic solutions for your business challenges.</p> <p>Strong global network including other VCs, incubators, accelerators, academia, etc.</p> <p>Deep expertise in evaluating start-up potential and fit with your business during investment process.</p> <p>Strong support to start-ups to ensure the highest probability of success and value delivered to your business.</p>	<p>Reduced risk environment to test and assess potential disruptors.</p> <p>Side-by-side working model with the businesses to ensure continuous alignment of all stakeholders.</p> <p>Early definition of pilots in strong collaboration with you and start-up.</p> <p>Assistance with the integration of those concepts and business models that demonstrate potential for long term value creation.</p>

The investment process is as follows:

### Process. Corporate Venturing



In addition to direct investment in start-ups, alongside its Oil & Gas sector partners Repsol also works on the OCGI **Climate Investments** (OCGI-CI). This is a vehicle to channel a \$1,000 million investment commitment over ten years to start-ups in order to develop and accelerate technologies that may have a major impact on the reduction of greenhouse gas emissions in the sector. New investment was made available for this vehicle in 2018: Econic, a UK company which has developed technology to produce polymers from CO<sub>2</sub>; GHGSat, a Canadian company which develops satellite technology to control greenhouse gas emissions; Inventys, a Canadian company which has developed a process to capture CO<sub>2</sub>; Kairos Aerospace, an American company which has

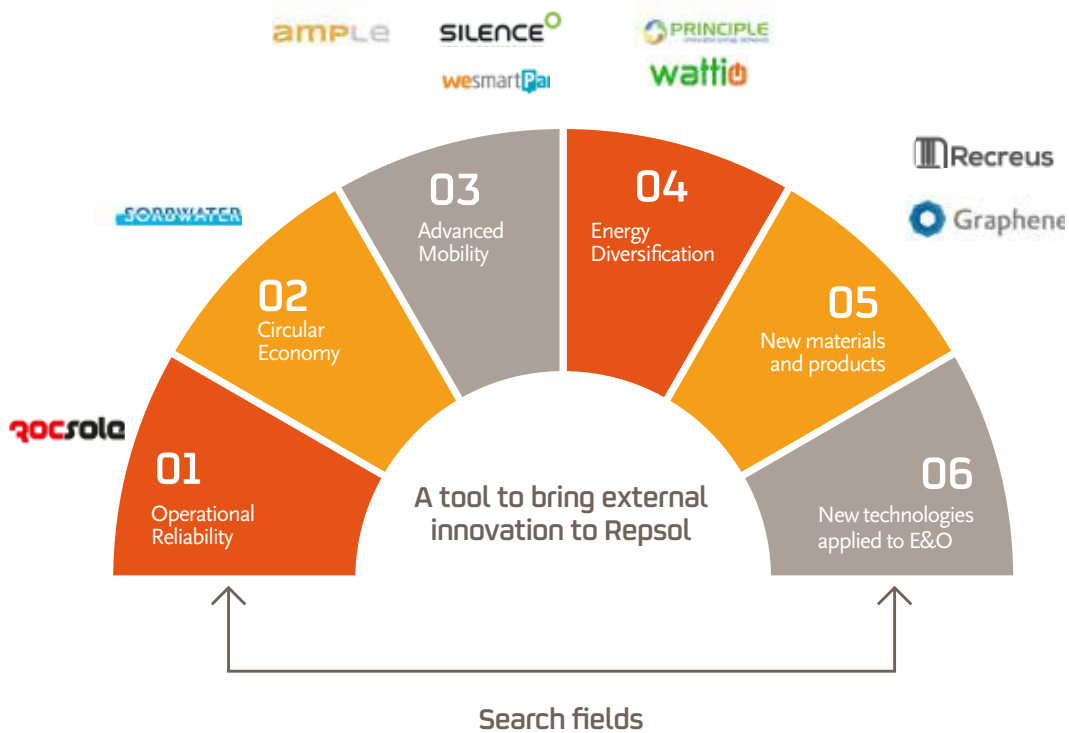
developed technology to detect methane emissions through aerial inspection; ClarkeValve, an American company which has developed control valves to eliminate fugitive methane emissions in seal zones.

In 2018 Repsol continued co-investing with the Center for Industrial Development (“CDTI” in Spanish) in Spanish technology start-ups through the INNVIERTE program.

Repsol Corporate Venturing launched its website in 2018: <http://ventures.repsol.com>, to give start-ups and other investment funds information on the team and enable them to contact it with proposals.

The following are a few of the investments:

## Capturing innovation in start-ups



### Digitalization:

**Digitalization** is now a reality in Repsol, with more than 130 digital initiatives underway and more than €90 million invested.

In 2018, 10 hubs or expert centers were created, among them facilities devoted to data analytics and artificial intelligence, omnichannel, UX/UI design, blockchain and emerging technologies and the Agile working model, and more than 750 people were trained in new digital trends and ways of working.

Upstream is adding new remote operational control centers (IOC) that allow for making decisions based on more information, in real time and with a predictive data analysis. It also incorporated an Integrated Asset Management System (IAMS), a single control panel that consolidates both economic and asset information.

The industrial area uses data analytics technologies to predict demand and adapt the crude mix in refineries. It has also developed an app to mobilize operation and maintenance tasks, allowing for on-site management of jobs that previously required an in-person presence.

The commercial area has developed, jointly with Kia, a new car-sharing business, Wible, which is revolutionizing vehicle access with a very competitive offer. It has also launched the "mobile office" in service stations, thus automating and reducing administrative tasks.

At Corporate, for example in Global Services, the robotization of processes has helped reduce the time dedicated to administrative tasks.

**Repsol acts transparently at all times.**




**Responsible tax policy**

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

**Principles of the Repsol tax policy**

Responsible compliance; Tax efficiency and protection of corporate interests; Cooperative relations; Prevention of tax risks; and Transparency.

## 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. aligned with the Company's mission, and values, and with its long-term business strategy, is 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."*

The commitment and effective compliance with the best responsible taxation and tax governance principles and practices is shown below:

### Responsible Tax Principles<sup>(1)</sup> Application and compliance evidence in Repsol

PRINCIPLES	EVIDENCE
<p><b>1 Accountability and Governance</b> Tax is a crucial part of corporate responsibility and it is overseen by the Board of Directors.</p>	<ul style="list-style-type: none"> <li>• Tax policy approved by the Board of Directors is binding on all Group employees.</li> <li>• The Board of Directors directly evolved in developing the Group's tax strategy and management.</li> <li>• Tax objectives incorporated to Repsol Global Sustainability Plan</li> </ul>
<p><b>2 Compliance</b> We comply with the tax legislation of the countries in which we operate and we pay the right amount of tax at the right time, in the countries where we create value.</p>	<ul style="list-style-type: none"> <li>• Internal rules and regulations to ensure full compliance of tax obligations.</li> <li>• Organizational structure and adequate resources to comply with tax obligations.</li> <li>• Internal process for setting transfer prices aligned with value created and the arm's length principle.</li> </ul>
<p><b>3 Business structure</b> We use corporate structures driven by commercial considerations, aligned activity business and which have genuine substance. We do not seek abusive tax results..</p>	<ul style="list-style-type: none"> <li>• Corporate structure aligned with business and appropriate for legal requirements and corporate governance standards.</li> <li>• Streamlining of corporate structure.</li> <li>• No use of instrumental entities in tax havens or special purpose vehicles.</li> </ul>
<p><b>4 Relationship with authorities</b> We seek, wherever possible, to develop cooperative relationships with tax authorities based on mutual respect, transparency and trust.</p>	<ul style="list-style-type: none"> <li>• Application of Spanish Code of Good Tax Practices and similar initiatives in other countries (Portugal, Singapore, United Kingdom and the Netherlands).</li> <li>• Voluntary submission to Spanish tax agency of tax transparency reports for 2015, 2016 and 2017.</li> <li>• Voluntary participation in pilot program of International Compliance Assurance Programme (ICAP).</li> </ul>
<p><b>5 Seeking and accepting tax incentives</b> When we claim tax incentives offered by government authorities, we seek to ensure that they are transparent and consistent with statutory and regulatory frameworks.</p>	<ul style="list-style-type: none"> <li>• Use of tax benefits with respect for letter and spirit of law.</li> <li>• Verification that incentives are generally accessible to all economic operators.</li> <li>• Support for publication of tax incentives of oil contracts by authorities and governments.</li> </ul>
<p><b>6 Supporting effective tax system</b> We engage constructively in a national and international dialogue with governments, business groups and civil society to support the development of an effective tax system.</p>	<ul style="list-style-type: none"> <li>• Collaboration with international bodies (OECD, UN and EU), governments and NGOs.</li> <li>• Participation in international initiatives of responsible tax and tax governance (B-team, UNE).</li> </ul>
<p><b>7 Transparency</b> We provide regularly information to our stakeholders, including investors, policy makers, employees, civil society and the general public, about our approach and taxes paid.</p>	<ul style="list-style-type: none"> <li>• Transparency leaders in Spain according to reports published by a number of observatories.</li> <li>• Publication of tax payments by country.</li> <li>• Detailed tax information on website and in annual reports.</li> </ul>

(1) Aligned with Responsible Tax Principles defined by B-Team. The B-Team is a group of companies that aim to promote sustainable development and, in particular, responsible tax policy and good tax governance. It may be found at [www.bteam.org](http://www.bteam.org)

## Cooperative compliance

The Repsol Group seeks to build transparent cooperation with the tax authorities of the countries in which it operates, based on the principles of mutual trust and understanding, with the aim of facilitating enforcement of the tax systems, enhance tax certainty and reduce litigation.

In Spain, Repsol applies the Code of Good Tax Practices, which was created by the Forum of Large Enterprises of the Spanish tax agency (AEAT). In like manner, Repsol participates in and promotes similar initiatives in countries where it has a presence<sup>1</sup>.

As part of its transparency commitment, Repsol voluntarily submitted to the AEAT its transparency reports for 2015, 2016 and 2017.

In 2018, Repsol was invited to participate in the International Assurance Compliance Programme (ICAP), an initiative of the OECD that seeks to foster greater cooperation between the tax authorities for the supervision of tax risks in multinational groups and, particularly, with regard to transfer pricing and permanent establishments.

Repsol has joined the B-team, a group of large enterprises that promote sustainable development in the private sector. In relation to taxes, it has drawn up a catalog of Responsible Tax Principles that is aimed to become the new international standard in the good tax governance of large enterprises.

Repsol is also actively collaborating in the creation of a tax system that promotes development and international trade either directly or through international bodies<sup>2</sup>.

Repsol engages in a respectful and productive dialog with a number of NGOs, which allows a better understanding of demands in terms of transparency and good tax practices.

1. In Portugal, it is a founding member of the Forum of Large Enterprises to adopt measures of cooperative compliance; in Singapore, it voluntarily participates in the Assisted Compliance Assurance Programme (ACAP); in the United Kingdom, it participates in the Oil & Gas Industry Direct Tax Forum, which fosters links between oil & gas companies and the tax authority (HRMC) on the basis of a relationship of mutual trust and cooperation; in the Netherlands, it has a transparent and smooth relationship with the tax authority in accordance with horizontal tax monitoring standards.

2. Repsol is a member of several sub-committees created by the the UN's Committee of Experts on International Cooperation in Tax Matters that discuss and draw up tax guidelines for the authorities in developing countries. Repsol is also a member of the Tax Committee of the Business and Industry Advisory Committee (BIAC) of the OECD.

## Tax contribution and impact

Taxes have a significant impact on the **results** of the Group. In 2018 the **tax impact<sup>3</sup>** on net income was as follows:

Item	2018		2017	
	Amount	Rate	Amount	Rate
Income tax	1,494	40.4% <sup>(1)</sup>	1,122	37.9%
Total tax burden <sup>(2)</sup>	2,464	52.9% <sup>(2)</sup>	2,118	53.5%

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

(1) Expense incurred in income tax/net income before tax

(2) Tax burden (income Tax + taxes and contributions that reduce the result. Net income before tax burden.

In cash flow terms, the **tax contribution** is also quite significant. In 2018 Repsol **paid €13,600 million in taxes** and similar public charges, and filed more than 48,000 tax returns in more than 40 countries.

3. For the purposes of monitoring and analysis of the tax contribution by the Group, 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 etc.), 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, withholdings etc.). We classify the first group under "Tax burden" and the second under "Taxes collected." With respect to taxes with an impact on the Group result, Repsol is subject to various types of income tax in the countries where it operates. Each tax has its own structure and rate. The tax rates applicable to profits on production of hydrocarbon (Upstream) 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, whereupon 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 charges, employment taxes and social security contributions etc.

**GSP**
**2020**

### Objective:

Promote cooperative relations and seeking out amicable solutions with tax authorities.

### ICAP:

Repsol the only Spanish company invited to participate in ICAP pilot program of OECD and classified as low risk taxpayer.

**PGS**
**a**

### Ambition:

Be publicly recognized as an honest and transparent company in tax-related matters.

**Result generated and taxes effectively paid<sup>(1)</sup> in 2018, by country:**

€ million	Adjusted net income <sup>(2)</sup>	Tax burden			Taxes collected				Total 2018	Total 2017
		Total	Income tax	Other taxes on profit	Total	VAT	TH <sup>(3)</sup>	Other		
Spain	491	1,184	775	408	8,516	3,117	5,071	328	9,700	8,760
Portugal	60	43	31	12	1,131	302	810	19	1,174	1,164
Italy	(12)	3	1	2	80	20	58	1	82	99
Norway	97	1	-	1	88	67	-	21	89	49
Netherlands	24	40	40	-	1	-	-	1	41	59
United Kingdom	678	15	4	11	(2)	(25)	-	24	13	23
Luxembourg	62	(1)	1	(2)	-	-	-	-	(1)	-
Other	(138)	3	2	1	5	4	-	1	7	5
<b>Europe</b>	<b>1,257</b>	<b>1,287</b>	<b>854</b>	<b>433</b>	<b>9,819</b>	<b>3,484</b>	<b>5,940</b>	<b>395</b>	<b>11,106</b>	<b>10,159</b>
Peru	69	110	16	94	511	312	178	21	621	585
Brazil	193	233	-	232	33	1	-	32	266	194
Colombia	88	51	49	2	23	7	-	16	74	48
Bolivia	66	23	13	11	44	38	-	6	67	38
Venezuela	(97)	5	1	5	2	1	-	1	8	38
Ecuador	88	73	69	3	5	1	-	3	77	17
T&T	(17)	74	-	74	(26)	(29)	-	3	48	(4)
Other	(87)	-	-	-	1	-	-	-	-	-
<b>Latam &amp; Caribbean</b>	<b>303</b>	<b>569</b>	<b>148</b>	<b>421</b>	<b>592</b>	<b>331</b>	<b>178</b>	<b>82</b>	<b>1,161</b>	<b>916</b>
Indonesia	470	195	194	-	7	3	-	4	202	192
Malaysia	89	230	-	230	9	(5)	-	14	239	181
Russia	28	85	16	69	13	10	-	3	98	87
Vietnam	41	53	25	29	2	(1)	-	3	55	30
Singapore	(6)	-	-	-	6	4	-	2	6	11
Other	6	-	-	-	-	-	-	-	-	5
<b>Asia and Oceania</b>	<b>628</b>	<b>563</b>	<b>235</b>	<b>328</b>	<b>37</b>	<b>11</b>	<b>-</b>	<b>27</b>	<b>601</b>	<b>506</b>
US	(178)	73	3	70	26	-	-	26	99	76
Canada	240	28	2	27	31	(1)	-	32	60	74
Mexico	(20)	16	7	9	(7)	(11)	-	4	9	-
<b>North America</b>	<b>42</b>	<b>117</b>	<b>12</b>	<b>105</b>	<b>50</b>	<b>(12)</b>	<b>-</b>	<b>62</b>	<b>167</b>	<b>150</b>
Libya	196	519	473	45	1	-	-	1	520	225
Algeria	36	40	34	6	4	-	-	4	44	21
Other	(121)	-	-	-	2	-	-	1	2	2
<b>Africa</b>	<b>111</b>	<b>559</b>	<b>507</b>	<b>52</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>566</b>	<b>248</b>
<b>TOTAL</b>	<b>2,341</b>	<b>3,095</b>	<b>1,755</b>	<b>1,339</b>	<b>10,506</b>	<b>3,815</b>	<b>6,118</b>	<b>572</b>	<b>13,600</b>	<b>11,979</b>

(1) Only taxes actually paid in the year will be counted. Hence, taxes on profits accrued in the period but which are paid in the future and refunds from previous years are excluded.

(2) Net income after tax and minor items, including income from joint ventures and companies managed as such (see Appendix I for more information) and income from discontinued operations.

(3) Hydrocarbon tax. Includes amounts paid by logistics operators when the company is ultimately responsible for payment.



## Corporate streamlining

Maintenance of a simple and easily manageable corporate structure is one of the objectives of the Repsol Group.

In 2018, streamlining continued in the corporate structure of the Group<sup>1</sup>, with the dissolution of 27 entities and, at present, more than 50 additional entities are in the process of liquidation.

## Group presence in tax havens

In accordance with its tax policy<sup>2</sup>, 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.

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, 2018, Repsol has no active controlled company with its registered address and tax residence in such territories.

GSP

2020

### Objective:

Eliminate presence in tax havens [except when unavoidable and for legitimate business-related circumstances] and simplify the corporate structure.

### Group companies in tax havens

Company	Jurisdiction	Share	Status	Total income (€M)	Before tax income (€M)	Nominal income tax rate	Profit tax accrued (€M)
Greenstone Assurance, Ltd. <sup>(1)</sup>	Bermuda	100%	Inactive	0.04	0.20	0%	-

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

Pursuant to Repsol's policy of reducing its presence in tax havens, the Branch it had in Liberia was closed down in 2018.

(1) Insurance company the current purpose of which is limited to liquidating risks undertaken in the past. In a "run off" situation.

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

2. 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, prepared by the Economic and Financial Affairs Council (ECOFIN) of the European Union). 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.

**Non-controlling shares (non-group) in entities in tax havens**

Company	Jurisdiction	Share	Status	Total income (€M)	Before tax income (€M)	Nominal income tax rate	Profit tax accrued (€M)
Oil Insurance, Ltd. <sup>(1)</sup>	Bermuda	5.66%	Active	53.43	28.18	0%	-
Oleoducto de Crudos Pesados (OCP) Ltd. <sup>(2)</sup>	Cayman Islands	29.66%	Active	45.72	44.33	0%	-
Transasia Pipeline, Co. <sup>(3)</sup>	Mauritius	15%	Active	0.71	(5.58)	15%	(0.43)

(1) Insurance mutual society of the Oil & Gas sector that covers Group risks from Bermuda, a common jurisdiction for the practice of reinsurance of *Upstream* business assets. Amounts are for the year 2017, the most recent available. Figures according to percentage share of the Repsol Group.

(2) A company that includes an international association agreement (joint venture) to channel the stake in an Ecuador operating company that manages oil activity infrastructures (Heavy Crude Pipeline). Figures considered according to Repsol's stake.

(3) Used to channel the share in an operating company in Indonesia that manages infrastructures for oil-sector activity. Amounts are for the year 2017, the most recent available. Figures according to percentage share of the Repsol Group.

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 in connection with appropriate purposes aligned with conventional sector standards.

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.

**Presence of Repsol in non-cooperative tax jurisdictions according to EU list**

Company	Jurisdiction	Share	Status	Total income (€M)	Before tax income (€M)	Nominal income tax rate	Profit tax accrued (€M)
BP Amoco Trinidad y Tobago, LLC. Sucursal en Trinidad & Tobago <sup>(1)</sup>	Trinidad and Tobago	30%	Active	646.70	12.22	57.25%	(27.84)
Repsol Angostura, Ltd. <sup>(2)</sup>	Trinidad and Tobago	100%	Active	2.00	(1.98)	55%	0.68
Repsol Exploración Tobago, S.A. Sucursal en Trinidad y Tobago <sup>(3)</sup>	Trinidad and Tobago	100%	Active	0.00	(0.21)	55%	0.05

Sign convention: positive sign indicates revenue/profit; negative sign indicates expense/loss; Figures presented according to percentage stake of Repsol Group.

(1) Branch in Trinidad and Tobago of a US joint Venture between Repsol and the BP Group that carries out exploration and production in the country.

(2) Company that provides hydrocarbon exploration and production-related services to other Group companies in Trinidad and Tobago.

(3) Branch of Spanish company holding hydrocarbon exploration and production assets in Trinidad and Tobago

## 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 has 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 an **Ethics and Conduct Code**, approved by the Board of Directors, which 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 Group's principles. This year Repsol wished to go one step further by tabling a new Ethics and Conduct Code training scheme for all employees based on a dynamic game, the aim of which is to consolidate the knowledge already acquired in previous years and secure a greater comprehension of the expected patterns of behavior.

**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 and in any language, 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. Repsol also has an Ethics and Compliance Committee to manage the 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**<sup>1</sup>.

The Company also has a regulation for "*Management of the Crime Prevention Model*" and another for "*Internal Investigations of the Ethics and Compliance Committee*" that implements the crime prevention model and response mechanisms for potential infringements of the Ethics and Conduct Code or in relation to data or indications of the possible perpetration of crimes addressed in the Repsol Crime Prevention Model or suspicions of infringements of the Model. Repsol also has a Crime Prevention Manual, devised for a better understanding of criminal risks and the actions and conduct expected of employees, with a plan to spread awareness of this, which commenced in 2017. In 2018 this plan included new in situ training sessions for Repsol executives and directors, and an online course for those responsible for management of the Model's control features.

Repsol enhances ethical and responsible behavior.



GSP

2020

### Objective:

100% employees informed about prevention of and fight against corruption.

<sup>1</sup> The Crime Prevention Model approved by Repsol's governing bodies is the system for preventing, detecting and responding to any possible criminal conduct that could be committed within the organization. Money laundering is included in this model (crime n°15), amongst others.



**Ambition:**  
No cases of corruption.

Ethics and compliance	2018	2017
Number of employees trained On-line in Ethics and Conduct Code <sup>(1)</sup>	16,687	11,296
Number of communications received through the ethics and compliance channel	60	45
Number of corruption mitigation controls	311	306
Number of audit projects related to compliance with the Ethics and Conduct Code <sup>(2)</sup>	33	31
Number of ICFR controls related to mitigation of fraud	1,046	990
Number of serious and very serious offenses due to breach of the Ethics and Conduct Code:	379	192
Written warnings	8	13
Work and salary suspensions	291	133
Resignations	2	46
Number of dismissals due to breaches of the Ethics and Conduct Code	76	91

(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 33 projects in 2018.

## 6.8. Supply chain

Responsible management of the supply chain is one of the fundamental factors in relation to sustainability, as it presents specific risks and is linked to the generation of employment and local economic development. It is one of the main expectations of communities in which the company operates.

Repsol has a set of regulations<sup>1</sup> and a supply chain management system which ensures compliance with ethical, employment, environmental and social standards, and establishes the procurement management model. The Suppliers' Code of Ethics and Conduct defines the criteria for conduct to guide the action taken by companies with which Repsol has a contractual relationship. Repsol also conducts a reputational analysis which must have a positive outcome, and this is updated every six months for qualified suppliers and successful bidders.

Repsol also carries out a reputational analysis that must be passed, and which is updated on a half-yearly basis for qualified and winning suppliers.

1. Repsol has a Policy on "Commercial relationships with third parties" in which the Company commits to ensuring that these relationships are legal and based on ethical principles and the values that distinguish Repsol (responsibility, integrity, transparency, flexibility and innovation). That policy is the framework of reference for the internal regulations governing supply chain management.

## RLP-21 project in La Pampilla

### Peru

With the objective of adaptation to new fuel requirements, the project contributes to environmental improvements through the reduction of emissions of sulfur compounds arising from the combustion of gas oils and gasolines produced and sold by R&M Peru.

It has also increased the Gross Internal Product of the population directly or indirectly affected in terms of employability, and the contracting of direct or indirect services. Specifically:

- 19 permanent jobs in the industrial complex, taken up by new professional employees and technical specialists training the country, and a total of 80 permanent jobs (in building and contractor companies).
- Creation or extension of services in the area such as workshops, rental of living space, food services, transport, laundry facilities etc.
- Boost to employability of the local population in projects in the sector, through technical courses and courses in safety taught to contractor companies.



## Indirect economic impact. Encouragement of local contracts [203-1, 203-2]:

Repsol considers a supplier is "local" when the company has been incorporated or nationalized under the laws of the country in which it supplies goods or provides a service. Local suppliers have the advantage of supplying in close proximity to our operations, which occasionally makes for greater flexibility and adaptability to our needs, with a shorter response time.

Repsol creates opportunities for indirect employment in projects involving the construction of new plants or extensions to existing facilities, and also during drilling operations and shutdowns of industrial complexes. As a general rule there is a high percentage of local procurement and purchases, especially in services involving logistics, civil engineering, catering, accommodation, vehicle and driver hire, doctors and rentals of warehouses and offices; and support services in information and management systems for local offices, waste management, parcel services, internal and external messaging.

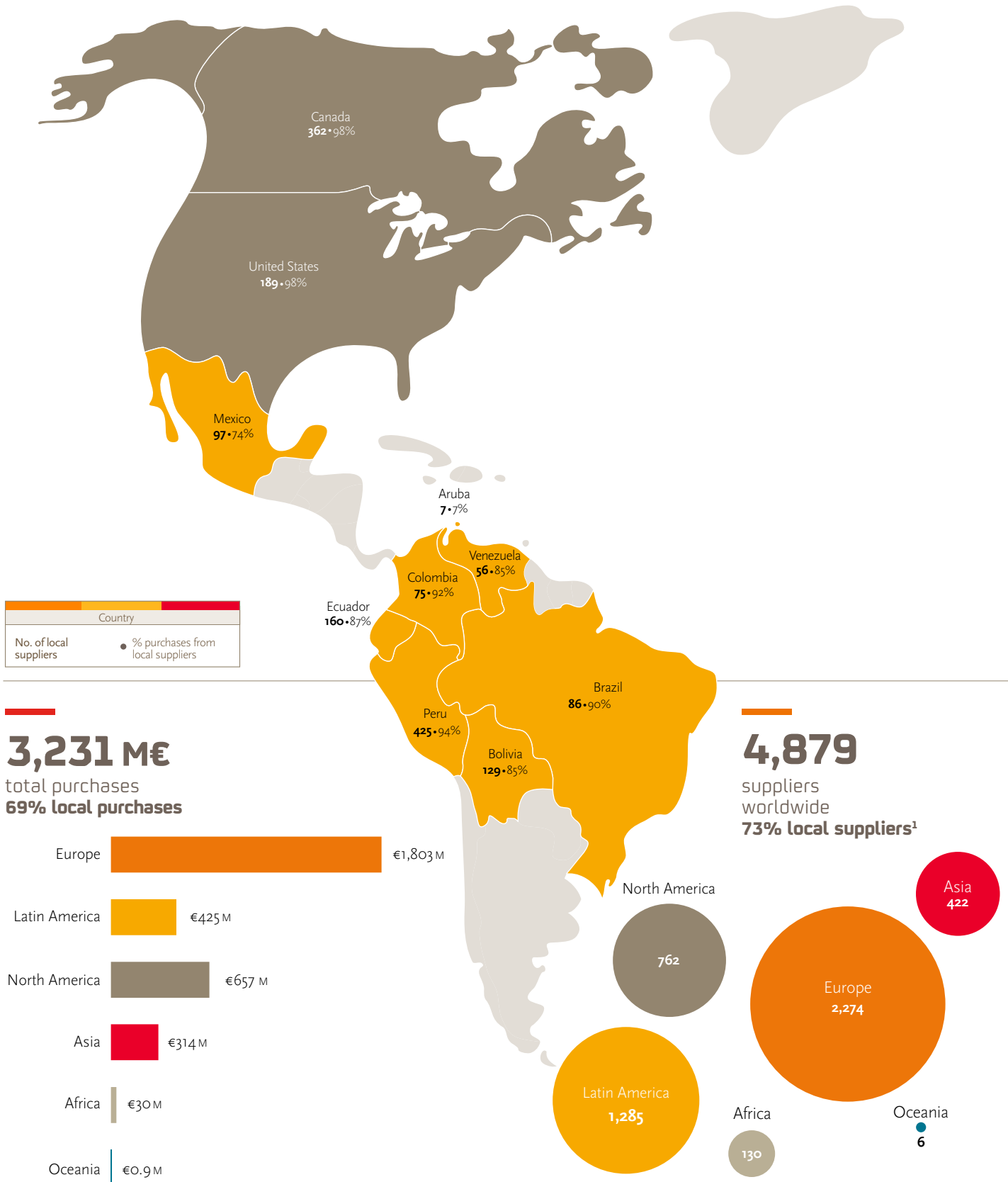
## Environmental and social assessment of suppliers

The system managing Repsol's supply chain assesses supplies to identify the economic, technical, social, ethical, environmental or safety risks in the various stages of the commercial relationship, from the preliminary grading of the contract to the performance assessments carried out when the services have been completed, which are finalized with technical or social audits.

Aspects of integrity, corruption and bribery were verified in 2018 by means of the Thomson Reuters external service World Check One on 4,261 suppliers. A further 42 supplier assessment audits were performed using the Repsol protocol, and among other aspects these carried out an in situ verification with respect to human rights. There is also access to 9 audits conducted by REPRO to analyze these issues, with a protocol convalidated by Repsol. 4 social audits were performed in 2018. No contracts were terminated in the course of the year due to the outcome of these audits.

From the point of view of assessment of the tasks carried out by suppliers and contractors, 3,060 assessments were carried out in 2018 on 1,347 suppliers and contractors with respect to a range of environmental, employment, social and integrity issues.

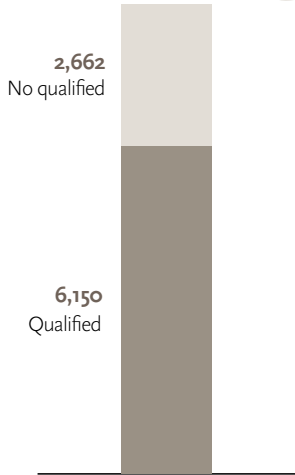
Company expenditure in the countries in which it operates stands at €3.231 million, 69% of which is accounted for by local suppliers.



1. Repsol considers a "local supplier" to be companies incorporated or nationalized under the laws of the country where Repsol carries on operations for which the company is a supplier or service provider.



**8,812**  
qualification  
processes<sup>2</sup>



**3,060**  
performance  
assessments  
of 1,347 suppliers

No. of assessments addressing:



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

**42**  
rating audits  
**4** social  
audit

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

**0**  
breaches  
of contract

2. In 2018, 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 labor or that has submitted its employees to forced labor in any way.



**3.5%** ↑  
 global GDP  
 in 2019  
 (estimated)

## 7. Outlook

### 7.1. General outlook

#### Macroeconomic outlook

World economic growth has been faltering recently, albeit gradually for now. The latest forecasts by the International Monetary Fund (IMF WEO Update, January 2019) put global growth at 3.5% in 2019, compared to 3.7% for 2018.

Growth in the developed economies is expected to be slow down in 2019 at 2.0%, and activity in the US is set to expand by 2.5% (falling against 2.9% in 2018) due to the delayed effect of higher interest rates and a smaller fiscal impulse. In any case, the US fiscal impulse will continue to be positive, and this will keep its economy ahead of the rest of the developed economies. The Eurozone is expected to achieve 1.6% growth, while the Spanish economy should expand by 2.2%.

Growth in emerging economies has been moderating more sharply, and in spite of a recent stabilization, growth for 2019 is expected to reach 4.5%, as China is responding to moderation of business with a number of stimulus measures which will gradually take effect.

In any case, not only do the current 2019 global growth prospects of 3.5% fall 0.4 p.p short of those expected in early 2018, but the demand risks on the central scenario have also considerably increased. Risks include the possibility of a more abrupt downturn in China, as against the current backdrop of excess debt and capital outflows, stimulus measures may be less effective. Another risk would be a tightening of finance conditions that could cause a sharper fall in consumption and investment, thereby generating a vicious circle between the real economy and finance markets. To avoid this, it will be most important for central banks to demonstrate greater sensitivity to financial developments.

#### Macroeconomic forecast, key figures

	Growth of Real GDP (%)		Average inflation (%)	
	2019	2018	2019	2018
World economy	3.5	3.7	3.8	3.8
Advanced countries	2.3	2.4	1.7	2.0
Spain	2.2	2.5	1.8	1.8
Emerging countries	4.5	4.6	5.1	4.9

Source: IMF (*World Economic Outlook* January 2019) and Repsol Research Unit.

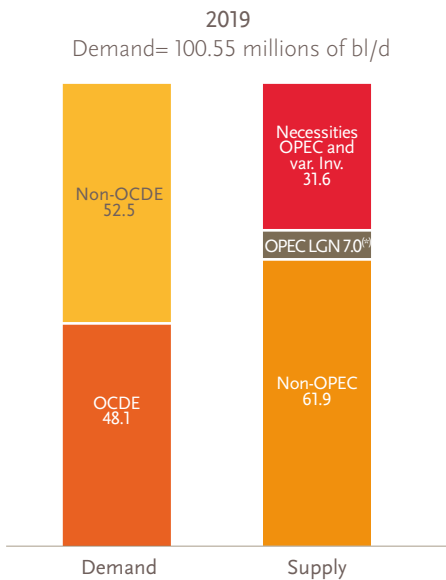
#### Energy sector outlook

##### 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 chiefly determined by an agreed reduction in OPEC production and some non-OPEC countries. On the non-OPEC side, the International Energy Agency (IEA) is expecting an increase in production in 2019 of about +1.5 millions barrels a day bbl/d, nearly all of which would be supplied by the US (+1.32 million bbl/d) and much more modest contributions from Brazil (+350 thousand million bbl/d). On the OPEC side, the market will be watching closely for fulfillment of commitments to the production cuts agreed in December 2018 (-800 million bbl/d as of January up to June), and the cutbacks announced by non-OPEC export allies (-400 million bbl/d), led by Russia, which will have a direct effect on crude oil prices.

The increase in world demand in 2019 would be +1.4 million bbl/d, bringing total demand to 100.6 million bbl/d. Consumption by non-OECD countries would climb by +1.11 million bbl/d, and by +290 million bbl/d in OECD countries, culminating five consecutive years of positive growth. This scenario involves a reduction of 200 thousand barrels a day in OPEC crude oil needs and inventory changes of up to 31.6 million bbl/d in 2019. In short, the IEA expects market equilibrium thanks to intervention by OPEC to make adjustments.

**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 respect to the **movement of crude oil** prices in the short term, the analyst consensus points to an average Brent crude price of \$71/bbl in 2019.

With respect to the **movement of gas prices** in the short term, the adjustment of the balance begun in 2017 is expected to continue into 2019. Here, the key factor will be the performance of production in the US, which may lead to larger volumes of gas associated with oil production.

In spite of doubts concerning production trends, on the demand side strong growth of exports is expected (both of liquefied natural gas - LNG - and gas via pipeline). In 2019, both the liquefaction capacity due to the commissioning of new export terminals and the capacity of gas via pipeline to Mexico will continue to increase. New industrial plants are also expected to commence operations.

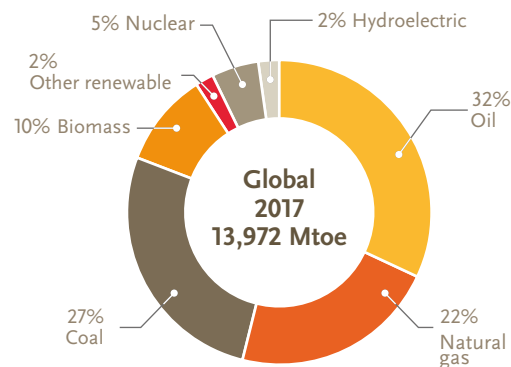
**Long-term energy sector outlook**

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.

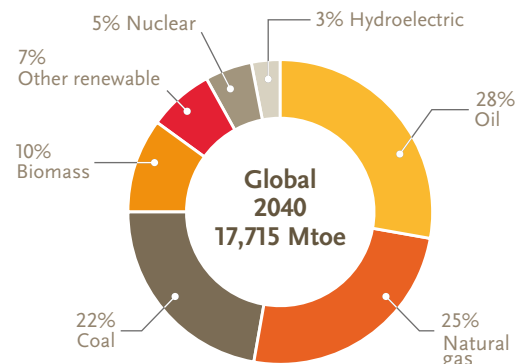
No major changes are expected in the coming years. According to the International Energy Agency (IEA), in the baseline scenario of its 2018 World Energy

Outlook, oil will contract by 4 percentage points in the 2040 energy matrix compared to 2017, while natural gas will account for 25% of the estimated total energy demand of 17,715 million tons of oil equivalent.

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



Source: IEA and Repsol Research Unit



Source: IEA and Repsol Research Unit

**3%** ↑  
Natural Gas in the energy matrix in 2040 vs. 2017

**71\$/bbl**  
consensus in 2019

720 KBoe/d  
in 2019

## 7.2. Outlook for business

In 2019, the objectives of all areas are centered on the creation of value and are aimed at fulfilling the commitments assumed in the Update to the Strategic Plan for 2018-2020, which was published on June 6, 2018 (see section 2.6) the main pillars of which are improving shareholder remuneration, *achieving profitable growth in both Upstream and Downstream* and developing new businesses linked to the energy transition.

Specifically, the **Upstream** business plans to increase production to about 720,000 barrels/day in 2019, through active management of its portfolio that provides quality barrels and the prioritization of onshore projects (on land) and in shallow waters, where Repsol has prior experience.

In 2019, our organic investment is expected to be around \$2,800 million with the aim of developing productive assets and opening new avenues for future growth. Investment will be concentrated especially in the US, Norway, Trinidad, Brazil, Colombia, the UK, Algeria, Malaysia, Canada, Bolivia and Peru.

In 2019, the **Downstream** business aims to consolidate the good performance of recent years and create new opportunities for growth and the creation of value. The main objectives are: the creation of value. The main objectives are:

- In Refining and Chemical facilities, continue increasing plant reliability and orientation toward the reduction of energy costs and CO<sub>2</sub> emissions, which will maintain the continuous improvement of margins;
- In addition, at the refining facilities, a global overhaul must be carried out in order to be prepared to maximize their profitability in the new regulatory scenario set by the International Maritime Organization (IMO) on fuel specifications for maritime transport.
- Grow in high value chemicals with applications in high-demand sectors and large margins..
- In mobility, maximize business value and consolidate our competitive position by optimizing operations and continuing to develop our business in Mexico and enter new markets.

- Continue with the international expansion of other businesses such as Lubricants, Trading or LPG.
- Develop new growth opportunities while bearing in mind the quest for continuous improvement in efficiency and cost containment.
- In Low Carbon, Repsol will continue to implement the actions envisaged in the Updated 18-20 Strategic Plan, with the aim of consolidating the value proposition begun in 2018 and achieving the commitments assumed within the planned timeframe.

Lastly, in 2019 the focus will stay on efficiency in **corporate areas**, with shared service centers established, and processes automated so as to contribute to the profitability of the entire organization.

In the current environment, Repsol expects that in 2019 it will be able to generate cash to finance its investment needs and remunerate its shareholders in accordance with the Update of the Strategic Plan.

**Digitalization** will continue to be a cornerstone of the transformation of all businesses, driving new ways of working to obtain benefits and efficiencies with tangible impact on the results. In Exploration and Production, this means providing greater security to operations, optimizing the development of assets and helping to achieve excellence in exploration, among other activities. In *Downstream* businesses, by contributing to safer operations, with zero unexpected failures, evolving towards a self-contained and connected plant, helping to make planning processes more intelligent and dynamic and improving decision-making based on data and enabling new digital business or mobility.

As an additional lever, 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 and providing agility and efficiency.

---

# Appendix

# Appendix I.

## Alternative performance measurements

Repsol's financial disclosures contain figures and measurements prepared in accordance with the regulations applicable to financial information, as well as other measurements prepared in accordance with the Group's Reporting Model<sup>1</sup> known as Alternative Performance Measurements (APMs). APMs are measurements which are "adjusted" compared to those presented as IFRS-EU or with 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.

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

### 1. Financial performance measurements

#### Adjusted net income

The **adjusted net income** is the key financial performance measurement which Management (Executive Committee) Executive Committee) consults when making decisions in accordance with IFRS 8 "Operating segments".

Repsol presents its segment results including joint ventures<sup>3</sup> and other companies which are jointly managed in accordance with the Group's investment percentage, considering 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** (CCS<sup>4</sup>) net of taxes and the result from investments minority interests. It does not include certain income and expenses (**special items**), or what is known as the **Inventory effect**. The **financial income** corresponds to the adjusted net income under "Corporate and other".

The **Adjusted net income** is a useful APM for investors 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 current cost of supply (CCS)** and the result calculated as the average weighted cost (AWC, which is an inventory valuation method used by the company to determine its results in accordance with European accounting regulations). It only affects the *Downstream* segment, so 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 etc.) and is presented net of taxes and minority interests. Repsol management considers that this measurement is useful for investors, considering the significant variations arising in the prices of inventories 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 this cost and its market value.

1. See Note 5, "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 13 "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. Due to the above, adjusted net income does not include the 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 divestment, restructuring costs, impairments, and provisions for risks and expenses. Special items are presented net of taxes and minority interests.

The way in which the results of exchange rate fluctuations on tax positions in currencies other than the functional currency are presented has changed during the period, and these changes are reflected in the Special Items to facilitate the monitoring of business results and align us with best practices in the industry. The comparative figures for 2017 have not been restated, given their immateriality.

Section 4.3 “Financial overview” of this document contains the accumulated *Special items* for the years 2018 and 2017. There follow the results for the fourth quarter of 2018 and 2017:

Millions of euros	Fourth Quarter	
	2018	2017 <sup>(2)</sup>
Divestments	24	(72)
Workforce restructuring	(13)	(12)
Impairment	(559)	(612)
Provisions and other <sup>(1)</sup>	423	377
Discontinued operations	-	115
<b>Total</b>	<b>(125)</b>	<b>(204)</b>

(1) Includes the effect of the exchange rate on tax positions in currencies other than the functional currency.

(2) The information for 2017 was restated following the sale of the stake in Naturgy Energy Group, S.A. (see Note 2.2 of the 2018 consolidated financial statements).

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

€ Million	Fourth Quarter											
	Adjustments											EU-IFRS profit/loss
	Adjusted Result		Reclassification of Joint Ventures		Special items		Inventory Effect <sup>(2)</sup>		Total Adjustments			
	2018	2017 <sup>(3)</sup>	2018	2017 <sup>(3)</sup>	2018	2017	2018	2017	2018	2017	2018	2017 <sup>(3)</sup>
Operating income	1,300	807	(611)	(257)	(487)	120	(480)	209	(1,578)	72	(278)	879
Financial result	(172)	(17)	39	76	24	(103)	-	-	63	(27)	(109)	(44)
Results of companies accounted for using the equity method - net of tax	(24)	13	610	376	72	(1)	1	-	683	375	659	388
<b>Net income before tax</b>	<b>1,104</b>	<b>803</b>	<b>38</b>	<b>195</b>	<b>(391)</b>	<b>16</b>	<b>(479)</b>	<b>209</b>	<b>(832)</b>	<b>420</b>	<b>272</b>	<b>1,223</b>
Income tax	(464)	(208)	(38)	(195)	266	(336)	124	(52)	352	(583)	(112)	(791)
<b>Profit from continuing operations</b>	<b>640</b>	<b>595</b>	-	-	<b>(125)</b>	<b>(320)</b>	<b>(355)</b>	<b>157</b>	<b>(480)</b>	<b>(163)</b>	<b>160</b>	<b>432</b>
Income attributed to minority interests for continuing operations	(8)	(7)	-	-	-	1	18	(3)	18	(2)	10	(9)
<b>Net income from continuing activities attributable to the parent</b>	<b>632</b>	<b>588</b>	-	-	<b>(125)</b>	<b>(319)</b>	<b>(337)</b>	<b>154</b>	<b>(462)</b>	<b>(165)</b>	<b>170</b>	<b>423</b>
Profit from discontinued operations	-	-	-	-	-	115	-	-	-	115	-	115
<b>TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY</b>	<b>632</b>	<b>588</b>	-	-	<b>(125)</b>	<b>(204)</b>	<b>(337)</b>	<b>154</b>	<b>(462)</b>	<b>(50)</b>	<b>170</b>	<b>538</b>

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

(2) The inventory effect represents an adjustment to “Procurement” and “Changes in inventory of finished goods” on the IFRS-EU income statement.

(3) The information for 2017 was restated following the sale of the stake in Naturgy Energy Group, S.A. (see Note 2.2 of the 2018 consolidated financial statements).

€ Million	At December 31											
	Adjustments											EU-IFRS profit/loss
	Adjusted Result		Reclassification of Joint Ventures		Special items		Inventory Effect <sup>(2)</sup>		Total Adjustments			
	2018	2017 <sup>(3)</sup>	2018	2017 <sup>(3)</sup>	2018	2017	2018	2017	2018	2017		
Operating income	4,396	3,214 <sup>(1)</sup>	(1,204)	(610)	(633)	42	(106)	143	(1,943)	(425)	2,453	
Financial result	(462)	(356)	130	126	159	(82)	-	-	289	44	(173)	(312)
Results of companies accounted for using the equity method - net of tax	15	49	965	580	72	1	1	-	1,038	581	1,053	630
<b>Net income before tax</b>	<b>3,949</b>	<b>2,907</b>	<b>(109)</b>	<b>96</b>	<b>(402)</b>	<b>(39)</b>	<b>(105)</b>	<b>143</b>	<b>(616)</b>	<b>200</b>	<b>3,333</b>	<b>3,107</b>
Income tax	(1,569)	(738)	109	(96)	46	(350)	28	(36)	183	(482)	(1,386)	(1,220)
<b>Profit from continuing operations</b>	<b>2,380</b>	<b>2,169</b>	-	-	<b>(356)</b>	<b>(389)</b>	<b>(77)</b>	<b>107</b>	<b>(433)</b>	<b>(282)</b>	<b>1,947</b>	<b>1,887</b>
Income attributed to minority interests for continuing operations	(28)	(38)	-	-	1	1	9	(3)	10	(2)	(18)	(40)
<b>Net income from continuing activities attributable to the parent</b>	<b>2,352</b>	<b>2,131</b>	-	-	<b>(355)</b>	<b>(388)</b>	<b>(68)</b>	<b>104</b>	<b>(423)</b>	<b>(284)</b>	<b>1,929</b>	<b>1,847</b>
Profit from discontinued operations	-	-	-	-	412	274	-	-	412	274	412	274
<b>TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY</b>	<b>2,352</b>	<b>2,131</b>	-	-	<b>57</b>	<b>(114)</b>	<b>(68)</b>	<b>104</b>	<b>(11)</b>	<b>(10)</b>	<b>2,341</b>	<b>2,121</b>

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

(2) The inventory effect represents an adjustment to "Procurement" and "Changes in inventory of finished goods" on the IFRS-EU income statement.

(3) The information for 2017 was restated following the sale of the stake in Naturgy Energy Group, S.A. (see Note 2.2 of the 2018 consolidated financial statements).

## EBITDA:

The **EBITDA** ("Earnings Before Interest, Tax, Depreciation and redemption") is a financial indicator which determines the operating margin of a company prior to deducting interest, taxes, impairment, 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, for a more straightforward exercise in making comparisons with other companies in the Oil & Gas sector.

The **EBITDA** is calculated as Operating Income + redemption + Impairment + Restructuring costs as well as other items which do not represent cash inflows or outflows from transactions (capital gains/losses from divestment, provisions etc.). Operating income corresponds to the result from continuing operations at average weighted cost (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 ventures reclassification and others		Inventory effect		IFRS-EU <sup>(1)</sup>	
	2018	2017	2018	2017	2018	2017	2018	2017
Upstream	1,224	1,086	(493)	(483)	-	-	731	603
Downstream	469	964	(50)	(3)	-	-	419	961
Corporate and other	(13)	(42)	4	(11)	-	-	(9)	(53)
<b>EBITDA</b>	<b>1,680</b>	<b>2,008</b>	<b>(539)</b>	<b>(497)</b>	-	-	<b>1,141</b>	<b>1,511</b>
<b>EBITDA at CCS</b>	<b>2,160</b>	<b>1,799</b>	<b>(539)</b>	<b>(497)</b>	<b>(480)</b>	<b>209</b>	<b>1,141</b>	<b>1,511</b>

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



	At December 31							
	Group Reporting Model		Joint ventures reclassification and others		Inventory effect		IFRS-EU <sup>(1)</sup>	
	2018	2017	2018	2017	2018	2017	2018	2017
Upstream	4,801	3,507	(1,782)	(1,459)	-	-	3,019	2,048
Downstream	2,859	3,386	(58)	(12)	-	-	2,801	3,374
Corporate and other	(147)	(170)	20	1	-	-	(127)	(169)
<b>EBITDA</b>	<b>7,513</b>	<b>6,723</b>	<b>(1,820)</b>	<b>(1,470)</b>	<b>-</b>	<b>-</b>	<b>5,693</b>	<b>5,253</b>
<b>EBITDA at CCS</b>	<b>7,619</b>	<b>6,580</b>	<b>(1,820)</b>	<b>(1,470)</b>	<b>(106)</b>	<b>143</b>	<b>5,693</b>	<b>5,253</b>

(1) Corresponds to "Profit before tax" and "Result adjustments" on the consolidated Cash Flow Statements 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: (Adjusted Net Income, excluding Financial Result + Inventory

Effect + Special Items)<sup>1</sup> / (Capital employed during the continuing operations period). The **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	2018	2017
<b>EU-IFRS operating profit</b>	<b>2,453</b>	<b>2,789</b>
Joint Ventures reclassification	1,204	610
Income tax <sup>(1)</sup>	(1,489)	(1,241)
Results of companies accounted for using the equity method - net of tax	88	50
<b>I. ROACE result at average weighted cost</b>	<b>2,256</b>	<b>2,208</b>

Denominator	2018	2017
Total equity	30,914	30,063
Net financial debt	3,439	6,267
<b>Capital employed at year-end</b>	<b>34,353</b>	<b>36,330</b>
<b>II. Average capital employed<sup>(2)</sup></b>	<b>33,730</b>	<b>34,520</b>
<b>ROACE (I/II)</b>	<b>6.7</b>	<b>6.4</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.

1. In 2018 Repsol modified the ROACE calculation in order to take into account "Special items", thereby improving its comparability against other companies in the industry. The information relating to the period used as a comparison has been adapted.

## 2. Cash flow measurements

### Free cash flow, cash generated and liquidity:

The three main measurements used by the Group's management to evaluate the generation of cash flow in the period are **Cash flow from operations**, **Free cash flow** and **Cash flow generated**.

The **cash flow from operations** measures generation of cash from operating activities, and is calculated as: EBITDA +/- Changes to current capital (also called Working Capital) + Collection of dividends + Collections/-payments of income tax + Other collections/-payments from operating activities.

The **free cash flow (FCF)** 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.

The **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 cash flow statements prepared under IFRS-EU:

	Fourth Quarter					
	Adjusted cash flow		Joint ventures reclassification and others		EU-IFRS cash flow statement	
	2018	2017	2018	2017	2018	2017
I. Cash flows from / (used in) operating activities (cash flow from operations)	2,077	1,929	(317)	(84)	1,760	1,845
II. Cash flows from / (used in) investing activities	(2,221)	(1,045)	153	157	(2,068)	(888)
<b>Free cash flow (I+II)</b>	<b>(144)</b>	<b>884</b>	<b>(164)</b>	<b>73</b>	<b>(308)</b>	<b>957</b>
<b>Generated cash flow</b>	<b>(1,017)</b>	<b>683</b>	<b>(163)</b>	<b>78</b>	<b>(1,180)</b>	<b>761</b>
III. Cash flows from / (used in) financing activities and others <sup>(1)</sup>	(332)	(894)	125	(50)	(207)	(944)
<b>Net increase / (decrease) in cash and cash equivalents (I+II+III)</b>	<b>(476)</b>	<b>(10)</b>	<b>(39)</b>	<b>23</b>	<b>(515)</b>	<b>13</b>
Cash and cash equivalents at the beginning of the period	5,497	4,830	(196)	(242)	5,301	4,588
Cash and cash equivalents at the end of the period	5,021	4,820	(235)	(219)	4,786	4,601

	At December 31					
	Adjusted cash flow		Joint ventures reclassification and others		EU-IFRS cash flow statement	
	2018	2017	2018	2017	2018	2017
I. Cash flows from / (used in) operating activities (cash flow from operations)	5,428	5,506	(849)	(393)	4,579	5,113
II. Cash flows from / (used in) investing activities	(372)	(2,946)	(987)	157	(1,359)	(2,789)
<b>Free cash flow (I+II)</b>	<b>5,056</b>	<b>2,560</b>	<b>(1,836)</b>	<b>(236)</b>	<b>3,220</b>	<b>2,324</b>
<b>Cash flow generated</b>	<b>2,706</b>	<b>1,391</b>	<b>(1,832)</b>	<b>(229)</b>	<b>874</b>	<b>1,162</b>
III. Cash flows from / (used in) financing activities and others <sup>(1)</sup>	(4,855)	(2,658)	1,820	248	(3,035)	(2,410)
<b>Net increase / (decrease) in cash and cash equivalents (I+II+III)</b>	<b>201</b>	<b>(98)</b>	<b>(16)</b>	<b>12</b>	<b>185</b>	<b>(86)</b>
Cash and cash equivalents at the beginning of the period	4,820	4,918	(219)	(231)	4,601	4,687
Cash and cash equivalents at the end of the period	5,021	4,820	(235)	(219)	4,786	4,601

(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	
	2018	2017	2018	2017	2018	2017
Cash and cash equivalents	5,021	4,820	(235)	(219)	4,786	4,601
Undrawn credit lines	2,265	2,503	(16)	-	2,249	2,503
Time deposits of immediate availability <sup>(1)</sup>	1,456	231	-	-	1,456	231
<b>Liquidity</b>	<b>8,742</b>	<b>7,554</b>	<b>(251)</b>	<b>(219)</b>	<b>8,491</b>	<b>7,335</b>

(1) Repsol contracts time deposits but with immediate availability, which are recorded under the heading “Other current financial assets” (see Note 8 to the 2018 Consolidated Financial Statements) and which do not meet the accounting criteria for classification as cash and cash equivalents..

## 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 in the operation of

resources made by different Group businesses. It includes that which corresponds to joint ventures or other companies whose operations are managed as such.

	Fourth Quarter					
	Operating investments		Joint venture reclassification and other		EU-IFRS <sup>(1)</sup>	
	2018	2017	2018	2017	2018	2017
Upstream	550	716	(104)	(9)	446	707
Downstream	1,271	360	(39)	(1)	1,232	359
Corporation & Other	34	17	-	1	34	18
<b>Total</b>	<b>1,855</b>	<b>1,093</b>	<b>(143)</b>	<b>(9)</b>	<b>1,712</b>	<b>1,084</b>

	At December 31					
	Operating investments		Joint venture reclassification and other		EU-IFRS <sup>(1)</sup>	
	2018	2017	2018	2017	2018	2017
Upstream	1,973	2,089	(365)	(307)	1,608	1,782
Downstream	1,831	805	(41)	(2)	1,790	803
Corporation & Other	70	42	-	-	70	42
<b>Total</b>	<b>3,874</b>	<b>2,936</b>	<b>(406)</b>	<b>(309)</b>	<b>3,468</b>	<b>2,627</b>

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

### 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.

	Net Debt		Joint venture reclassification <sup>(1)</sup>		Figure according to EU-IFRS balance sheet	
	dec-18	dec-17	dec-18	dec-17	dec-18	dec-17
<b>Non-current assets</b>						
Non-current financial instruments <sup>(2)</sup>	87	360	887	1,560	974	1,920
<b>Current assets</b>						
Other current financial assets	1,630	254	81	3	1,711	257
Cash and cash equivalents	5,021	4,820	(235)	(219)	4,786	4,601
<b>Non-current liabilities<sup>(3)</sup></b>						
Non-current financial liabilities	(6,625)	(7,611)	(2,767)	(2,469)	(9,392)	(10,080)
<b>Current liabilities<sup>(3)</sup></b>						
Current financial liabilities	(3,827)	(4,160)	(462)	(46)	(4,289)	(4,206)
<b>Items not included on the balance sheet</b>						
Net mark to market valuation of financial derivatives (ex: exchange rate) <sup>(4)</sup>	275	70	(227)	-	48	70
<b>Net debt</b>	<b>(3,439)</b>	<b>(6,267)</b>			<b>(6,162)</b>	<b>(7,438)</b>

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

*December 2018:* (cash and cash equivalents of €13 million and current financial liabilities as a result of an intra-group loan of €2,674 million, less a €127 million third-party loan).

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

(2) Corresponds to the consolidated balance sheet heading, "Non-current financial assets" without including equity instruments.

(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.

	Gross debt		Joint venture reclassification		Figure according to EU-IFRS balance sheet	
	dec-18	dec-17	dec-18	dec-17	dec-18	dec-17
Current financial liabilities	(3,776)	(4,133)	(463)	(45)	(4,239)	(4,178)
Net valuation at the market rates of financial derivative, such as current exchange rate	20	(9)	-	-	20	(9)
<b>Current gross debt</b>	<b>(3,756)</b>	<b>(4,142)</b>	<b>(463)</b>	<b>(45)</b>	<b>(4,219)</b>	<b>(4,187)</b>
Non-current financial liabilities	(6,570)	(7,542)	(2,767)	(2,470)	(9,337)	(10,012)
<b>Non-current gross debt</b>	<b>(6,570)</b>	<b>(7,542)</b>	<b>(2,767)</b>	<b>(2,470)</b>	<b>(9,337)</b>	<b>(10,012)</b>
<b>Total Gross Debt</b>	<b>(10,326)</b>	<b>(11,684)</b>	<b>(3,230)</b>	<b>(2,515)</b>	<b>(13,556)</b>	<b>(14,199)</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 21 "Financial result" 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	Fourth Quarter					
	Group Reporting Model		Reclassif. Joint Arrangements		EU-IFRS	
	dec-18	dec-17	dec-18	dec-17	dec-18	dec-17
Interest	73	82	(14)	(14)	59	68
EBITDA	1,680	2,008	(539)	(497)	1,141	1,511
<b>Interest cover</b>	<b>4.4%</b>	<b>4.1%</b>			<b>5.2%</b>	<b>4.5%</b>

€ Million	At December 31					
	Group Reporting Model		Reclassif. Joint Arrangements		EU-IFRS	
	dec-18	dec-17	dec-18	dec-17	dec-18	dec-17
Interest	288	350	(58)	(63)	230	288
EBITDA	7,513	6,723	(1,820)	(1,470)	5,693	5,253
<b>Interest cover</b>	<b>3.8%</b>	<b>5.2%</b>			<b>4.0%</b>	<b>5.5%</b>

# Appendix II. Risks

## Risk management

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

Repsol has an integrated risk management system designed to identify, analyze, 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 is based on a Risk Management Policy approved by the Board of Directors and its principles are specified in the Integrated Risk Management Standard approved by the Executive Committee.

The fundamental pillars of the SGIR are:

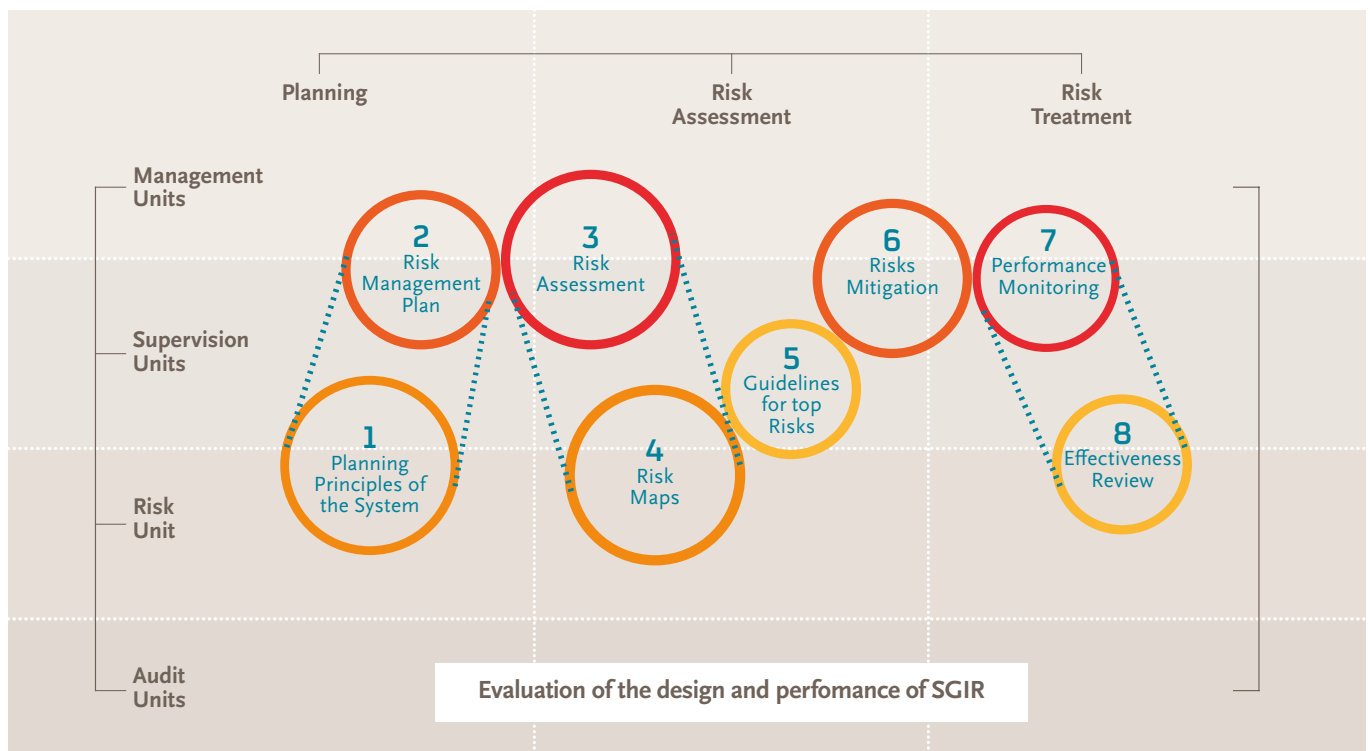
- Senior Management leads integrated risk management.
- The risk perspective is integrated into management and decision-making processes.
- Businesses and corporate areas play a role in the implementation of the model with different levels of responsibility and specialization (risk management units, supervisory units and audit units, in accordance with the

three lines of defense model) as well as the Risk Unit, which governs and coordinates the system.

- It ensures that risks are identified, assessed and addressed in accordance with the guidelines of ISO 31000
- Promotion of continuous improvement to gain efficiency and responsiveness.

Another key element is the risk tolerance declaration, which is set out in the Risk Management Policy along with the above principles. Repsol aspires to a low-to-medium risk profile that is appropriate for an integrated and diversified energy company, differentiating between risks in which the Company is ready to accept exposure within its overall tolerance threshold, and others in which it seeks to reduce exposure to levels as low as reasonably possible. The latter type would include accident, environmental, health, safety, ethics and conduct, image and reputation and compliance risks.

## Process ISO 31000 Risk Management System - Principles and guidelines



Below are details on the Company bodies involved in the definition, implementation, monitoring and supervision of the SIGR, as well as their responsibilities:





In accordance with the risk management system, Repsol decides to what extent each of the identified risks is assumed, mitigated, covered or averted as far as possible. Among the main measures adopted by the Company are the following:

- Establishment of policies, standards, procedures, manuals and guidelines.
- Analysis and measurement of different risk-related variables, as well as the performance of an analysis of their sensitivity.
- Definition, monitoring and continuous evaluation of the design and operation of the Group's internal control and compliance<sup>1</sup> systems:
- Contracting of insurance coverage

In this regard, as part of the periodic updating of the Risk Map, the Company is working on identifying new lines of action and response and consolidating existing ones, mainly through mitigation actions, for the most relevant risks.

In particular, for certain highly-critical risks, Repsol is working on a methodology which makes it possible to gain an holistic understanding of the factors leading to their materialization and consequences, in order to prevent their occurrence and/or reduce their impacts (preventive and contingency measures).

In addition, Repsol has various units for analysis, supervision and independent and response control, specializing in various risk management areas<sup>2</sup> in addition to an Internal Audit Unit focused on evaluating and improving existing controls in order

1. Repsol has an integrated internal control model inspired by the reference framework of COSO 2013, comprising the Group's internal control and compliance systems, which have been formally developed, including the Financial Information Internal Control System, the Regulatory Compliance Program for the formal legal obligations of legal persons pertaining to the Group and the Crime Prevention Model at the Group's Spanish companies.

2. The following areas are notable: Sustainability, Corporate Security, Legal Counsel, Communications, CIO&CDO, Institutional Relationships, Strategy and Planning, Economic-Tax, Financial Development and Rating Agencies, Technology and Corporate Venturing, Corporate Governance Matters, People and Organization, Purchasing and Contracting, Technical Development and Safety and Environment E&P, Technical Industrial Area and Engineering.

to verify that potential risks that could affect the achievement of the Group's objectives are reasonably identified, measured and controlled.

## System of Internal Control over Financial Reporting (ICFR)

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) 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, Control and Risk Managing Division annually evaluates the design and functioning of the Group ICFR and draws conclusions on its effectiveness.

## Main risks

In relation to the materialized risks, during 2018, and taking into account the information in the 2018 Financial Statements on geostrategic risks in Venezuela, Libya and Vietnam, risks specific to the Group's activity have materialized, and the control systems established by the Company have worked correctly, which has enabled these risks to be managed in an appropriate manner.

The main risks identified in section 2.5 of this document are detailed below:

### Financial and market risks

#### *Fluctuations in the benchmark prices of hydrocarbons and derivative products:*

Crude oil prices are subject to exogenous factors and therefore to volatility, as a consequence of fluctuations in international supply and demand, impacted by the geopolitical environment, OPEC influence, technological changes or natural disasters. On average, the price of Brent crude stood at \$71.3/bbl in 2018, up 32% on the average for 2017 (\$54.2/bbl). On average, the price of HH gas stood at \$3.1/Mbtu in 2018, in line with those of 2017.

The reduction in crude oil prices adversely affects the profitability of *Upstream* activity, the valuation of its assets, its capacity to generate cash and its investment plans. A significant drop in capital investment could negatively affect Repsol's ability to replace its crude oil reserves.

In turn, international product prices, influenced by the price of crude oil, can impact the margins of the *Downstream* Refining and Commercial businesses. High product prices can also affect demand for them..

#### *Competitive positioning:*

The activity of the energy industry takes place in the context of a highly competitive sector. Such competition may be intensified by a number of factors including the entry of new competitors, changes in market conditions, the expiration of administrative concessions, technological obsolescence or insufficient differentiation. The combined effect of these factors may affect business volumes and margins.

## Regulatory and litigation risks

*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 whose scope, content and outcome cannot be predicted with precision. For further information on some of these proceedings, see Note 14.2 of the Consolidated Financial Statements.

*Regulatory risks:*

The energy industry and the Group's activity is heavily regulated. The current regulatory framework affects aspects such as the environment, competition, taxation, industrial safety and IT security, among others. Any changes that may be made to the applicable standards or any deviations in their strict observance, or their interpretation, may adversely affect the business, results and financial position of the Repsol Group.

In particular, the regulatory areas that generate this exposure of the Group include tax regulation and interpretation, the wide variety of environmental and safety legislation (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), accounting and transparency regulations and regulations governing data protection.

Repsol also reports on estimated proved and unproved reserves of oil and gas, which present an uncertainty that is inherent to the assessment process, which is subject to judgments and estimations (see note 3 of the Consolidated Financial Statements).

In addition, Repsol may be affected by the existence of sanctions and trade embargo regimes adopted by the EU, its Member States, the US or other countries, as well as supranational bodies such as the United Nations, on certain countries and/or companies or individuals based in them.

## Geostrategic risks

*Arbitrary actions and loss of assets due to government decisions:*

Part of Repsol's activities are carried out in countries that present or may present scenarios of social, political or economic instability that could lead to situations such as the increase of taxes and royalties, the establishment of production limits and volumes for exports, mandatory renegotiations or annulment of contracts, regulation of product prices, nationalization, expropriation or confiscation of assets, loss of concessions, changes in government policies, changes in commercial customs and practices or delayed payments, among others.

Specifically, Repsol operates in countries with special geopolitical risk such as Venezuela, Libya, Algeria, or in regions in territorial dispute between states such as the South China Sea (Vietnam). For further information, see Note 20.3 of the Group's consolidated financial statements.

## Operational risks

*Accident rate*

Repsol's industrial and commercial assets (refineries, petrochemical complexes, regasification plants, power generation plants, bases and warehouses, port facilities, pipelines, ships, tanker trucks, service stations, etc.) as well as E&P's own facilities (exploratory or production wells, surface facilities, oil platforms, etc.), both onshore and offshore, are exposed to accidents such as fires, explosions, toxic product leaks and environmental incidents with a large potential impact. 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.

The Repsol Group is exposed to impacts from any type of damage or temporary interruption of service associated with accidents in operations or involving land, sea, river and air transport vehicles for people or substances.

*Deviations in the execution of investment projects:*

Repsol executes investment projects of various types, both in physical and IT assets. The Group's *Downstream* and *Upstream* projects are in many cases complex due to their nature and/or size and are exposed to execution delays and deviations from the initially budgeted costs. The projects to dismantle offshore platforms in Norway and the United Kingdom stand out for their complexity and environment

Part of the projects of the Repsol Group are carried out through joint ventures associated in which the Group's capacity to control and influence the functioning and management of operations, and to identify and manage related risks, is limited

*Deviations in organizational management and of employees in ethics and conduct:*

The Repsol Group is exposed to negative impacts arising from the management of the organization and its employees, which constitute a key asset for the Group and which, in certain business contexts, may prove inadequate for achieving its objectives. The factors triggering such impacts include aspects such as talent attraction and retention, organizational structure, both in terms of design and dimensioning, and labor relations.

*Errors and failures in production and/or transport processes:*

The Repsol Group is exposed to potential impacts related to failures or deviations from planned results in the operation and/or maintenance of industrial complexes (refineries, petrochemical complexes, regasification plants and so on) or logistics facilities for transporting raw materials or products (gas pipelines, oil pipelines and polyducts), as well as in reserve operation activities, among others.

*Attacks against people or assets:*

In general, but especially in certain countries where it operates, Repsol is exposed to potential impacts deriving from acts of direct violence that may endanger the integrity of both the Company's assets, whether physical or logical, and of the persons linked to it as a result of the actions of persons or groups motivated by any interests, whether governmental or not, including, among others, acts of terrorism, delinquency and piracy.

Noteworthy are the special safety conditions in Libya, where there have been intermittent stoppages of hydrocarbon production in 2018. See Note 20.3 of the 2018 consolidated financial statements.

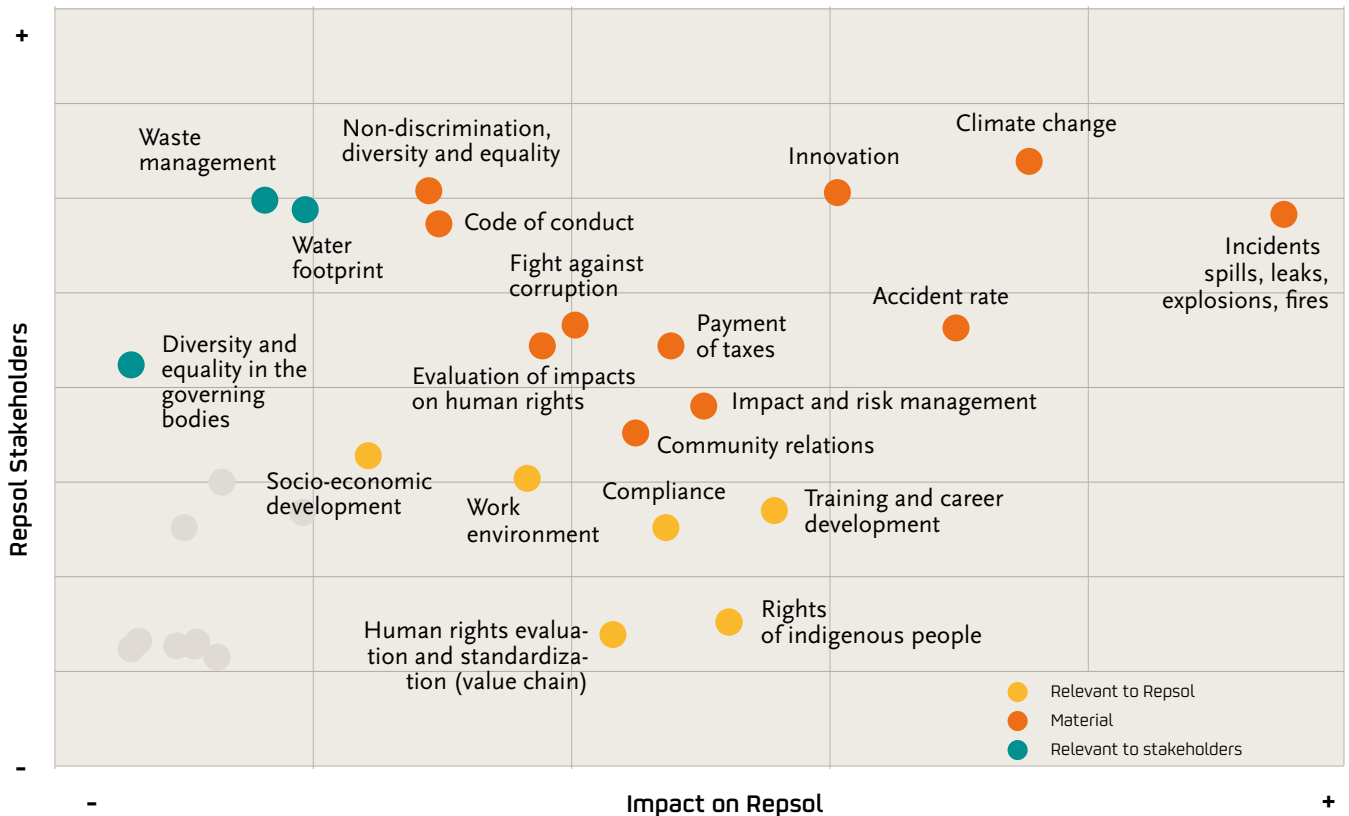
# Appendix III. GRI indicators

## Part I. General contents

### Materiality (102-46 to 47) and Stakeholder Engagement (102-40 and 102-42 to 44)

The following chart shows the results of the materiality study with regard to sustainability:

### Matters identified by stakeholders



Aspect	IMR 2018 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 impact assessment and qualification (supply chain)		6.2.2	Respect for Human rights and Community relations
● Stable working conditions	People	6.2.1	Human capital
● Training and career development		6.2.1	Human capital
● Indigenous people's 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
● Accident rate		6.3	Safe Operation
● Incidents: Spills, leaks, explosions, fires, etc.	Safe operation	6.3	Safe Operation
● Emergency response		6.3	Safe Operation
● Water footprint		6.3	Environment (Water)
● Waste management	Environment	6.4	Environment (Waste)
● Innovation	Innovation and technology	6.5	Innovation and technology
● Compliance		6.7	Ethic and compliance
● Impacts and risk management		Anexo II	Risks
● Tax payment	Ethic	6.6	Responsible tax policy
● Fight against corruption	and Transparency	6.7	Ethic and compliance
● Code of conduct		6.7	Ethic and compliance
● Diversity and equality in the governance bodies		2.4	Corporate governance
● Qualification of suppliers and contractors		6.8	Supply chain

Repsol has updated the materiality study carried out in 2017, which reflects the significance of economic, social, environmental and corporate governance issues that are considered to have a high impact and importance both for the Company and for its stakeholders. On the basis of this study, new sources of information have been included and the prioritisation criteria and materiality thresholds have been revised to more accurately reflect the current context.

The list of stakeholders included in this analysis consists of: employees, ESG investors and analysts, companies in the value chain (suppliers and contractors), civil society organizations and media. The new sources of information analyzed for qualitative assessment include the 2018 Sustainability Risks Matrix and the updating of the Repsol Group's 2020 Strategic Plan, with a view to assessing the importance of matters from an internal point of view. The Global Sustainability Plan has also been incorporated with a weight of 30% in the scale of importance for stakeholders.

## Matters identified by stakeholders consulted:

**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 Company's actions in this regard. The company has channels of communication and dialogue with workers through their labor union representatives in negotiating committees to discuss issues of interest and reach agreements. Through meetings in committees and commissions, monitoring and compliance are ensured of collective bargaining agreements and pacts applicable in group companies. The European Works Council of the Repsol Group stands out for their capacity for dialogue with workers' representatives at an international level.

**ESG investors and analysts:** They demand from the company transparency on a continuous basis on its social, environmental and corporate 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 with investors to respond to their requests for information in this field. And for the third year, he led Sustainability Day in its fifth edition, with the assistance of the CFO for the first time. In this edition, both Repsol's progress on the energy transition path and the recent acquisition of Viesgo's non-regulated assets took on special importance, with the Company's stake 25% higher than in 2017. The total number of investors visited during the year represents 72% of the total socially responsible shareholders.

The total number of shares managed according to ESG criteria in Repsol represented, at November 30, 2018, about 30% of the institutional shareholders vs. 19% of the ESG shareholders at the end of November 2017.<sup>1</sup>

**Companies in the value chain:** Suppliers and contractors strive to ensure Repsol shares with them sustainability criteria and best practices to improve their performance and be able to participate in bids and contract their services. They also request greater clarity in the information on their performance evaluations. For their part, customers choose according to the quality, price and availability of the product, as well as punctuality and delivery times; they value positively the service provided by Repsol as a supplier, as well as the quality of its products, while the aspects to be improved are incident management and the price of the product.

**Civil society organizations:** They aim for companies like Repsol to prevent and mitigate the environmental and social impacts of their activities. 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 received are answered and it actively participates multi-sector working groups, talks, congresses and debates on this subject. Specifically, within this stakeholder group, **international bodies** call on companies to implement their sustainability recommendations and good practices, as well as to collaborate with other companies and organizations.

In addition, in 2018 external sources (through desk research) have been incorporated into the materiality study to complete the qualitative analysis begun in 2017, such as trend and reputation analyses based on information in the media and sustainability studies and publications from the leading international organizations.

1. Source: Leaders Arena Limited

## 102-8 Information on employees and other workers

## Number of employed by contract type and gender

		2018	2017
Permanent Contract	Men	14,669	14,675
	Women	8,112	7,750
	Total	22,781	22,425
Temporary Contract	Men	1,397	1,597
	Women	1,110	1,063
	Total	2,507	2,660
<b>Total</b>		<b>25,288</b>	<b>25,085</b>

The number of employees was the same as in 2017. The ratio of employees with permanent contracts is lower due to the downsizing currently under way, which mainly affects this group of employees.

## Number of fixed employees by job type and gender

		2018	2017
Full time	Men	14,639	14,641
	Women	8,050	7,684
Part time	Men	30	34
	Women	62	66
<b>Total</b>		<b>22,781</b>	<b>22,425</b>

The data published reflect the number of fixed employees, irrespective of their percentage of employment.

## Annual average number of contracts

Category	<30				30-50				>50				Total Full time	Total Part time
	Permanent contracts		Temporary contracts		Permanent contracts		Temporary contracts		Permanent contracts		Temporary contracts			
	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		
<b>Executives</b>	-	-	-	-	97.20	0.00	1.67	-	155.72	0.00	3.42	-	258.00	0.00
Women	-	-	-	-	24.29	0.00	-	-	23.84	0.00	-	-	48.12	0.00
Men	-	-	-	-	72.91	0.00	1.67	-	131.88	0.00	3.42	-	209.88	0.00
<b>Technical managers</b>	2.19	-	0.22	0.00	1,558.86	4.97	7.40	-	845.33	4.94	10.66	-	2,424.66	9.91
Women	0.17	-	-	-	522.33	4.97	2.67	-	193.49	2.37	1.50	-	720.15	7.34
Men	2.02	-	0.22	0.00	1,036.53	0.00	4.73	-	651.84	2.57	9.16	-	1,704.51	2.57
<b>Technicians</b>	1,135.81	0.00	216.68	0.03	7,827.27	13.54	284.78	1.13	2,174.60	6.94	19.56	-	11,659.70	21.65
Women	658.53	0.00	75.36	0.00	3,257.40	13.22	45.64	1.13	477.82	6.94	1.99	-	4,516.73	21.29
Men	477.28	0.00	141.32	0.03	4,570.87	0.33	239.14	0.00	1,696.79	0.00	17.57	-	7,142.97	0.36
<b>Administrative staff</b>	20.69	-	25.55	0.00	589.99	3.99	105.01	0.35	220.36	0.00	12.72	0.00	974.31	4.34
Women	10.51	-	12.12	-	429.79	2.44	40.54	0.20	162.97	0.00	7.97	-	663.90	2.65
Men	10.18	-	13.43	0.00	160.20	1.55	65.46	0.14	57.39	0.00	4.75	0.00	310.41	1.69
<b>Manual workers and junior personnel</b>	296.51	1.72	676.09	67.27	4,656.11	31.50	1,149.69	86.61	1,771.06	9.75	120.27	13.26	8,669.73	210.12
Women	89.19	0.70	270.71	28.18	1,362.61	22.85	579.07	55.38	350.76	5.82	62.64	7.97	2,714.98	120.90
Men	207.32	1.02	405.38	39.09	3,293.50	8.65	570.62	31.23	1,420.30	3.94	57.63	5.29	5,954.75	89.21
<b>General total</b>	1,455.19	1.72	918.54	67.30	14,730.43	54.01	1,548.54	88.09	5,167.07	21.64	166.63	13.26	23,986.40	246.01

**Number of employees by region and gender**

		2018	2017
Africa	Men	146	150
	Women	24	26
	Total	170	176
Asia	Men	518	770
	Women	241	281
	Total	759	1,051
Europe	Men	12,312	12,325
	Women	6,643	6,291
	Total	18,955	18,616
Latin America	Men	2,222	2,164
	Women	1,828	1,658
	Total	4,050	3,822
North America	Men	868	861
	Women	485	556
	Total	1,353	1,417
Oceania	Men	-	2
	Women	1	1
	Total	1	3
<b>Total employees</b>	Men	16,066	16,272
	Women	9,222	8,813
<b>Total</b>		<b>25,288</b>	<b>25,085</b>

The number of total employees has risen due to the increase of staff in Europe and Latin America.

**102-41 Collective bargaining agreements**

The countries in which Repsol has employees under a collective bargaining agreement are Spain, Brazil, Norway, Peru and Portugal. About 85% of the employees in these countries are covered by such an agreement. The details by country are as follows:

- In **Brazil**, more than 95% of the regional workforce is covered by a collective bargaining agreement, which represents 100% of the local workforce of Repsol Sinopec Brasil.
- In **Spain**, 100% of the regional workforce is under a collective bargaining agreement, although a certain percentage is excluded from the agreement in different matters that are governed by the individual contract for such groups.
- In **Norway**, more than 15% of the regional workforce is under a collective bargaining agreement that covers workers on offshore platforms.
- In **Peru**, 10% of the regional workforce is covered by a collective bargaining agreement, reflecting 45% of the workforce of the La Pampilla Refinery.
- In **Portugal**, 99% of the regional workforce is covered by a collective bargaining agreement.

**Governance****102-23 Chair of the highest governing body**

Since 2014, Repsol has separated the positions of Chairman of the Board of Directors and Chief Executive, with Antonio Brufau Niubó holding the non-executive Chairmanship of the Board of Directors and Josu Jon Imaz the position of Chief Executive Officer and chairing, therefore, the Executive Committee.

On October 30, 2018, the Board of Directors resolved, at the proposal of the Appointments Committee, to propose to the next Shareholder Annual Meeting the re-election of the Chairman of the Board of Directors, Antonio Brufau Niubó, and of the Managing Director, Josu Jon Imaz San Miguel, for the statutory term of four years, so that both may continue to perform the duties with which they have been entrusted to date and which they have been carrying out in an outstanding manner: Mr. Imaz, focused on executive tasks and Mr. Brufau on oversight and institutional representation of the Company.

### 102-37 Stakeholder involvement in remuneration

The Annual Report on the Remuneration of Repsol Directors is submitted to an advisory vote of shareholders. In the General Meeting of May 11, 2018, the report received wide support, as it was approved by a majority of the 94.5% 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, in recent years the Company has published an additional voluntary report on this topic that contains more detailed and complete information on directors' remuneration. For 2018, the Company decided to avail itself of the option set out in Circular 2/2018 of the Spanish National Securities Market Commission and prepare a single Annual Remuneration Report in an unrestricted format, along with a statistical appendix, so that its shareholders and stakeholders could have access to all information on directors' remuneration.

Also, the General Shareholders' Meeting of Saturday, May 19, 2017 approved, with 95.9% of votes in favor, the 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 long-term variable remuneration and the policy on holding of shares.

### 102-38 and 102-39 Ratios of annual total compensation and percentage increase in annual total compensation

Repsol analyzes wage markets in the countries and business sectors in which we operate 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 2018 continued to be characterized by wage restraint, albeit to a lesser extent than 2017, and this was generally reflected in an increase in both the average remuneration of the workforce and that of the highest-paid individual.

The only exceptions were in some countries in North America and Southeast Asia due to divestments in non-core assets and workforce restructuring programs that have led to a reduction in highly qualified personnel, resulting in a decrease in the average remuneration of the workforce.

In two of the countries reported there has been a larger decrease in remuneration due to the fact that the highest-paid individual in 2017 is either no longer part of the company in 2018 or is no longer the highest paid person.

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	1.99	(2.08)
Brazil	3.04	0.06
Canada	3.65	(4.37)
Ecuador	11.09	(0.26)
Spain <sup>(3)</sup>	14.41	3.21
United States	3.00	0.02
Indonesia	4.21	(0.65)
Malaysia	3.11	(4.15)
Peru	13.23	(3.14)
Portugal	4.98	20.46
Repsol S.A. <sup>(3)</sup>	38.70	19.02

(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.

(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) Data on the Senior Management of the Group at world level are not included in Spain and are reported in the disclosures of the company Repsol, S.A.



## Part II: Material aspects

### Economic dimension

#### Economic Performance

##### 201-1 Direct value generated and distributed and 201-4 Financial assistance received from government

Item	2018	2017
<b>Direct economic value generated:</b>	<b>51,186</b>	<b>42,613</b>
Sales and other operating income	50,946	42,378
Finance income	177	194
Gains on disposal of fixed assets	62	41
<b>Economic value distributed:</b>	<b>47,623</b>	<b>39,422</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)	36,902	28,781
Salaries and employee benefits (except training)	1,859	1,880
Payments to capital providers (dividends to shareholders and interest payments to interest providers)	768	864
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.	8,094	7,897
Investments in communities (this value is calculated by the area RC)	43	23
<b>Retained economic value</b>	<b>3,562</b>	<b>3,168</b>
Economic and granted by government entities (grants)	20	23

### Market presence

##### 202-1 Ratios of standard entry level wage by gender compared to local minimum wage

Country <sup>(1)</sup>	Country minimum wage (local currency/month)	Repsol minimum wage <sup>(2)</sup> (local currency/month)	Repsol/national minimum wage
Bolivia	2,060.00	12,567.52	6.10
Brazil	954.00	5,000.00	5.24
Canada	2,119.73	3,510.25	1.66
Ecuador	386.00	878.17	2.28
US	735.90	1,124.07	1.53
Spain	1,256.67	3,125.00	2.49
Indonesia	3,648,035.00	11,620,829.00	3.19
Malaysia	1,050.00	3,985.50	3.80
Peru	930.00	930.00	1.00
Portugal	580.00	590.00	1.02

(1) The data reported include the most representative countries in terms in terms of workforce size.

(2) The Repsol minimum salary reflected in the table includes only base wages and fixed allowances, excluding other remuneration such as variable bonuses or incentives or remunerations in kind.

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 fixed minimum wage is above the local minimum wage in all countries except Peru. Considering Repsol's total annual remuneration, Peru also exceeds the country's minimum wage.

## 202-2 Proportion of senior management hired from local community

Country	% Executive personnel, Managers and Technical Managers coming from the local community in 2018	Country	% Executive personnel, Managers and Technical Managers from the local community in 2018
Argelia	8.11 %	Indonesia	65.22 %
Bolivia	88.89 %	Libya	28.57 %
Brazil	50.00 %	Malaysia	75.32 %
Canada	58.39 %	Mexico	50.00 %
Colombia	75.00 %	Norway	67.80 %
Ecuador	90.48 %	Peru	79.46 %
USA	23.30 %	Portugal	90.77 %
Spain	88.39 %	Russia	53.85 %
		Venezuela	87.10 %
		Vietnam	48.15 %

Includes executives and technical managers excluded from the collective bargaining agreement in different matters that are governed by the individual contract for such groups. (except in Brazil, in which the filter is not applied) 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.

## Indirect economic impacts

### 203-1 Investments in infrastructure and services supported and 203-2 Significant indirect economic impacts

#### Figures of social investment

In 2018, the social investment of the Repsol Group, including its two foundations, amounted to €43.3 million, of which €21.26 million (49%) consisted of voluntary contributions and €22.04 million (51%) were made under a legal or contractual obligation.

#### Voluntary social investment

This includes the social programs carried out on a voluntary basis, or which arise from voluntary agreements with communities.

#### Voluntary social investment (million euros)<sup>(\*)</sup>

	2018	2017
Repsol	11.57	14.86
Repsol Foundations	9.69	8.62
<b>Total</b>	<b>21.26</b>	<b>23.48</b>

\* Does not include contributions to associations.

Virtually all the funds of the Repsol Foundation come from Repsol, S.A. and its subsidiaries. These funds are used to fund projects (with no compensation for the Repsol Foundation) undertaken by diverse entities (universities, foundations, associations, not-for-profit entities and so on). In 2018, the contribution amounted to €6,965 thousand.

#### Voluntary social investment by type of contribution (million euros)

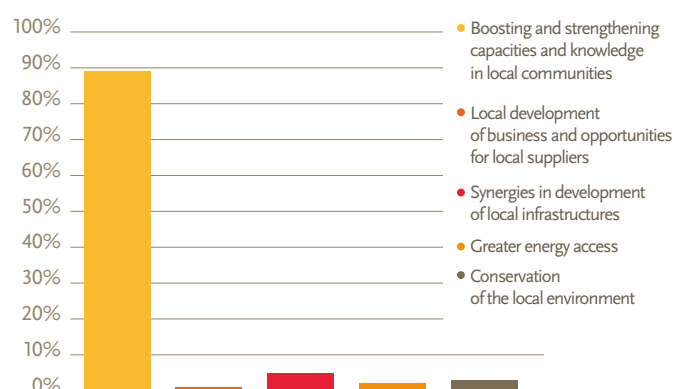
	2018	2017
Contribution in cash	17.45	22.21
Contributions in time	0.52	0.42
Contributions in kind	2.65	0.14
Management costs	0.64	0.71
<b>Total</b>	<b>21.26</b>	<b>23.48</b>

#### Voluntary social investment by type of project (million euros)

	2018	2017
Increase and strengthen skills and knowledge within local communities.	18.44	18.44
Local development of business and opportunities for local suppliers	0.34	3.25
Development synergies of local infrastructures	0.97	0.58
Greater energy access	0.45	0.05
Preservation of local environment	0.59	0.55
Other <sup>(*)</sup>	0.47	0.61
<b>Total</b>	<b>21.26</b>	<b>23.48<sup>1</sup></b>

\* Management costs without specific allocation to projects €0.47 million.

#### Voluntary social investment by type of project [%]



<b>Voluntary social investment, by country (million euros)</b>		
	<b>2018</b>	<b>2017</b>
Argelia	0.00	0.12
Bolivia	1.46	1.81
Brazil	0.63	0.71
Canada	0.86	0.93
Colombia	0.14	1.14
Ecuador	1.03	1.12
Spain	10.82	9.22
United States	0.12	0.17
Greece	0.06	-
Guyana	0.10	-
Indonesia	0.10	0.01
Libya	2.67	3.87
Malaysia	0.37	0.41
Norway	0.38	0.25
Papua New Guinea	0.08	0.18
Peru	2.09	1.80
Portugal	0.22	0.51
Russia	0.02	1.07
Venezuela	0.03	0.05
Vietnam	0.07	0.11
<b>Total</b>	<b>21.26</b>	<b>23.48</b>

### 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 we deliver the due sum.

Mandatory investment in 2018 amounted to €22.04 million and it was made in:

<b>Mandatory social investment by country (million euros)</b>		
	<b>2018</b>	<b>2017</b>
Brazil	9.24	6.09
Canada	0.00 <sup>(1)</sup>	0.80
Colombia	0.00	0.03
Ecuador	1.07	0.36
Indonesia	0.00	0.14
Russia	0.95	-
United States	10.77	8.39
Venezuela	0.00	0.002
<b>Total</b>	<b>22.04</b>	<b>15.81</b>

(1) Mandatory social investment in Canada in recent years was pursuant to contractual obligations from the acquisition of Talisman, which ended in 2017.

Mandatory social investment is made pursuant to contractual obligations and is usually linked to the volume of activity carried out. In 2018 it increased by 39% over the previous year due to the increase in activity in Brazil, the USA, Ecuador.

## Environmental dimension

### Energy efficiency and climate change

#### G4-OG2 and G4-OG3 Renewable energy generation

Repsol Energy Ventures has a shareholding in the American company Principle Power Inc. This company owns a patent for semi-submersible floating structures for offshore wind generation and its business plan consists of demonstrating the validity of the technology with the prototype that was operational from December 2011 to July 2016 in Portuguese waters, having produced some 17,000 MWh. In 2018 a contract was signed to install three 8 MW turbines with PPI technology in the KOWL (Kincardine) Project in Scotland.

The Windfloat Atlantic project (three wind turbines with a total power of 25 MW) on the Portuguese coast is also in the construction phase. The project has a remuneration scheme approved by the Portuguese Government, and with public funding from both the European Union, through the NER 300 program, and from the Portuguese Environmental Agency (APA). In addition, the project has obtained a €60 million loan from the European Investment Bank under the InnovFin Program. The contributions made by Repsol this project in 2018 amounted to €1.5 million, and the project is scheduled to commence operation toward the end of 2019.

Repsol Nuevas Energías is carrying out a 264 MWp solar photovoltaic project in Extremadura through the company Valdesolar Hive S.L, in which it owns 100% of the share capital. Work is scheduled to commence towards the end of 2019 and the commissioning is expected towards the end of 2020.

#### 302-5 Reductions in energy requirements of products and services

Repsol invests in sustainable mobility through electric mobility projects, promotion of automotive gas and energy diversification. It is also firmly committed to biofuels and efficient waste management.

## 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 1,494 charging points (at October 31, 2018), of which 30 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 such vehicles. The first, second, third and fourth activity have been granted (2012 – 2017; 2013 – 2018; 2014 – 2019; 2015-2020) The reduction in CO<sub>2</sub> emissions has been verified with an entity accredited by the Ministry of the Environment, and to date Repsol has already verified a reduction in emissions of 1,123.94 tCO<sub>2</sub>.

**Silence** is a company owned by Repsol that designs, produces and markets electric motorcycles. In 2018, it sold more than 2,400 motorcycles.

One of the competitive advantages of Silence 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. The investment was made as part of the INNVIERTE program, with the CDTI.

Corporate **car-sharing** programme with electric and autogas vehicles managed by **IBIL**, which currently has more than 600 registered employees. In addition, Repsol launched in 2018 a **car-sharing** service in Madrid with 500 plug-in hybrid vehicles ("zero emissions" label of Spain's Directorate General of Traffic) under a 50% joint venture with KIA.

**AMPLE** project : Power delivery service for electric vehicles through autonomous battery exchange based on a subscription model for electric vehicles.

It provides a solution to the problem of charging the electric vehicle that supplements Repsol's marketing business, as it is the electric equivalent of a service station for electric vehicles.

## 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. It currently has more than 16,000 active parking users and operates in more than 70 parking facilities in Madrid and Barcelona. In 2018, with the help of a local partner, commenced operations in Santiago de Chile. 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.

## AutoGas

**AutoGas** is the most widely used alternative fuel for vehicles because it enables fuel savings of up to 40%. We currently have 732 AutoGas supply points and we are 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.

**BEGAS** Project: 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. In 2018, a pilot test was carried out 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.

## Energy diversification

**WATTIO** Project: offers a comprehensive "Smart Home" solution that covers the maximum number of needs in the home (electricity, comfort, heat, security and so on) via a unique system (also compatible with others) that enables user to manage energy more efficiently at home. Investment made as part of the INNVIERTE program, jointly with the CDTI.

### 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, we are operating according to ISCC schemes in our plants and industrial facilities<sup>1</sup>.

The percentage of biofuels incorporated into gasoline and diesel fuel complies with the limits mandated by law.

## Non-GHG emissions

### 305-7: Nitrogen oxides (NOX), sulphur oxides (SOX) and other significant air emissions.

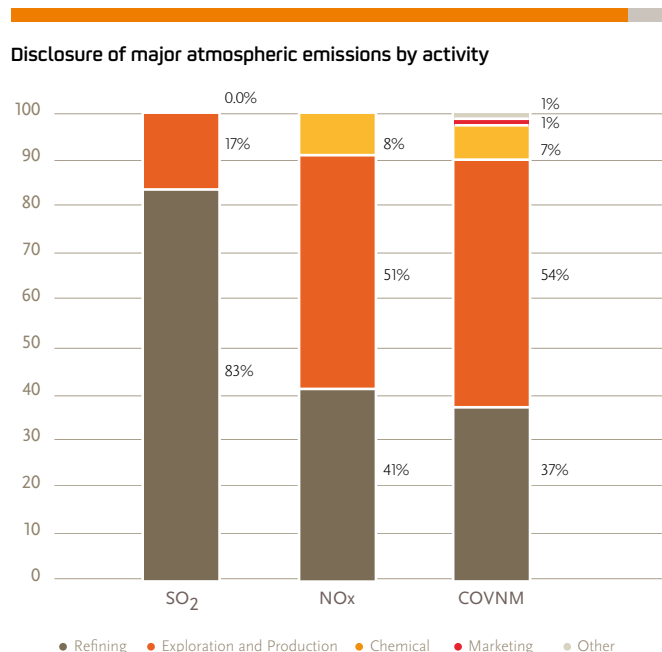
Emissions of SO <sub>2</sub> , NO <sub>x</sub> and COVNM <sub>s</sub> (t)	2017
SO <sub>2</sub>	29,923.64
NO <sub>x</sub>	20,603.19
COVNM	35,889.99

SO<sub>2</sub> and NO<sub>x</sub> emissions in the refining and chemical businesses are measured with continuous concentration and smoke flow analyzers. When there is no continuous analyzer, internal environmental parameter guideline are applied, where the methodology for calculating these emissions is established.

In the rest of the businesses, the environmental parameters guidelines are applied when the applicable regulations do not define a direct calculation or measurement methodology.

In the case of NMVOC emissions, it is estimated using the methodology established in the environmental parameter guidelines in cases where there is no applicable local regulation.

### Disclosure of major atmospheric emissions by activity



SO<sub>2</sub> emissions increased by 8% due to the both the increase of the activity in the Petronor refinery after shut-down in 2017, and the increase of the activity in the Cartagena refinery. To a lesser extent, due to the conduction of well tests in some Upstream assets.

### 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	2018	2017
Tons of SO <sub>2</sub> / thousands tons of processed crude oil	0.528	0.477
Tons of NO <sub>x</sub> / thousands tons of processed crude oil	0.179	0.252
Tons of COVNM / thousands tons of processed crude oil	0.282	0.358

Exploration and production <sup>(1)</sup>	2018	2017
Tons SO <sub>2</sub> / thousands of boe produced	0.030	0.030
Tons NO <sub>2</sub> / thousands of boe produced	0.062	0.068
Tons COVNM / thousands of boe produced	0.115	0.118

(1) The intensive figures have been calculated using gross production of our operated assets, as reported atmospheric emissions include 100% of emissions for such assets, irrespective of Repsol's percentage of them.

1. International Sustainability & Carbon Certification.

The intensity of NOx emissions decreased by 29% in the Refining business due to the replacement of the burners with low NOx-emission burners.

**G4-OG8 Benzene, lead and sulfur content in fuels**

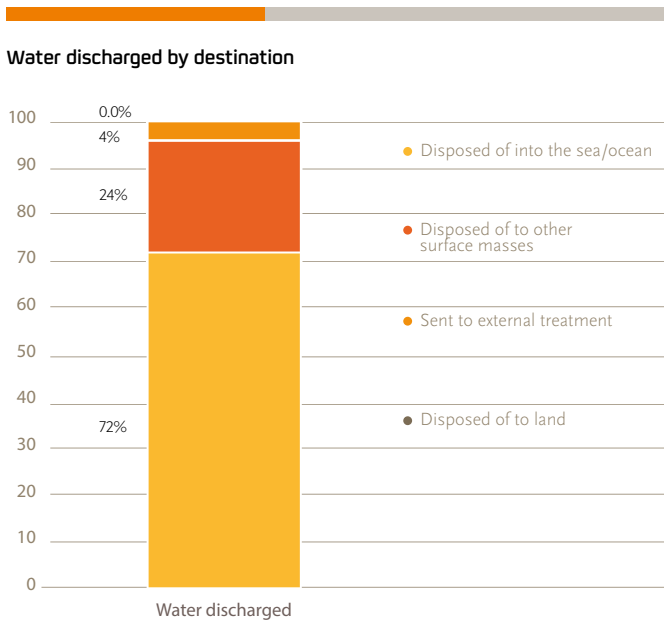
All the fuel the Company supplies to the market meets current quality specifications. In the refineries in Spain, it is applied the EN228 standard for gasoline and EN590 for gasoil. Under these specifications, gasoline and gasoil must be free of sulfur compounds (maximum 10 mg/kg) and have a low content 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 the establishment of new diesel and gas production units of 0.005% sulfur content. The new facilities are capable of desulfurizing diesel and gasoline produced in the refinery with a maximum of 50 ppm sulfur and limit the content of other compounds, such as the aromatics, olefin and benzene.

**Effluents and waste**

**306-1 Water discharge by quality and destination**

A total of 41,256 tons of water were discharged. Water discharged by destination is shown below:



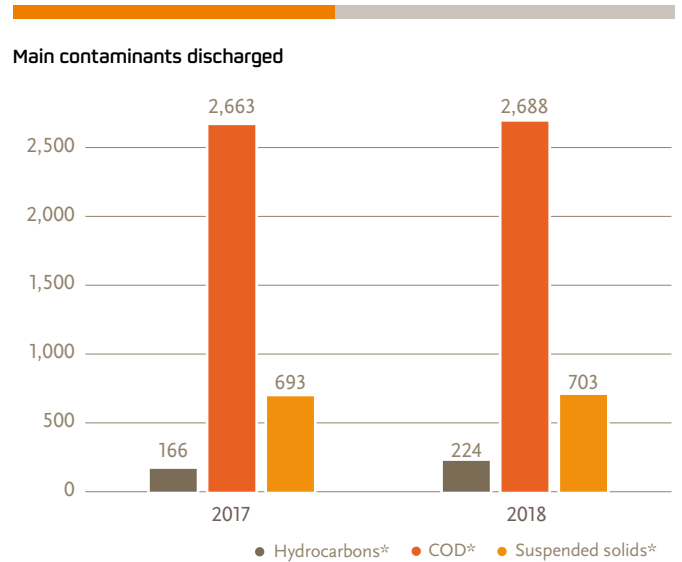
**Treatment of discharged water**

The fluid effluents from our facilities 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 41% of water discharged undergoes advanced treatment processes, 25% undergoes secondary processes and the remaining 34% undergoes includes primary treatment, and discharges that are untreated. processes as the quality of the discharged water does not require more complex treatment. The increase in the percentage of water discharged subjected to primary treatment (in 2017, it accounted for 26%) was due to the increase in off-shore activities in Gabon, Malaysia and Aruba.

**Main contaminants discharged**

The main contaminants discharged at our facilities are: hydrocarbons, suspended solids, and organic matter likely to undergo oxidation, measured as chemical oxygen demand (COD).



\* these are discharges to the exterior, discounting amounts reported in Puertollano chemicals and asphalt, which are contaminant discharges in water treated in the wastewater treatment facility of the Puertollano refinery.

The Upstream business accounts for 76% of total hydrocarbons discharges. In 2018, hydrocarbons discharged in E&P increased by more than 50% due to a stoppage in the Malaysia asset.

### Hydrocarbons discharged in 2018, by activity

Activity	Tons	%
Exploration and production	170.9	76.3%
Refining	45.2	20.2%
Chemicals	4.2	1.9%
Marketing	3.3	1.5%
Other	0.4	0.2%
<b>Total</b>	<b>224</b>	<b>100%</b>

### G4-OG5 Volume and disposal of formation or produced water

The following is the water produced and injected in our exploration and production assets:

Water	2018	2017
Produced (thousands of tons)	62,129	60,255
Injected (thousands of tons)	54,431	55,231

### 306-2 Waste by type and disposal method

Disclosure of hazardous and non-hazardous waste per activity in 2018

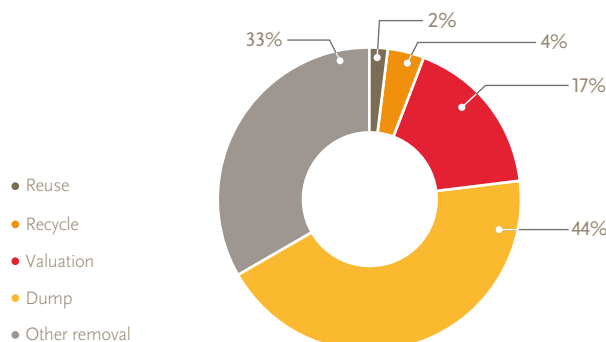
Activity	Hazardous waste <sup>(2)</sup> (metric tons)	Non-hazardous waste (metric tons)
Exploration and Production <sup>(1)</sup>	24,681	73,333
Refining	25,956	45,810
Chemicals	15,090	21,526
Marketing	4,358	5,032
Lubricants and Specialist Products	131	688
LPG	29	554
Other	97	496
<b>Total</b>	<b>70,342.6</b>	<b>147,439.5</b>

(1) Of the non-hazardous waste in E&P, somewhat more than 90% relate to the remediation of contaminated lands in Canada, a one-off activity not linked to ordinary operations.

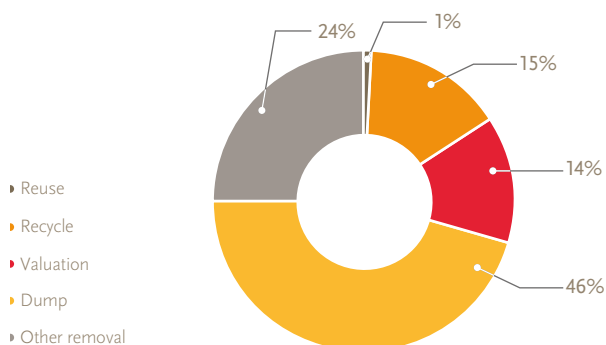
(2) Hazardous waste increased by 75% in 2018 on the previous year, mainly due to the Refining (sludge from water separators in the Tarragona and La Pampilla refineries) and E&P businesses, mainly sludge from cleaning tank bottoms of assets in Canada.

The charts below report the actions carried out in 2018 for each category:

### Hazardous waste management



### Non-hazardous waste management



### G4-OG7 Total drilling waste (drilling mud and cuttings), disposal and placement approaches

The above data excludes the amount of waste generated in drilling activities, the information for which is given below:

	2018	2017
Water-based cuttings and fluids	42,605	86,265
Non water-based cuttings and fluids	43,650	60,627

Management of waste from drilling operations (cuttings and fluids) is regulated by the company's internal rules and regulations called Environmental Performance Practices (EPP). These guidelines establish a set of standards that must be followed in Upstream activities and that are applicable to all geographical areas in which the company operates and regardless each country's specific legislation.

## Biodiversity

### 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

Repsol has an internal information research and screening tool to assess potential overlapping of operating blocks with protected areas. The input data comes from the Proteus consortium with UNEP-WCMC<sup>1</sup> where the World Database on Protected Areas (WDPA) is obtained, which is integrated into the internal tool. This information is taken into account as a criterion in decision-making throughout the life cycle of projects.

In addition, Repsol applies the IPIECA and 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.

The following assets are located in areas adjacent to protected areas and/or areas of major value to biodiversity:

Bolivia	Adjacent to an IUCN area Cat. Not assigned or published
Ecuador	34% of Block 16 and 100% of the Tivacuno block are in IUCN Cat. II.
Peru	20% of Block 57 is located in the protected area of Machiguenga communal reserve, classified as IUCN: VI

Although there is overlap in the areas under concession by the state (blocks), our operating facilities are not located in areas protected by the IUCN nor any international convention. Even so, due to the high biodiversity that exists in these three sites and as we have been reporting in recent years, we are implementing a biodiversity action plan in each of these assets to avoid, minimize and restore our impacts.

### 304-2 Significant impacts of activities, products and services on biodiversity

Applying the mitigation hierarchy of potential impacts on biodiversity is fundamental for Repsol. The company applies the IPIECA IOGP BES Management methodology. 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. 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. Further details at the following link:

<http://www.ipieca.org/resources/awareness-briefing/biodiversity-and-ecosystem-services-fundamentals-a-summary/>

In this regard, Repsol continues to work on putting this methodology into practice in its operated assets and projects, setting medium-term objectives and developing work plans to achieve them.

Repsol's way of putting this methodology into practice was presented this year at the international congress "SPE International Conference and Exhibition on Health, Safety, Security, Environment, and Social Responsibility" held in April 2018 in Abu Dhabi.

In addition, Repsol has developed a tool called "Repsol Biodiversity and Ecosystem Services Tool (BEST-R)" to facilitate the implementation of this methodology.

This tool can implement a systematic and consistent approach when assessing Biodiversity and Ecosystem Services in the company's operations worldwide, since it is applicable to:

- The entire life cycle of E&P activities (projects and assets)
- All countries
- All ecosystems (e.g., land/marine, rainforest, tundra, etc.).

Although the impacts are assessed for each project using the company methodology, in general, the nature of the impacts on biodiversity in our activities tends to be: disturbance of wildlife, removal of vegetation, loss and/or fragmentation of habitats; alteration of ecosystem quality and diversity and introduction of alien/invasive species.

### 304-3 Habitats protected or restored.

Restoration is the third step 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. One of the restoration projects being carried out in Block 57 (Peru), in the Machiguenga Communal Reserve, where the Company is monitoring the revegetation of the pipeline and the abandonment of the platforms. 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). This work allowed for the gathering of information on diverse species, many of them of great importance for the knowledge and management of biodiversity.

In January 2018 Repsol received public recognition from the Unified Management Committee of the Megantoni National Sanctuary and Machiguenga Communal Reserve (RCM) for its

1. United Nations Environment Program's World Conservation Monitoring Center.

2. The Global Oil and Gas Industry Association for Environmental and Social Issues.

3. The International Association of Oil & Gas Producers.



support in strengthening Participatory Management and its contribution to the Management of Protected Natural Areas.

**G4-EN14 IUCN Red List species and national conservation list species with habitats in areas affected by operations**

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. 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. Repsol has the book created with the Smithsonian Institute that provides a catalog of indicator species of the health of largest habitats of the planet with the aim of being more effective in the 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

Number of species in areas affected by our exploration and production operation <sup>(1)</sup>	
Critically endangered species	22
Endangered species	73
Vulnerable species	355
Endangered species	429

(1) The data reported include species of our Exploration and Production assets with activity in 2018

**G4-OG4 – Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored**

	Result (%)
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% because we assume that all assets we operate have potential biodiversity-related risks

**306-5 Water bodies affected by water discharges and/or run-offs**

In Repsol has internal requirements for Environmental Performance Practices (EPP) relating to the management of wastewater in Exploration and Production activities. 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 in accordance with their importance for both biodiversity and for local communities and adopts mitigation plans.

In addition, 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.

## Social Dimension

### Employment

#### 401-1: New employee hires and employee turnover<sup>(1)</sup>

##### Number and percentage of new employee hires

Region		<30		30-50		>50		2018		2017	
		N°	%	N°	%	N°	%	N°	%	N°	%
Africa	Women	1	100%	1	5%	-	-				
	Men	1	50%	1	1%	-	-				
	<b>Total</b>							<b>4</b>	<b>2%</b>		<b>2%</b>
Asia	Women	0		9	4%	-	-				
	Men	2	7%	6	1%	-	-				
	<b>Total</b>							<b>17</b>	<b>2%</b>	<b>43</b>	<b>4%</b>
Europe	Women	445	79%	640	13%	50	4%				
	Men	599	71%	586	8%	53	1%				
	<b>Total</b>							<b>2,373</b>	<b>13%</b>	<b>2,092</b>	<b>11%</b>
Latin America	Women	427	70%	316	28%	2	3%				
	Men	310	68%	218	16%	14	3%				
	<b>Total</b>							<b>1,287</b>	<b>32%</b>	<b>23</b>	<b>26%</b>
North America	Women	12	41%	26	8%	7	5%				
	Men	11	14%	66	11%	7	3%				
	<b>Total</b>							<b>129</b>	<b>10%</b>	<b>2</b>	<b>2%</b>
<b>Total</b>	Women	855	73%	992	15%	59	4%				
	Men	923	65%	877	9%	74	2%	<b>3,810</b>	<b>15%</b>	<b>3,157</b>	<b>13%</b>

(1) Calculated as the number of hires out of the total number of employees at December 31, 2018, excluding Viesgo.

The rate reflects the new hires with no previous working relationship with company compared to the origin population of the tranche analyzed.

39.5% of these new hires have permanent contracts and, of these, 70% are in Peru.

<b>Voluntary employee turnover</b>							
<b>Region</b>		<b>&lt;30</b>	<b>30-50</b>	<b>&gt;50</b>	<b>2018</b>	<b>2017</b>	
Africa	Women	100%	15%	-			
	Men	-	2%	-	4%	1%	
Asia	Women	50%	7%	24%			
	Men	36%	29%	13%	21%	6%	
Europe	Women	17%	3%	1%			
	Men	13%	2%	-	3%	1%	
Latin America	Women	40%	14%	5%			
	Men	29%	11%	5%	17%	17%	
North America	Women	21%	11%	3%			
	Men	12%	6%	2%	7%	6%	
<b>Total</b>	Women	29%	6%	2%			
	Men	19%	5%	1%	6%	4%	

The Latin America turnover rate is concentrated in the Marketing business and is aligned with the economic growth and labor market of the country.

<b>Total employee turnover</b>							
<b>Region</b>		<b>&lt;30</b>	<b>30-50</b>	<b>&gt;50</b>	<b>2018</b>	<b>2017</b>	
Africa	Women	100%	20%	-			
	Men	-	3%	-	5%	4%	
Asia	Women	50%	9%	29%			
	Men	36%	32%	40%	27%	9%	
Europe	Women	91%	24%	17%			
	Men	75%	13%	19%	23%	5%	
Latin America	Women	47%	17%	8%			
	Men	40%	17%	10%	23%	25%	
North America	Women	24%	20%	25%			
	Men	14%	13%	20%	17%	14%	
Oceania	Women	-	-	-			
	Men	-	100%	-	100%	700%	
<b>Total</b>	Women	67%	22%	18%			
	Men	59%	14%	19%	23%	9%	

This is calculated as the turnover of permanent employees out of the total number of employees at 12.31.2018.

## Number of dismissals

Region		<30		30-50		>50		General total
		Temporary contracts	Permanent contracts	Temporary contracts	Permanent contracts	Temporary contracts	Permanent contracts	
Asia	<b>Men</b>	-	-	-	5	-	7	12
	Administrative staff	-	-	-	1	-	1	2
	Technical managers	-	-	-	4	-	2	6
	Technicians	-	-	-	-	-	4	4
	<b>Women</b>	-	-	-	3	-	-	3
	Administrative staff	-	-	-	1	-	-	1
	Technicians	-	-	-	2	-	-	2
Europe	<b>Men</b>	8	-	9	25	1	223	266
	Administrative staff	-	-	-	-	-	1	1
	Technical managers	-	-	-	1	-	10	11
	Manual workers and junior personnel	8	-	9	18	1	51	87
	Technicians	-	-	-	6	-	161	167
	<b>Women</b>	4	-	3	31	-	29	67
	Administrative staff	-	-	-	-	-	7	7
	Manual workers and junior personnel	4	-	3	24	-	8	39
Technicians	-	-	-	7	-	14	21	
Latin America	<b>Men</b>	8	4	4	17	-	7	40
	Technical managers	-	-	-	1	-	-	1
	Manual workers and junior personnel	5	-	2	-	-	-	7
	Technicians	3	4	2	16	-	7	32
	<b>Women</b>	-	15	-	14	-	2	31
	Technicians	-	15	-	14	-	2	31
North America	<b>Men</b>	-	-	-	39	-	13	52
	Administrative staff	-	-	-	2	-	-	2
	Executives	-	-	-	3	-	1	4
	Technical managers	-	-	-	10	-	9	19
	Manual workers and junior personnel	-	-	-	3	-	-	3
	Technicians	-	-	-	21	-	3	24
	<b>Women</b>	-	1	1	26	-	8	36
	Administrative staff	-	-	1	4	-	4	9
	Executives	-	-	-	-	-	1	1
	Technical managers	-	-	-	3	-	-	3
	Manual workers and junior personnel	-	-	-	1	-	-	1
Technicians	-	1	-	18	-	3	22	
<b>General total</b>	<b>20</b>	<b>20</b>	<b>17</b>	<b>160</b>	<b>1</b>	<b>289</b>	<b>507</b>	

#### 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

##### Social benefits by region (Thousands of euros)

Region	Life insurance	Medical insurance	Pension fund	Food allowances	Subsidized loans	Study assistance	Social aids
Africa	50.6	260.6	0.0	150.0	0.0	155.7	(1.3)
Asia	176.6	1,470.8	5,349.0	63.2	0.0	1,034.1	0
Europe	3,726.8	13,368.2	33,396.9	10,758.1	159.0	2,375.6	294.4
Latin America	808.1	6,100.7	1,404.3	2,706.1	0.0	(46.8)	75.3
North America	539.5	6,855.6	14,786.2	109.5	0.0	(0.6)	92.4
<b>Total</b>	<b>5,301.5</b>	<b>28,055.9</b>	<b>54,936.5</b>	<b>13,786.9</b>	<b>159.0</b>	<b>3,519.1</b>	<b>460.8</b>

The information shows the benefits for all employees (full-time, part-time, temporary and permanent). Collective bargaining agreements reflect differences between benefits provided to full-time and part-time employees.

#### 401-3 Parental leave

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.

Return to work		2018	2017
Total employees entitled to leave	Women	199	230
	Men	376	424
	<b>Total</b>	<b>575</b>	<b>654</b>
Total employees that took maternity or paternity leave	Women	192	227
	Men	340	400
	<b>Total</b>	<b>532</b>	<b>627</b>
Total employees that returned to work after leave	Women	186	214
	Men	320	397
	<b>Total</b>	<b>506</b>	<b>611</b>
Return to work rate <sup>(1)</sup>	Women	97%	94%
	Men	94%	99%
	<b>Total</b>	<b>95%</b>	<b>97%</b>

Retention		2018	2017
Total number of employees that were still employed 12 months after their return to work <sup>(1)</sup>	Women	210	223
	Men	386	411
	<b>Total</b>	<b>596</b>	<b>634</b>
Retention rate <sup>(2)</sup>	Women	98%	96%
	Men	97%	99%
	<b>Total</b>	<b>98%</b>	<b>98%</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.

In 2018, a total of 1,247,096 hours of absenteeism were recorded. Absentee hours due to occupational accident or illness are not counted as reported absentee hours at the criterion of the company.

#### Occupational health and safety

##### 403-1: Workers representation in formal joint management-worker health and safety committees

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.

These committees' general areas of action 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.

Country	Corporate
<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 SL. 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 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

### 403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities

Rate of employee occupational illness			
Region		2018 total	2017 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	0.2
	Men	0	0
	Total	0	0.2
North America	Women	0	0
	Men	0	0
	Total	0	0
Oceania	Women	0	0
	Men	0	0
	Total	0	0

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.

### 403-3 Workers with high incidence or high risk 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). We provide 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, and assessment of them and corrective/mitigating measures with their corresponding periodic controls. Ergonomic and psycho-sociological risks are also assessed as 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 2018:

<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.

In addition to these general actions, the Company undertakes various activities, by country:

Country	Corporate
<b>Algeria</b>	New procedure in Occupational Health, aligning the country's legislation with Repsol's internal procedures. Audits of health centres in the area of the Reggane facility. Inspections of catering service. Communication campaigns in cholera and stroke. Influenza vaccination. Nutrition sessions. First aid training.
<b>Brazil</b>	Implementation of stress anamnesis in health surveillance. Accompaniment of people on sick leave. Ergonomic adaptation of workstations. Wellness activities (shiatsu, manual therapies). Work gymnastics activities. Nutritional accompaniment.
<b>Colombia</b>	Survey assessment of psycho-social risks. Prevention of musculoskeletal and cardiovascular injuries. Monitoring of ergonomic comfort factors. Prevention of vector-borne diseases, sexually transmitted diseases, diabetes, breast, prostate and uterine cancer. Informational talks on health topics (back care, hand care, stress management, ergonomics). Prevention of respiratory and gastrointestinal diseases focused on the worker and family. Active breaks. Nutritional monitoring.
<b>Ecuador</b>	Obesity prevention plan. Cardio-metabolic Plan, Digestive Diseases Plan. Fatty liver intervention. Program for the prevention of the use and consumption of alcohol, tobacco and other drugs. First aid Health Education Program: Alcohol and drugs conference, nutrition conference, psychosocial risk intervention, laughter therapy, sports injuries, health days, cardiometabolic conference, work-related stress conference, workplace ergonomics, active breaks, breast cancer prevention, skin care, work-related cancer, psychosocial risk-workplace bullying.
<b>Holland</b>	Project of assessment of health-related risks. On-the-job posture training
<b>Indonesia</b>	Air quality monitoring at the Jakarta office. First aid training. Training in ergonomics and pandemics.
<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. Personalized monitoring by a nutritionist. Repsol Healthy Heart Plan First aid training. Prevention of colon, prostate, HPV and breast cancer. Alcohol and drug use prevention for drivers of transport companies. Immunization and prevention of communicable and metaxenic diseases for our own personnel and third parties. Prevention of musculoskeletal disorders. Support in the incorporation of personnel with different abilities. Health contents in internal newsletters.
<b>Portugal</b>	Adaptation of workstations. Reinforcement of the lines of action of the Repsol heart-healthy plan: diet, physical activity, high blood pressure, stress management, type II diabetes, smoking habit. Personalized follow-up of workers with risk factors such as obesity, hypercholesterolemia, etc. Alcohol and drug prevention. Influenza vaccination. Assessment of psycho-social risks.
<b>Russia</b>	First aid training, training sessions on fatigue prevention, manual handling, importance of hygiene, flu prevention. Information channel on health issues according to time of year. Management of vaccinations Emergency plans. Health week at the Moscow office.
<b>Singapore</b>	Purchase of ergonomic chairs and other ergonomic comfort items.
<b>Venezuela</b>	Day of ophthalmological assessment in Company. Prevention talk on visual fatigue. Talks on different topics related to health promotion (postural hygiene, malaria, measles, prevention of cervicalgia and dorsalgia, diseases associated with the use of cell phones, nutrition with antioxidants, effect of exercise on cardiovascular risk, prevention of diabetes). Mindfulness and stress management workshop. Prevention of colon, breast and prostate cancer. Vaccinations. Alcohol and drug prevention.

#### 403-4 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.

Agreements have been reached with trade unions on health and safety-related 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 9th 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.
- **Portugal:** 2016-2018 agreement between Repsol Polímeros, SA and Federação de Sindicatos da Indústria, Energia e Transportes - COFESINT e outra – Alteração salarial e outras.

## Training and education

### 404-1 Average hours of training per year per employee

#### Average training hours year by person and by gender

Category	Training hours/Year	Total 2018	Total 2017
<b>Executives</b>	Training hours/Year	10,071	9,232
	Person	39	36
	Women	51	49
<b>Technical managers</b>	Training hours/Year	112,641	84,498
	Person	47	37
	Women	54	42
<b>Technicians</b>	Training hours/Year	561,832	528,213
	Person	48	46
	Women	46	44
<b>Administrative staff</b>	Training hours/Year	24,319	20,367
	Person	27	20
	Women	23	19
<b>Manual workers junior personnel</b>	Training hours/Year	358,518	314,558
	Person	42	36
	Women	19	16
<b>Total</b>	Training hours/Year	1,067,380	956,868
	Person	45	40
	Women	36	33
	Men	50	44

### 404-2 Programs for upgrading employee skills and transition assistance programs

Repsol's learning is aimed at developing the professional abilities necessary to effectively perform in carrying out Repsol's strategy.

The programs carried out in 2018 are based on initiatives aimed at acquiring the knowledge, developing the skills and fostering the commitment of the people in the organization to the company's plans, culture and values throughout their professional career.



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. This year all area leaders have been trained in the company's Leadership model.</p> <p>Several programs have been carried out aimed at the professionalization of the P&amp;O function; such as training for Business Partners, programs for the Compensation area and others aimed at learning the new Workday tool.</p> <p>Training for Executives: External training programs selected for each specific type of position, and two editions for internal strategic program for all senior managers to promote the achievement a common vision, sense of team and identification with the strategic plan (84 executive personnel trained).</p> <p>Programs of generic skills and languages. Programs available at all times for all Repsol employees.</p>
<b>Health, Safety and Environment</b>	<p>During 2018, training continued in the new Synergi incident management tool in each business. We have also worked with the group of industrial technicians on the deployment of incident investigation methodologies focused on identifying root causes.</p> <p>We updated the design of online training for improved incident investigation based on case studies.</p>
<b>Master Programs</b>	<p><b>REGE Master:</b> There were 34 students in 2018, with a program of 820 hours, to which has been added a Chemistry and Integrated Margin Module within the Logistics Module of the E&amp;P area, in addition to contents related to the Internal Digital Transformation</p> <p><b>E&amp;P Master:</b> In 2018 a new design of the Master was made with comprehensive training for in-house teaching staff, and a new project for the end of the Master. It started in September and has a duration of 11 months. There are a total of 32 students, of which 24 are employees of Repsol, six guests of the NOC's and two of the Carolina Foundation. A total of 13 nationalities are represented.</p> <p><b>Industrial Master:</b> Training for recruitment of new university degreeholders. A total of 37 students from five different countries completed this program during the year.</p>
<b>Refining and Chemical</b>	<p>We continued the program for the dissemination of Repsol values, targeted at operators of chemical plants and of dual occupational training. The training program with process simulators has established itself as an outstanding tool for improving knowledge of the operation of plants and practicing situations of emergency.</p> <p>In addition to the regular and mandatory training in Safety, training has been deployed in industrial facilities of the five defined Safety behaviours (In Plant programme) and aimed at the production and maintenance staff of industrial facilities (more than 3,000 people)</p>
<b>Upstream</b>	<p>The E&amp;P Academy provides applied learning content that integrates with the E&amp;P business strategy. It is a global vision of learning that includes technical, leadership and language learning opportunities, and takes account of competency development components to provide quality learning.</p>
<b>Marketing and LPG</b>	<p>Education and Training Program for the <b>sale of Gas and Electricity</b> on service station, Direct Sales and LPG channels aimed at 27,000 people</p> <p>Three editions of the University Expert Program in Commercial Management have been given.</p> <p>Training program in the management of merchandising and sales in the franchise Stop&amp;Go.</p> <p>Program for leadership in service quality excellence in service stations</p> <p>In LPG, in safety, training programs in emergencies and first aid in all factories and central office staff. Road safety training for LPG, Direct Sales and service stations.</p>
<b>Training for Occupational Integration and Employability Programs</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. 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 reviews

### 404-3 Percentage of employees receiving regular performance and career development reviews

#### Performance and career development reviews

	2018 <sup>(1)</sup>			2017		
	Women	Men	Total	Women	Men	Total
<b>Executives</b>	50	195	245	45	217	262
<b>Technical managers</b>	712	1,648	2,360	690	1,650	2,340
<b>Technicians</b>	2,742	5,222	7,964	2,950	5,656	8,606
<b>Clerical staff</b>	575	227	802	613	301	914
<b>Manual workers junior personnel</b>	296	2,428	2,724	374	2,719	3,093
<b>Total</b>	<b>4,375</b>	<b>9,720</b>	<b>14,095</b>	<b>4,672</b>	<b>10,543</b>	<b>15,215</b>

(1) Information regarding 2018 is the best data available because a part of the assessment process had not been completed at the date of disclosure of this report.

## Diversity and equal opportunity

### 405-1 Diversity of governance bodies and employees

#### Number of employees by job category, age and gender

Category		2018			2017		
		<30	30-50	>50	<30	30-50	>50
<b>Executives</b>	Women	-	28	24	-	25	21
	Men	-	81	139	-	90	126
	Total	-	109	163	-	115	147
	% W	-	27	15	-	22	14
<b>Technical managers</b>	Women	1	562	195	1	499	181
	Men	8	1,061	720	2	1,012	662
	Total	9	1,623	915	3	1,511	843
	% W	11	35	21	33	33	21
<b>Technicians</b>	Women	788	3,409	494	758	3,254	464
	Men	702	4,902	1,811	626	4,840	2,034
	Total	1,490	8,311	2,305	1,384	8,094	2,498
	% W	53	41	21	55	40	19
<b>Clerical staff</b>	Women	29	520	200	30	509	208
	Men	26	196	95	23	264	91
	Total	55	716	295	53	773	299
	% W	53	73	68	57	66	70
<b>Manual workers junior personnel</b>	Women	410	2,099	463	369	2,111	383
	Men	690	3,969	1,666	679	4,063	1,760
	Total	1,100	6,068	2,129	1,048	6,174	2,143
	% W	37	35	22	35	34	18
<b>Total</b>	Women		9,222			8,813	
	Men		16,066			16,272	
	Total		25,288			25,085	
	% W		36			35	

The percentage of women in this section includes all employees, including those that have working hours of less than 80%..

## 405-2 Ratio of basic salary and remuneration of women to men

### Ratio of men's base salary to women's base salary <sup>(1) (2) (3)</sup>

Country	Executive personnel <sup>(4)</sup>	Technical manager	Technicians	Clerical staff	Manual workers and junior personnel
Bolivia	N.A.	1,01	1.00	N.A.	N.A.
Brazil	N.A.	0.84	1.02	N.A.	N.A.
Canada	0.98	0.93	0.88	N.A.	N.A.
Ecuador	N.A.	N.S.	0.74	N.A.	N.A.
Spain	0.89	0.93	0.93	N.A.	N.A.
United States	N.S.	0.90	0.79	N.A.	N.A.
Indonesia	N.A.	N.S.	0.80	N.A.	N.A.
Malaysia	N.A.	0.83	0.78	N.A.	N.A.
Peru	N.S.	0.82	0.89	N.A.	N.A.
Portugal	N.A.	0.99	0.93	N.A.	N.A.

(1) The ratios reported are for the average basic salary for the most representative countries in terms of revenues and headcount.

(2) Employees covered by agreements are excluded from the calculation due to the existence of numerous agreements in each country, as well as the data for "Administrative" and "Operative and junior staff", as there are no homogeneous data at Group level, reasons that hinder the consolidation of the data prevent their availability (N.A.). There is no gender pay differentiation in collective bargaining agreements.

(3) In those categories with a non-representative female or male workforce (in executive personnel less than two and in the rest less than five), the ratio has not been given as it is considered distorted and not significant (N.S.)

(4) Excluding temporary expatriate directors in countries other than those of origin to which their salaries are adapted, general directors, executive directors and corporate directors.

Although there have been no very significant changes in the values of the reported ratios, the trend compared to 2017 is generally positive, especially among executive personnel (improvement in 100% of cases) and technicians (improvement in 80%) and neutral in technical managers (improvement in 50% cases).

In addition, the average wages by region and the wage gap by gender are disclosed, in compliance with the requirements of Spanish Law 11/2018.

### Table values

-	No cases
CI	One person - confidential information

### Remuneration broken down by job category

Region	Average wage <sup>(1)</sup>								Wage gap by gender <sup>(2)</sup>
	Executives		Technical managers		Technicians		Clerical staff, manual laborers and other <sup>(3)</sup>		
	Women	Men	Women	Men	Women	Men	Women	Men	
Africa	-	-	CI	65,772	33,709	41,404	23,598	20,808	1.07
Asia and Oceania	-	-	85,714	102,566	36,238	47,648	18,137	30,566	0.80
Europe	IC	198,347	149,566	91,775	53,000	66,235	39,084	46,064	1.00
Latin America	IC	180,489	74,793	88,580	44,862	43,977	22,645	26,495	1.01
North America	238,934	236,021	133,946	147,540	73,580	89,156	48,039	64,591	0.86

Table values	
-	No cases
CI	One person - confidential information

## Remuneration by age

Region	Average wage <sup>(1)</sup>					
	<35 years		35-50 years		>50 years	
	Women	Men	Women	Men	Women	Men
Africa	36,471	24,784	32,771	42,898	49,618	50,933
Asia and Oceania	26,058	31,290	42,048	65,760	42,154	79,561
Europe	50,573	54,035	52,502	77,911	58,272	94,632
Latin America	29,064	28,786	57,531	59,047	50,221	84,278
North America	71,015	78,605	84,352	108,183	83,244	131,595

- (1) The data has been prepared on the basis of the annual base wage in euros (using ratio of the average daily exchange rate in 2018 of each currency to wages of 2018 wage review campaign). In view of the dispersal of wages between countries and businesses in each región, the median value between the cut-off averages of each country is given.
- (2) The wage gap has been calculated as the weighted average ratio of the different aggregates in the region. The ratios have been calculated as the average wage of men divided by the average wage of women (according to the model of the indicator GRI 405-2).
- (3) Interpretation of the figures must take into account that the range of categories shown in this category is quite wide and may be affected largely by the unequal gender presence in each of them.

## Combined adjusted wage gap of all countries outside Spain

0.93

Remuneration and gender wage gap figures may be affected by the small size of the workforce and the grouping of data.

In some countries, the small number of cases in different ranges by professional category and age may lead to statistical distortions.

The diversity of criteria in professional categories does not allow for establishing more homogeneous sub-categories to yield a figure that can more precisely reflect wage differences by gender.

## Human rights

### 412-2: Employee training on human rights policies or procedures

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. In 2018, the course has been taken by a cumulative total of 266 employees, which is equivalent to 532 hours of training. Prevention of harassment 101 people, which is equivalent to 101 hours and overcoming barriers 229 people, which is equivalent to 229 hours.

### 406-1 Incidents of discrimination and corrective actions taken<sup>1</sup>

In 2018, 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 case claims, investigations, handling or resolution for reasons of confidentiality.

In the US, there were no claims of discrimination in 2018. One claim from 2017 is currently ongoing.

In Canada, a complaint of possible discrimination on the basis of race/nationality, filed in November 2017, is in the process of investigation. There is still a pending dispute of discrimination on the basis of disability, which has been brought before the Alberta Human Rights Commission and is expected to be settled.

In Vietnam, a case of harassment through the Ethics and Conduct Channel was reported on 18 April 2018. An investigation was carried out and it was established that there was sufficient evidence to justify the complaint. Actions have been implemented to improve the conduct of the reported employee.

### 407-1, 408-1, 409-1 Operations and suppliers whose right to the freedom of association and collective bargaining could be at risk, or involve significant risk in cases of child, forced or mandatory labor.

The Company's Code of Ethics and Conduct, which is applicable to all directors, executives and employees at Repsol and to our partners, joint-ventures operated by third parties, contractors, suppliers and other collaborating companies in all countries in which Repsol operates, complies with the requirements established by local legislation. In addition, Repsol is committed to respect of internationally recognized human rights, which include the rights set out in the Universal Human Rights Declaration and the principles relating to the rights established by the International Labor Organization (ILO) in the Declaration on Fundamental Principles and Rights at Work and the eight Fundamental Conventions.

Although some countries in which we operate are not signatories to ILO international conventions, Repsol is committed to respecting the human rights of the members of the most vulnerable groups or collectives when carrying out activities in those countries, regardless of the location in which we operate. This includes: Indigenous peoples; national, ethnic, linguistic or religious minorities; children, the elderly, the disabled; and refugees, displaced persons and migrant workers, as well as their families.

### 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 eight countries (Bolivia, Canada, Colombia, Ecuador, Indonesia, 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 evaluations 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.

1. Cases of harassment of employees of Spanish companies within the scope of application of the Repsol Group's Framework Agreement are subject to the Harassment Prevention Protocol defined for Spain and for other jurisdictions that meet local legal requirements. In any event, the Code of Ethics and Conduct contains the general principles applicable to achieve harassment-free workplaces.

## Social development and performance reviews at Repsol

Country	Description	Participation strategy
<b>Bolivia</b>	Margarita: Caipipendi and Huacaya. 5 indigenous communities pertaining to the Guarani people of Itaka Guasu. Mamoré, Monteagudo and Cambeiti: 1 indigenous community belonging to the Guarani people in Cambeiti	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 dialog. 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 Rios.
<b>Canada</b>	Greater Edson, North Duvernay & South Duvernay, Chauvin - - 16 First Nation and Metis indigenous communities.	Management plans are in place for the communities in the 5 operating areas, including plans for local development, impact evaluations, identification and updates of the plan relating to stakeholders, consultation processes to report activities in Alberta in accordance with regulatory requirements, as well as social investment projects, etc. In 2018, those plans include the aboriginal communities that may be potentially impacted by reclamation procedures. 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 Curripacos 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 directly involve these communities, taking into account their cultural particularities: Desert communities, piedmont communities and high-plains and jungle communities. Their representative organizations, leaders and traditional authorities have been identified to build fluid and ongoing relationships. Social investment projects are undertaken with indigenous communities.
<b>Ecuador</b>	Active Block 16 and 67 - Waorani community and the Kichwa people in the nine communities within the direct influence area.	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. The projects are governed by the law of Ecuador and by the Environmental Management Plan. Community development plans, emergency plans, environmental plans and an anthropological contingency plan have all been developed. Strategy based on the ongoing participation of communities through dialog plans that identify key stakeholders, frequency of contacts and regular meetings and so on. Also, local development projects are carried out, such as specific training courses for farmers or women's groups, as well as social investment projects.
<b>Papua New Guinea</b>	Indigenous communities organized into 137 clans and sub-clans (population of approximately 5,000 people).	Strategy based on the ongoing participation of communities through dialog plans that identify key stakeholders, c, contact frequency and regular meetings in accordance with the Stakeholder Relationship Plan. Local development projects, such as specific training courses for farmers, ranchers and groups of women are also carried out, together with social investment projects. This year and emphasis was placed on awareness of the end of exploration activities in the Western Province, which has involved the provincial government, land-owner leaders and Kiunga land-owner communities. We have continued with agricultural projects and community development focusing on financial literacy and photovoltaic energy.
<b>Peru</b>	Block 57: 8 native communities in the area of direct influence.	The operations carried out are covered during the three phases of community relationships (Insertion, Permanence and Withdrawal) by participation strategies. They are developed in accordance with the Community Relationship Plan based on the Social impact management programs (community monitoring and citizen vigilance; compensation and indemnity; complaint log; promotion of local employment; community communications and relationships) as well as social investment and contributions to local development. Community relationships are developed with respect for cultural matrices in each ethnic group (Machiguenga, Kakinte, Ashaninka, Yine). The socio-economic situation of each community and stakeholder group has also been taken into account.
<b>Russia</b>	6 indigenous communities of the Khanty and Mansy ethnic groups in the area of influence.	The strategy is based on prior studies to identify stakeholders, including indigenous communities in our area of influence. The legal participation requirements in the country have been met.
<b>Indonesia</b>	25 families of the nomadic indigenous community Suku Anak Dalam (SAD) within the area of influence.	Development programs have been designed with the participation of the SAD community and the government.

## 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.

### 413-2: : Operations with significant actual and potential negative impacts on local communities

Activity	Potential impacts identified
Downstream Industrial Onshore exploration and production	<p>Smells, noise, gas emissions into the atmosphere, dust, visual impacts and, to a lesser extent, discharges.</p> <p>Potential health effects on the people living locally as a result of the inhalation of gases associated with exploration activities</p> <p>Temporary use of land to carry out the exploration activities.</p> <p>Hiring of local manpower to carry out the exploration work.</p> <p>Migratory movements toward operations they may cause on use of local services..</p>
Offshore exploration and production	<p>Temporary change in fishing routes to accommodate the presence of boats and other equipment related to oil and gas operations.</p> <p>Temporary change in fishing sector revenue due to the installation of equipment and facilities for offshore exploration purposes.</p> <p>Economic activity related to tourism.</p> <p>Hiring of local manpower to carry out the exploration work.</p>

## Anti-corruption

### 205-2 Communications and training regarding anti-corruption policies and procedures

The fight against corruption is one of the principles included in Repsol's Suppliers' Code of 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 we may consider that 100% of Repsol's suppliers are informed of Repsol's position in this regard.

#### Employee training:

The company has three online training courses on the fight against corruption:

- "Code of Ethics and Conduct": includes anti-corruption policies (available to all employees) and a Game of Ethics and Conduct, a test to verify and refresh knowledge of the code among all employees.
- "Crime Prevention Model" (available to all employees).
- "Anti-Money Laundering and Terrorist Financing Prevention" (available to employees in Peru).

### Number and percentage of employees that have received training regarding anti-corruption measures by region

Country	Executives		Technical Managers		Technicians		Clerical staff		Manual workers and junior personnel	
	N <sup>a</sup>	%	N <sup>a</sup>	%	N <sup>a</sup>	%	N <sup>a</sup>	%	N <sup>a</sup>	%
Africa	1	33%	40	71%	88	74%	1	20%	-	-
Asia	8	73%	128	71%	408	58%	42	24%	-	-
Europe	175	79%	1,348	82%	5,144	73%	567	66%	5,091	45%
Latin America	19	100%	261	90%	2,252	47%	25	81%	24	25%
North America	14	64%	285	72%	580	66%	48	64%	136	61%
Oceania					2	100%				
<b>Total</b>	<b>217</b>	<b>79%</b>	<b>2,062</b>	<b>80%</b>	<b>8,474</b>	<b>63%</b>	<b>683</b>	<b>60%</b>	<b>5,251</b>	<b>45%</b>

(1) Data taken from the cumulative average of the managed workforce, taken to 1.

## Public policy

### 415-1 Contributions to political parties and/or representatives

In 2018, Repsol made no political contributions. Accordingly, there were no breaches of the Code of Ethics and Conduct Code. 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 the federal level and in Canada at federal and provincial level (Alberta).

Links to official lobby registration pages and further information at [www.repsol.com](http://www.repsol.com).

## Management of the supply chain and its impacts where the company operates

### 308-2 Negative environmental impacts in the supply chain and actions taken

A total of 3,060 evaluations were made of environmental aspects on 1,347 suppliers. Some 265 evaluations on 232 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 relationships were ended with suppliers for environmental reasons.

**414-2: Negative social impacts in the supply chain and actions taken**

A total of 3,060 social issue evaluations were performed on 1,347 suppliers. Some 120 evaluations on 102 suppliers were found with a social issue performance score below 5 out of 10. The negative evaluations are associated with the Code of Ethics and Human Rights, among other things. After the negative evaluations were identified, improvements were agreed with 100% of the suppliers. No relationship with any supplier has ended due to social issues (human rights or labor matters, among other things).

**Compliance**

**307-1 Non-compliance with environmental law and regulations**

In 2018 and 2017, there were no significant fines or sanctions levied against Repsol Group as a result of lawsuits or administrative proceedings ending with a final decision.

**206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices**

litigation <sup>1</sup> due to practices restricting competition (number of cases initiated)		
	2018	2017
Cases initiated	-	1

(1) Number of lawsuits or administrative procedures initiated during the year that are significant for 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 2018.



# Appendix IV.

## GRI- Standard

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
	<b>GRI 101</b>	<b>Fundamentals</b>			
	<b>GRI 102</b>	<b>General contents</b>			
		<b>Organizational Profile</b>			
G4-3	102-1	Company Name	Consolidated Financial Statements 2018 - Note 1 About this report		√
G4-4	102-2	Activities, brands, products and services	Section 2.1 Business model Section 5.1. Upstream Section 5.2. Downstream	11, 35, 47	√
G4-5	102-3	Location of the headquarters	Consolidated Financial Statements 2018 - Note 1 About this report		√
G4-6	102-4	Location of operations	Section 2.2. Repsol around the world Section 5. Business performance	12, 35	√
G4-7	102-5	Property and legal form	Consolidated Financial Statements 2018 - Note 1 About this report Consolidated Financial Statements 2018 - Note 7 Intangible Assets		√
G4-8	102-6	Markets served	Section 2.2. Repsol around the world Section 5.1. Upstream Section 5.2. Downstream	12, 35, 47	√
G4-9	102-7	Organizational Size	Section 2.1 Business model Section 2.2. Repsol around the world Section 2.3. Corporate Structure	11, 12, 14	√(1)
G4-10	102-8	Information on employees and other workers	Section 6. Sustainability - 6.2. People - Our team Appendix III: GRI Indicators - PART I Company Profile	70, 121	√(1)
G4-12	102-9	Supply Chain	Section 6.8. Supply Chain	100	√(2)
G4-13	102-10	Significant changes in the organization and its supply chain	Consolidated Financial Statements 2018 - Note 1 About this report- 1.5. Composition of the Group.		√
G4-14	102-11	Precautionary approach or principle	Section 2.4. Corporate Governance Section 6.1. Climate Change Section 6.3. Safe operation Section 6.4. Environment Appendix II: Risks	15, 62,79, 82, 116	√
G4-15	102-12	External Initiatives	<a href="https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshmtl">https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshmtl</a>		√
G4-16	102-13	Affiliation to associations	<a href="https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshmtl">https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshmtl</a>		√
		<b>Strategy</b>			
G4-1	102-14	Statement from senior decision-makers	Message from the Chief Executive Officer	3	√
G4-2	102-15	Main effects, risks and opportunities	Section 2.5. Risk management Section 6.1 Climate change Appendix II: Risks	17, 62, 116	√
		<b>Ethics and integrity</b>			
G4-56	102-16	Values, principles, standards and norms of conduct	Code of ethics and conduct. Section 6.7. Ethics and Compliance About this Report	99, 2	√
G4-57,58	102-17	Advisory mechanisms and ethical concerns	Repsol ethics and compliance channel. Section 6.7. Ethics and Compliance	99	√
		<b>Governance</b>			
G4-34	102-18	Governance structure	Section 2.4. Corporate Governance Appendix VII: Annual Corporate Governance Report 2018 - B.2List the direct and indirect holders of significant stakes, excluding directors Appendix VII: Annual Corporate Governance Report 2018 - B.3.1 Members of the Board of Directors Appendix VII: Annual Corporate Governance Report 2018 - B.5 Members of senior management Appendix VII: Annual Corporate Governance Reporto 2018 - B.4 Committees of the Board of Directors	15, 163	√
G4-35	102-19	Delegation of authority	Section 2.4. Corporate Governance Section 6.1. Climate Change	15, 62	√

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
G4-36	102-20	Executive-level responsibility for economic, environmental and social issues	Appendix VI: 2018 Annual Corporate Governance Report - B.4.2. Committees of the Board of Directors - Audit and Control Committee Appendix VII: Annual Corporate Governance Report 2018 - B.4.5 Committees of the Board of Directors - Sustainability Committee Section 2.4. Corporate Governance	15, 163	✓
G4-37	102-21	Consultation of stakeholders on economic, environmental and social issues	Section 6. Sustainability - Governance model	61	✓
G4-38	102-22	Composition of the most senior governing body and its committees	Appendix VII: Annual Corporate Governance Report 2018 - B.3.1 Members of the Board of Directors Appendix VII: Annual Corporate Governance Report 2018 - B.4 Committees of the Board of Directors	163	✓
G4-39	102-23	President of the most senior governing body	Section 2.4. Corporate Governance	15	✓
G4-40	102-24	Nomination and selection of the most senior governing body	Policy for the selection of directors: <a href="https://www.repsol.com/en/shareholders-and-investors/corporate-governance/committees-to-the-board/nominations-committee/index.cshhtml">https://www.repsol.com/en/shareholders-and-investors/corporate-governance/committees-to-the-board/nominations-committee/index.cshhtml</a> <a href="https://www.repsol.com/imagenes/global/en/00-00538PO_Directors_Selection_Policy_en_tcm14-66877.pdf">https://www.repsol.com/imagenes/global/en/00-00538PO_Directors_Selection_Policy_en_tcm14-66877.pdf</a> Appendix VII: Annual Corporate Governance Report 2018 - B.4.3 Procedures for the selection, appointment, re-election, evaluation and removal of Directors	163	✓
G4-41	102-25	Conflicts of interest	Appendix VII: Annual Corporate Governance Report 2018 - B.6 Competent body and procedure for the approval of transactions with related and intergroup parties Appendix VII: Annual Corporate Governance Report 2018 - B.6 Describe the mechanisms for detecting, determining and resolving possible conflicts of interest between the company and/or its group, and its directors, executives or significant shareholder	163	✓
G4-42	102-26	Role of the most senior governance body in the selection of objectives, values and strategy	Rules of Procedure of the Administrative Board - Article 5 <a href="https://www.repsol.com/imagenes/global/en/Reglamento_del_Consejo_27-07-2016_ENG_tcm14-13029.pdf">https://www.repsol.com/imagenes/global/en/Reglamento_del_Consejo_27-07-2016_ENG_tcm14-13029.pdf</a>		✓
G4-43	102-27	Collective knowledge of the most senior governing body	Section 2.4. Corporate Governance	15	✓
G4-44	102-28	Evaluation of the performance of the most senior governance body	Section 2.4. Corporate Governance Rules of Procedure of the Administrative Board - Article 11 <a href="https://www.repsol.com/imagenes/global/en/Reglamento_del_Consejo_27-07-2016_ENG_tcm14-13029.pdf">https://www.repsol.com/imagenes/global/en/Reglamento_del_Consejo_27-07-2016_ENG_tcm14-13029.pdf</a> Appendix VII: Annual Corporate Governance Report 2018 - B.3.4. Description of the evaluation of the Board of Directors Bylaws - Article 45.4	15, 163	✓
G4-45	102-29	Identification and management of economic, environmental and social effects	Appendix II: Risks Appendix VII: Annual Corporate Governance Report 2018 - B.8.1 E. Control and risks management systems Appendix VII: Annual Corporate Governance Report 2018 - B.8.2 F. Internal control and risks management systems related to the financial reporting process (SCIIF)	163	✓
G4-46	102-30	Effectiveness of risk management processes	Appendix II: Risks Appendix VII: Annual Corporate Governance Report 2018 - B.8.1 E. Control and risks management systems Appendix VII: Annual Corporate Governance Report 2018 - B.8.2 F. Internal control and risks management systems related to the financial reporting process (SCIIF)	163	✓
G4-47	102-31	Evaluation of economic, environmental and social issues	Appendix II: Risks Appendix VII: Annual Corporate Governance Report 2018 - B.8.1 E. Control and risks management systems Appendix VII: Annual Corporate Governance Report 2018 - B.8.2 F. Internal control and risks management systems related to the financial reporting process (SCIIF)	163	✓
G4-48	102-32	Role of the most senior governance body in sustainability reporting	Appendix VII: Annual Corporate Governance Report 2018 - B.4 Committees of the Board of Directors	163	✓
G4-49	102-33	Communication of critical concerns	Section 2.4. Corporate Governance	15	✓
G4-50	102-34	Nature and total number of critical concerns	Section 2.4. Corporate Governance	15	✓

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
G4-51	102-35	Remuneration policies	Appendix VII: Annual Corporate Governance Report 2018 - B.4 Committees of the Board of Directors - Remuneration Committee Annual Report on Directors' Remuneration 2018 Directors' Remuneration Policy 2015-2017. <a href="https://www.repsol.energy/imagenes/global/es/Politica_Remuneraciones_tcm13-30745.pdf">https://www.repsol.energy/imagenes/global/es/Politica_Remuneraciones_tcm13-30745.pdf</a> Directors' Remuneration Policy 2018-2020 <a href="https://www.repsol.com/imagenes/global/en/Pol%C3%ADtica_de_Remuneraciones_EN_VF_tcm14-64095.pdf">https://www.repsol.com/imagenes/global/en/Pol%C3%ADtica_de_Remuneraciones_EN_VF_tcm14-64095.pdf</a>	163	√
G4-52	102-36	Process for determining remuneration	2018 Consolidated Financial Statements- Note 27. Remuneration of Members of the Board of Directors and executive personnel Appendix VII: 2018 Annual Corporate Governance Report - B.4 Committees of the Board of Directors - Remuneration Committee Annual Report on Directors' Remuneration 2018	163	√
G4-53	102-37	Involvement of stakeholders in remuneration	Appendix III: Indicadores GRI - PART I: GENERAL CONTENTS	124	√
G4-54	102-38	Annual total compensation ratio	Appendix III: Indicadores GRI - PART I: GENERAL CONTENTS	124	√(3)
G4-55	102-39	Percentage increase in annual total compensation ratio	Appendix III: Indicadores GRI - PART I: GENERAL CONTENTS	124	√(4)
<b>Stakeholder engagement</b>					
G4-24	102-40	List of stakeholders	Appendix III: GRI Indicators - PART I: GENERAL CONTENTS Materiality and stakeholders	120	√
G4-11	102-41	Collective bargaining agreements	Appendix III: GRI Indicators - PART I Company Profile	123	√
G4-25	102-42	Identification and selection of stakeholders	<a href="https://repsol.energy/es/sostenibilidad/nuestro-modelo/index.cshml">https://repsol.energy/es/sostenibilidad/nuestro-modelo/index.cshml</a>		√
G4-26	102-43	Approach to stakeholder engagement	Appendix III: GRI Indicators - PART I: GENERAL CONTENTS - Materiality and stakeholders	120	√
G4-27	102-44	Key issues and concerns mentioned	Appendix III: GRI Indicators - PART I: GENERAL CONTENTS - Materiality and stakeholders	120	√
<b>Reporting practices</b>					
G4-17	102-45	Entities included in the consolidated financial statements	Section 2.3. Corporate Structure. Consolidated Financial Statements 2018 - Appendix I: Main companies making up the Repsol Group	14,	√
G4-18	102-46	Definition of the contents of the reports and the Coverage of the topic	Appendix III: GRI Indicators - PART I Materiality and stakeholders	120	√
G4-19	102-47	List of material topics	Appendix III: GRI Indicators - PART I Materiality and stakeholders	120	√
G4-22	102-48	Restatement of information	No relevant re-expressions in the period.		√
G4-23	102-49	Changes in reporting	Changes related to material issues and their coverage are included in the materiality matrix.	120	√
G4-28	102-50	Reporting period	Exercise 2018		√
G4-29	102-51	Date of last report	Sustainability Report 2017 published during the first half of 2018		√
G4-30	102-52	Reporting cycle	Annual		√
G4-32	102-53	Contact point for questions about the report	Address any doubts, queries, suggestions or other matters relating to it, through the Shareholder Office whose telephone number is 900 100 100 or by email to <a href="mailto:infoaccionistas@repsol.com">infoaccionistas@repsol.com</a> or to <a href="mailto:repsolteescucha@repsol.com">repsolteescucha@repsol.com</a>		√
G4-32 A	102-54	Declaration of preparation of the report in accordance with GRI Standards	About this report	2	
G4-32 B	102-55	GRI Content Index	Appendix IV: GRI - Standard Index	149	
G4-32C, 33	102-56	External verification	See PwC's verification letter at <a href="http://www.Repsol.com">www.Repsol.com</a>		√

## Material issues

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
<b>GENERAL CONTENTS</b>					
<b>Dimensión económica</b>					
<b>Economic performance</b>					
GRI 201					
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 6.1 Climate change Consolidated report on payments to governments in hydrocarbon exploration and production activities. Section 6.6. Tax responsibility Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS-Economic Performance	62, 94, 125	✓
<b>G4-EC1</b>	201-1	Direct economic value generated and distributed	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS-Economic Performance	125	✓(5)
<b>G4-EC2</b>	201-2	Financial implications and other risks and opportunities arising from climate change	Section 6.1. Climate change	62	✓(9)
<b>G4-EC3</b>	201-3	Obligations of the defined benefit plan and other retirement plans	Consolidated Financial Statements 2018 - Note 29 Obligations to employees		✓
<b>G4-EC4</b>	201-4	Financial assistance received from the government	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	125	✓
GRI 202					
<b>Presence in the market</b>					
<b>G4-DMA, 20, 21</b>	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	125, 126	✓
<b>G4-EC5</b>	202-1	Ratio of standard entry level salary by gender compared to local minimum wage	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	125	✓
<b>G4-EC6</b>	202-2	Proportion of senior management hired from the local community	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	126	✓
GRI 203					
<b>Indirect economic effects</b>					
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 6.2.2. Respect for Human Rights and Community Relations Apartado 6.8 Supply chain	76, 77, 101, 126	✓
<b>G4-EC7</b>	203-1	Investments in infrastructure and services supported	Section 6.2.2. Respect for Human Rights and Community Relations Apartado 6.8 Supply chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance - Indirect economic impacts	76, 77, 101, 126	✓
<b>G4-EC8</b>	203-2	Significant indirect commendable effects	Section 6.2.2. Respect for Human Rights and Community Relations Apartado 6.8 Supply chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance - Indirect economic impacts	76, 77, 101, 126	✓
GRI 204					
<b>Procurement practices</b>					
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 6.8. Supply chain	100	✓
<b>G4-EC9</b>	204-1	Proportion of expenditure on local suppliers	Section 6.8. Supply chain	101, 102, 103	✓(2)
<b>G4-OG1</b>	OG1	Volume and characteristics of the production estimate and identified reserves	Section 2. Our Company Section 5. Business performance - 5.1. Upstream	9, 10, 35	✓
GRI 205					
<b>Anti-corruption</b>					
<b>Anti-corruption</b>					
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 6.7. Ethics and compliance Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Fight against corruption	99, 147	✓
<b>G4-SO3</b>	205-1	Operations assessed for corruption-related risks	Section 6.7. Ethics and compliance	100	✓(16)
<b>G4-SO4</b>	205-2	Communication and training on anti-corruption policies and procedures	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Fight against corruption	147	✓(17)
<b>G4-SO5</b>	205-3	Confirmed corruption cases and measures taken	Section 6.7. Ethics and compliance	100	✓(15)

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
	GRI 206	<b>Unfair competition</b>			
<b>G4-DMA, 20, 21</b>	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social Performance - Regulatory Compliance	148	✓
<b>G4-SO7</b>	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social Performance - Regulatory Compliance	148	✓
		<b>Environmental dimension</b>			
		<b>Environmental performance</b>			
	GRI 301	<b>Materials</b>			
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 5. Business performance Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Energy efficiency and climate change - Non-GHG emissions	51, 130	✓
<b>G4-EN1</b>	301-1	Materials used by weight or volume	Section 5. Business performance	51	✓(6)
<b>G4-EN2</b>	301-2	Recycled inputs	Non-material		Not verified
<b>G4-OG8</b>	OG8	Benzene, lead and sulfur content in fuels	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Energy efficiency and climate change - Non-GHG emissions	130	✓(9)
<b>G4-EN28</b>	301-3	Reused products and packaging materials	Non-material		Not verified
	GRI 302	<b>Energy</b>			
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 6.1. Climate Change Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Energy Efficiency and Climate Change	62, 127-129	✓
<b>G4-EN3</b>	302-1	Energy consumption within the organization	Section 6.1. Climate Change	69	✓(7)
<b>G4-EN4</b>	302-2	Energy consumption outside the organization	Section 6.1. Climate Change	68	✓
<b>G4-EN5</b>	302-3	Energy Intensity	Section 6.1. Climate Change	69	✓(7)
<b>G4-OG2</b>	OG2	Total investment in renewable energy	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Energy Efficiency and Climate Change	127	✓
<b>G4-OG3</b>	OG3	Total amount of renewable energy generated, by type	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Energy Efficiency and Climate Change	127	✓(8)
<b>G4-EN6</b>	302-4	Reduction of energy consumption	Section 6.1. Climate Change	69	✓(7)
<b>G4-EN7</b>	302-5	Reduced energy requirements for products and services	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Energy Efficiency and Climate Change	127	✓(9)
<b>G4-OG14</b>	<b>OG14</b>	Volume of biofuels produced, bought and sold	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Energy Efficiency and Climate Change	129	✓(9)
	GRI 303	<b>Water</b>			
<b>G4-DMA, 20, 21</b>	103	Management approach	Section 6.4. Environment	85	✓
<b>G4-EN8</b>	303-1	Water extraction by source	Section 6.4. Environment	87	✓(18)
<b>G4-EN9</b>	303-2	Water sources significantly affected by water extraction	Section 6.4. Environment	87	✓(9)
<b>G4-EN10</b>	303-3	Recycled and reused water	Section 6.4. Environment	87	✓
	GRI 304	<b>Biodiversity</b>			
<b>G4-DMA, 20, 21</b>	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity	87, 132-133	✓
<b>G4-EN11</b>	304-1	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 CONTENTS - Environmental performance - Biodiversity	132	✓(10)
<b>G4-EN12</b>	304-2	Significant effects of activities, products and services on biodiversity	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity	132	✓(11)

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
G4-EN13	304-3	Protected or restored habitats	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity and ecosystem services	132	√(9)
G4-EN14	304-4	Species appearing on the IUCN Red List and national conservation listings whose habitats are in areas affected by operations	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity and ecosystem services	133	√
G4-OG4	OG4	Number and percentage of significant operational centers where biodiversity risks have been assessed and monitored	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity and ecosystem services	133	√
<b>GRI 305</b>		<b>Emissions</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.1. Climate Change Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Non-GHG Emissions	67-70, 129	√
G4-EN15	305-1	Direct GHG emissions (Scope 1)	Section 6.1. Climate Change	68	√(7)
G4-EN16	305-2	Indirect GHG emissions from energy generation (Scope 2)	Section 6.1. Climate Change	68	√(7)
G4-EN17	305-3	Other indirect GHG emissions (Scope 3)	Section 6.1. Climate Change	68	√(12)
G4-EN18	305-4	Intensity of GHG emissions	Section 6.1. Climate Change	70	√
G4-EN19	305-5	Reduction of GHG emissions	Section 6.1. Climate Change	67	√(7)
G4-EN20	305-6	Emissions of ozone-depleting substances (ODS)	Non-material		Not verified
G4-EN21	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Non-GHG Emissions	129	√
<b>GRI 306</b>		<b>Effluents and waste</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.1. Climate Change Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Effluents and waste Section 6.3. Safe Operation	69, 82, 130, 131, 133	√
G4-EN22	306-1	Water discharge by quality and destination	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Effluents and waste	130	√
G4-EN23	306-2	Waste by type and disposal method	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Effluents and waste	131	√
G4-EN24	306-3	Significant spills	Section 6.3. Safe Operation	82	√
G4-OG5	OG5	Volume and disposal of formation or produced water	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Effluents and waste	131	√(19)
G4-OG6	OG6	Volume of hydrocarbons sent to flare or vented	Section 6.1. Climate Change	69	√
G4-OG7	OG7	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Effluents and waste	131	√
G4-EN25	306-4	Transport of hazardous waste	Non-material		Not verified
G4-EN26	306-5	Water bodies affected by water discharges and/or run-offs	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity	133	√(9)
<b>GRI 307</b>		<b>Effluents and waste</b>			
G4-DMA, 20, 21	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Regulatory Compliance	148	√
G4-EN29	307-1	New employee hiring and staff turnover	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Regulatory Compliance	148	√

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
<b>GRI 308 Environmental evaluation of suppliers</b>					
G4-DMA, 20, 21	103	Management approach	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance -Management of the supply chain and its effects where the company operates	100, 101, 147	✓
G4-EN32	308-1	New suppliers that have passed evaluation and selection filters according to environmental criteria	Section 6.8. Supply Chain	103	✓
G4-EN33	308-2	Negative environmental effects in the supply chain and actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance -Management of the supply chain and its effects where the company operates	147	✓
<b>GRI 401 Social performance Employment</b>					
G4-DMA, 20, 21	103	Management approach	Section 6.2. People - Human capital Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Work	73, 134, 137	✓
G4-LA1	401-1	New employee hiring and staff turnover	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Work	134	✓
G4-LA2	401-2	Benefits for full-time employees that are not given to part-time or temporary employees	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Work	137	✓
G4-LA3	401-3	Parental leave	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Work	137	✓
<b>GRI 402 Labor/management relation</b>					
G4-DMA, 20, 21	103	Management approach	Repsol respects the period of notice established in the legislation of the countries in which it operates, as well as those provided for in collective or political agreements, if applicable.		✓
G4-LA4	402-1	Minimum notice periods for operational changes	Repsol respects the period of notice established in the legislation of the countries in which it operates, as well as those provided for in collective or political agreements, if applicable.		✓
<b>GRI 403 Health and safety at work</b>					
G4-DMA, 20, 21	103	Management approach	Section 6.3. Safe Operation Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Health and safety at work	79, 80, 137, 138, 140	✓
G4-LA5	403-1	Representation of workers in formal worker-company health and safety committees	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Health and safety at work	137	✓(20)
G4-LA6	403-2	Types of accidents and frequency rates of accidents, occupational diseases, days lost, absenteeism and number of deaths due to an accident at work or occupational disease	Section 6.3. Safe Operation Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Health and safety at work	80, 138	✓(21)
G4-LA7	403-3	Workers with a high incidence or high risk of diseases related to their activity	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Health and safety at work	138	✓
G4-LA8	403-4	Health and safety issues addressed in formal agreements with trade unions	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Health and safety at work	140	✓
G4-OG13	OG13	Number of process safety claims and near misses by type of activity	Section 6.3. Safe Operation	80	✓
<b>GRI 404 Training and education</b>					
G4-DMA, 20, 21	103	Management approach	Section 6.2. People - Human capital Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Training and education	79, 80, 137, 138, 140	
G4-LA9	404-1	Average hours of training per year per employee	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Training and education	140	✓
G4-LA10	404-2	Programs for upgrading employee skills and transition assistance programs	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Training and education	140	✓
G4-LA11	404-3	Percentage of employees receiving periodic performance and professional development evaluations	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Training and education	142	✓(22)

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
	<b>GRI 405</b>	<b>Diversity and equal opportunities</b>			
G4-DMA, 20, 21	103	Management approach	Section 2.4. Corporate Governance Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Diversity and equal opportunities	16, 142, 143	√
G4-LA12	405-1	Diversity in governing bodies and employees	Section 2.4. Corporate Governance Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Diversity and equal opportunities	16, 142	√(23)
G4-LA13	405-2	Ratio of basic salary and remuneration of women versus men	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Diversity and equal opportunities Appendix VII: 2018 Annual Corporate Governance Report B.3.1. Presence of women on the Board of Directors	143	√(13)
	<b>GRI 406</b>	<b>Non-discrimination</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.7 Ethics and compliance	99, 145	√
G4-HR3	406-1	Cases of discrimination and corrective actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	145	√(14)
	<b>GRI 407</b>	<b>Freedom of association and collective bargaining</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	100, 103, 145	√
G4-HR4	407-1	Operations and suppliers whose right to freedom of association and collective bargaining may be at risk	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	103, 145	√(9)
	<b>GRI 408</b>	<b>Child labor</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	100, 103, 145	√
G4-HR5	408-1	Operations and suppliers with significant risk for incidents of child labor	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	103, 145	√(9)
	<b>GRI 409</b>	<b>Forced or compulsory labor</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	100, 103, 145	√
G4-HR6	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	103, 145	√(9)
	<b>GRI 410</b>	<b>Safety practices</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities	78	√
G4-HR7	410-1	Security personnel trained in human rights policies or procedures	Section 6.2.2. Respect for Human Rights and Relationship with Communities	78	√
	<b>GRI 411</b>	<b>Rights of indigenous peoples</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities	75-78, 145, 146	√
G4-HR8	411-1	Cases of violations of the rights of indigenous peoples	Section 6.2.2. Respect for Human Rights and Relationship with Communities	78	√



GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
G4-OG9	OG9	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	145, 146	✓
	<b>GRI 412</b>	<b>Human Rights Assessment</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	76, 103, 145	✓
G4-HR9	412-1	Operations subject to human rights impact reviews or assessments	Section 6.2.2. Respect for Human Rights and Relationship with Communities	76	✓
G4-HR2	412-2	Training of employees in human rights policies or procedures	Section 6.2.2. Respect for Human Rights and Relationship with Communities Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Human rights	145	✓
G4-HR1	412-3	Significant investment agreements and contracts with human rights clauses or subject to human rights assessment	Section 6.8. Supply Chain	103	✓
	<b>GRI 413</b>	<b>Local communities</b>			
G4-DMA, 20, 21	103	Management approach	Section 5.1. Upstream Section 5.2. Downstream Section 6.2.2. Respect for Human Rights and Relationship with Communities Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social Performance - Society - Local communities	37, 49, 75, 76, 77, 147	✓
G4-SO1	413-1	Operations with local community participation, impact assessments and development programs	Section 6.2.2. Respect for Human Rights and Relationship with Communities	76, 77	✓
G4-SO2	413-2	Operations with significant actual and potential negative impacts on local communities	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social Performance - Society - Local communities	147	✓
G4-OG10	OG10	Number and description of significant disputes with local communities and indigenous peoples	There have been no significant controversies with local communities or indigenous peoples		✓(24)
G4-OG11	OG11	Sites dismantled and in the process of being dismantled	During 2018 there have been no dismantled sites		✓
G4-OG12	OG12	Cases of involuntary resettlement necessary for the activities of the organization	Section 6.2.2. Respect for Human Rights and Relationship with Communities	78	✓
	<b>GRI 414</b>	<b>Social evaluation of suppliers</b>			
G4-DMA, 20, 21	103	Management approach	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance -Management of the supply chain and its effects where the company operates	101, 103, 148	✓
G4-LA14, HR10, SO9	414-1	New suppliers that have passed selection filters according to social criteria	Section 6.8. Supply Chain	103	✓
G4-LA15, HR11, SO10	414-2	Negative social effects in the supply chain and actions taken	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance -Management of the supply chain and its effects where the company operates	148	✓
	<b>GRI 415</b>	<b>Public policy</b>			
G4-DMA, 20, 21	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Public policy	147	✓
G4-SO6	415-1	Contributions to political parties and/or representatives	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Public policy	147	✓

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
	<b>GRI 416</b>	<b>Consumer health and safety</b>			
G4-DMA, 20, 21	103	Management approach	Non-material		Not verified
G4-PR1	416-1	Assessment of health and safety effects of product or service categories	Non-material		Not verified
G4-PR2	416-2	Cases of non-compliance relating to health and safety effects of product and service categories	Non-material		Not verified
	<b>GRI 417</b>	<b>Marketing and labelling</b>			
G4-DMA, 20, 21	103	Management approach	Non-material		Not verified
G4-PR3	417-1	Requirements for information and product and service labelling	Non-material		Not verified
G4-PR4	417-2	Cases of non-compliance related to information and labelling of products and services	Non-material		Not verified
G4-PR7	417-3	Cases of non-compliance related to marketing communications	Non-material		Not verified
	<b>GRI 418</b>	<b>Customer privacy</b>			
G4-DMA, 20, 21	103	Management approach	Non-material		Not verified
G4-PR8	418-1	Substantiated complaints regarding violations of customer privacy and loss of customer data	Non-material		Not verified
	<b>GRI 419</b>	<b>Socio-economic compliance</b>			
G4-DMA, 20, 21	103	Management approach	2018 Consolidated Financial Statements - Note 14.2 Disputes and 23.4 Government and Legal proceedings with tax implication		√
G4-SO8, PR9	419-1	Non-compliance with laws and regulations in the social and economic spheres	2018 Consolidated Financial Statements - Note 14.2 Disputes and 23.4 Government and Legal proceedings with tax implication		√

√ Content revised according to the scope of the information described in PWC's Independent Review Report

- (1) Only own personnel are reported on.
- (2) Information on the supply chain refers exclusively to significant purchases made by the corporate purchasing and contracting department, and excluding purchases of crude oil, gas and materials.
- (3) For the calculation of this information, the average annual remuneration in cash accrued, for the workforce, and that effectively paid in the period, for executive functions and not as a Director, of the highest paid person, has been taken.
- (4) For the calculation of this information, the variation between the remuneration of the highest paid person in the previous year and the remuneration of the highest paid person in the current year has been taken into account.
- (5) The referenced report on payments to Public Administrations by country has not been subject to verification, and only the overall reasonableness of the evolution of payments has been analyzed. The information on taxes effectively paid includes payments for liquidity of taxes and duties, not including effective tax returns or surcharges and penalties.
- (6) The main material that is the processed crude oil is broken down.
- (7) The overall reasonableness of the data has been verified. The data are subject to modification once the audits of the emissions of each center and active under ISO 14064 are carried out.
- (8) Installed capacity is reported.
- (9) It is reported qualitatively.
- (10) Value for biodiversity is not reported, outside protected areas.
- (11) Nature of effects is not reported.
- (12) Scope 3 emissions do not include upstream transport categories in E&P as well as fixed asset and investee categories.
- (13) Remuneration by category and gender is not reported.
- (14) Incidents of discrimination against own staff are reported.
- (15) Sanctions or warnings derived from breaches of the Code of Ethics are reported.
- (16) Information included refers to number of ICFR controls.
- (17) Information does not include breakdown by members of governing body.
- (18) Only sweet water withdrawn is reported.
- (19) Volume of hydrocarbons discharged to produced water is not reported.
- (20) Workers' representation is reported where health and safety committees are in place.
- (21) No information given on rate of lost days or absenteeism rate. Nor is breakdown by gender or region given of accident data.
- (22) Percentage information not given.
- (23) No data given by percentage of employees of governing body by gender and age.
- (24) Incidents related to violations of rights of indigenous peoples reported through Company whistleblower reported.

# Appendix V: Statement of non-financial information

The table set out below presents the non-financial and diversity information requirements established by Law 11/2018 (December 28) and the sections of the Integrated Management Report in which this information is disclosed:

Contents	GRI Standards	Reference	Comments
<b>0. General contents</b>			
a) business environment: 1.) business environment 2.) organization and structure 3.) markets in which company operates 4.) objectives and strategies 5.) main factors and trend that may affect its future performance	102-2, 102-6	Section 2.1. Business model Section 2.2. Repsol around the world Section 2.3. Corporate structure Section 2.6. Strategy Section 3. Environment Section 5.1. Upstream Section 5.2. Downstream Section 7. Outlook	
b) Policies		Section 6. Sustainability	
c) Policy outcomes. KPIs		About this report Section 6. Sustainability Appendix III. GRI Indicators	
d) Risks at ST, MT and LT	102-15, 205-1, 413-1, 407-1, 408-1, 409-1	Section 2.5 Risk management Section 6.1 Climate change Appendix II: Risks Appendix VI: Corporate Governance Report - Section 8: Control and risks management	
e) KPIs	102-54	About this report	
<b>1. Information on environmental issues</b>			
a) General: • Current and foreseeable effects of the company on the environment • Assessment procedures or environmental certification • Resources dedicated to prevention of environmental risks • Precautionary principle, provisions and environmental guarantees	103, 102-11, 201-2, 307-1, 308-1, 308-2	Section 2.4. Corporate Governance Section 6.1. Climate change Section 6.3. Safe operation Section 6.4. Environment Section 6.8. Supply Chain Appendix II: Risks Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Environmental Dimension - Management of the supply chain and its impacts wherever the company carries out its operations Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social Performance - Company - Regulatory Compliance	Data on resources dedicated to forecasting environmental risks and provisions are detailed in note 31 of the Consolidated Financial Statements 2018. Data relating to environmental guarantees are detailed in Note 27.2 to the Financial Statements Consolidated Financial Statements 2018. In addition, Repsol has Environmental Management Systems ISO14001 with which it ensures that the levels of the regulations in force for that are not exceeded, and which helps to prevent and improve the management of Company's environmental impacts, risks and opportunities
b) Pollution	103, 305-5, 305-6, 305-7	Section 6.1. Climate change Annex III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Non-GHG Emissions	Light pollution is not reported as they are not considered material matters (see Materiality Matrix pg. 120).
c) Circular economy and prevention	103, 301-2, 301-3, 306-2	Section 6.4. Environment Annex III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Waste management	Actions to combat food waste are not reported because they are not considered material aspects (see Materiality Matrix) pg.120).
d) sustainable use of resources • Water consumption and water supply on accordance with local constraints • Consumption of raw materials and the measures taken to improve their efficient use • Direct and indirect energy consumption, measures taken to improve energy efficiency and the use of renewable energies	303-1, 303-2, 303-3  103, 301-1, 301-2  103, 302-1, 302-2, 302-3, 302-4, 302-5	Section 6.4. Environment  Section 5. Performance of our businesses. Improving efficiency in the use of raw materials  Section 6.1. Climate change	  is not reported as they are not considered a material aspect (see Materiality Matrix page 120).
e) Climate Change	103, 305-1, 305-2, 305-3, 305-5, 305-6, 305-7, 201-2	Section 2.6.3. Energy Transition - New Opportunities Section 6.1. Climate change Annex III: GRI Indicators - PART II: MATERIAL ASPECT - Environmental - Non-GHG emissions	

Contents	GRI Standards	Reference	Comments
f) Biodiversity protection	103, 304-3, 306-5, 304-1, 304-2	Section 6.4. Environment Annex III: GRI Indicators - PART II: MATERIAL ASPECTS - Environmental - Biodiversity	
<b>2. Information on social and personnel matters</b>			
a) Employment			
• Total number and distribution of employees by gender, age, country and job category	103, 102-8, 405-1	Section 2.4. Corporate Governance Section 6 Sustainability - 6.2. People - Human capital Appendix III: GRI Indicators - PART I General Contents Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Diversity and equality of opportunities	
• Total number and distribution of employment contract modalities	102-8	Section 6. Sustainability - 6.2. People - Human capital Appendix III: GRI Indicators - PART I Company Profile	
• Average annual number of permanent, temporary contracts and part-time contracts by sex, age and job category	102-8, 405-1	Section 2.4. Corporate Governance Section 6 Sustainability - 6.2. People - Human capital Appendix III: GRI Indicators - PART I General Contents Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Diversity and equality of opportunities	
• Number of dismissals by sex, age and job category	401-1	Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Employment	
• Average remuneration and their evolution broken down by sex, age and job category or equal value	405-2	Section 6. Sustainability - 6.2. People - Human capital Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Diversity and equality of opportunities	
• Wage gap, remuneration of identical jobs or company average	405-2	Section 6. Sustainability - 6.2. People - Human capital Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Diversity and equality of opportunities	
• The average remuneration of directors and executives, including variable remuneration, allowances, severance pay, payments to long-term savings schemes and any other wage item received, broken down by gender	103, 102-35, 102-36	Section 2.4 Corporate Governance Appendix III: GRI Indicators - PART I General Contents Appendix VII: 2018 Annual Corporate Governance Report -5. Remuneration of directors and senior management Appendix VII: 2018 Annual Corporate Governance Report -4. Committees of the Board of Directors- Remuneration Committee	Remuneration of the members of the Board of Directors of Administration and executive personnel are disclosed in note 30 of the 2018 Consolidated Financial Statements.
• Implementation of right-to-disconnect policies	103	Section 6. Sustainability - 6.2. People - Human capital	
• Employees with disabilities	405-1	Section 6. Sustainability - 6.2. People - Human capital Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Diversity and equality of opportunities	
b) Organization of work	103, 403-2	Section 6.2. People Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Health and occupational safety	
c) Health and safety	103, 403-2, 403-3, 403-4, 407-1	Section 6.3 Safe operation Section 6.8. Supply Chain Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Health and occupational safety	Repsol does not break down the accident rate by gender
d) Social relations	103, 102-41, 407-1, 403-4	Section 6.8. Supply Chain Appendix III: GRI Indicators - PART I General Contents Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Health and occupational safety	
e) Training	103, 404-1	Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Training and learning	
f) Universal accessibility of persons with disability	103	Section 6.2. People	
g) Equality	103	Section 6.2. People Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Human rights	
<b>3. Information on regarding human rights</b>			

Contents	GRI Standards	Reference	Comments
	103, 102-16, 102-17, 412-1, 412-2, 412-3, 410-1, 406-1, 407-1, 408-1, 409-1	About this report Section 6.2.2. Respect for Human Rights and Community Relations Section 6.7 Ethics and Compliance Section 6.8 Supply chain Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Human rights	
<b>4. Information relating to the fight against corruption and bribery</b>			
• Measures taken to prevent corruption and bribery	103, 102-16, 102-17, 205-1, 205-2, 205-3	About this report Section 6.7 Ethics and compliance Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Fight against corruption	
• Measures to combat money laundering	205-2	Section 6.7. Ethics and compliance Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Fight against corruption	
• Contributions to foundations and not-for-profit organizations	413-1	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance - Indirect economic impacts	
<b>5. Information about the company</b>			
a) Company commitments to sustainable development	103, 102-12, 102-13, 102-43, 203-1, 203-2, 204-1, 411-1, 413-1, 413-2	Section 6.2.2. Respect for Human Rights and Community Relations Section 6.8 Supply chain Appendix III: GRI Indicators - PART I: GENERAL CONTENTS - Materiality and stakeholder engagement Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Economic - Indirect economic impacts, local communities Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Social - Local communities	
b) Subcontracting and suppliers	103, 102-9, 308-1, 414-1	Section 6.8 Supply chain	
c) Consumers	103, 416-1		Supplier health, safety and satisfaction information is not reported as it is not considered material (see Materiality matrix page 126)
d) Tax information			
• Benefits obtained country by country. Income tax paid	201-1	Section 6.6. Responsible Tax Policy Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Economic - Economic performance	
• Public grants received	201-4	Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Economic - Economic performance	
<b>6. Other significant information</b>			
a) Other information on Company profile	102-1 A 102-7, 102-9, 102-10, 102-14, 102-15	Section 2.1 Business model Section 2.2 Repsol around the world Section 2.3 Corporate Structure Section 5.1 Upstream Section 5.2 Downstream Section 6.8 Supply Chain	
b) Corporate Governance	102-18 A 102-34; 102-37	Section 2.4 Corporate Governance Appendix III. GRI Indicators - PART I: General Contents	
c) Stakeholder engagement	102-40, 102-42 A 102-44	Appendix III: GRI Indicators - PART I: General Contents	
d) Other useful information on the preparation of the document	201-3, 202-1, 202-1, 206-1, 304-4, 305-4, 306-1, 306-3, 306-4, 401-2, 401-3, 402-1, 403-1, 404-2, 404-3, 414-2, 415-1, 417-1, 417-2, 417-3, 418-1, 419-1, OGI A OGI4	See Appendix IV: GRI Index	
e) Non-material GRI indicators (hence not reported)	301-2, 301-3, 305-6, 306-4, 416-1, 416-2, 417-1, 417-2, 417-3, 418-1	See Appendix IV: GRI Index	

# Appendix VI: table of conversions and abbreviations

			Oil				Gas		Electricity
			Liters	Barrels	Cubic meters	tep	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>3</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

(1) Measurement of reference: 32.35° API and relative density 0.8636

			Meter	Inch	Foot	Yard
Length	Meter	m	1	39.37	3.281	1.093
	Inch	in	0.025	1	0.083	0.028
	Foot	ft	0.305	12	1	0.333
	Yard	yd	0.914	36	3	1

			Kilogram	Pound	Ton
Mass	Kilogram	kg	1	2.2046	0.001
	Pound	lb	0.45	1	0.00045
	Ton	t	1,000	22.046	1

			Cubic foot	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

Term	Description	Term	Description	Term	Description
<b>bbl / bbl/d</b>	Barrel/ Barrel per day	<b>kbb</b>	Thousand barrels of oil	<b>Mm<sup>3</sup>/d</b>	Million cubic meters per day
<b>Bcf</b>	Billion cubic feet	<b>kbb/d</b>	Thousand barrels of oil per day	<b>Mscf/d</b>	Million standard cubic feet per day
<b>Bcm</b>	Billion cubic meters	<b>kboe</b>	Thousand barrels of oil equivalent	<b>kscf/d</b>	Thousand standard cubic feet per day
<b>Bep</b>	Barrel of oil equivalent	<b>kboe/d</b>	Thousand barrels of oil equivalent per day	<b>MW</b>	Megawatt (million watts)
<b>Btu/MBtu</b>	British thermal unit/ Btu/million Btu	<b>km<sup>2</sup></b>	Square kilometer	<b>MWh</b>	Megawatts per 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>Mbbl</b>	Million barrels	<b>tep</b>	Ton of oil equivalent
<b>Gwh</b>	Gigawatts per hour	<b>Mboe</b>	Million barrels of oil equivalent	<b>USD / Dollar / \$</b>	US dollar

## **Appendix VII: annual corporate governance report**

The 2018 Corporate Governance Report is included as an Appendix and forms an integral part of this report, as is required by Article 538 of the Spanish Companies Act.





*This version of our report is a free translation of the original, which was prepared in Spanish. All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinions, the original language version of our report takes precedence over this translation.*

## INDEPENDENT VERIFICATION REPORT

To the shareholders of Repsol, S.A.:

Pursuant to Article 49 of the Code of Commerce, we verified, under a limited level of assurance, the accompanying Statement of non-financial information (hereinafter "NFS") for the year ended 31 December 2018 of Repsol, S.A. and subsidiaries, making up the Repsol group (the Group), which forms part of the Group's consolidated management report.

The content of the consolidated management report includes information additional to that required by current mercantile regulations which has not been covered by our verification work. In this respect, our work was limited solely to verifying the information identified in Appendix V "Statement of non-financial information" and Appendix IV "GRI-Standard Index" in the accompanying consolidated management report.

We also carried out a moderate level assurance engagement on the application of the principles of inclusivity, materiality and responsiveness in relation to the information included in the section "Materiality and Stakeholder Engagement" of Appendix III of the accompanying consolidated management report, prepared in accordance with AA1000 AccountAbility Principles Standard 2008 (AA1000APS), issued by AccountAbility.

### Responsibility of the Directors

The preparation of the NFS included in the Group's consolidated management report and the content thereof are the responsibility of the Directors of Repsol, S.A. The NFS has been drawn up in conformity with the provisions of prevailing mercantile regulations and the Sustainability Reporting Standards of the Global Reporting Initiative ("GRI Standards") in accordance with the Core Option and Oil and Gas Sector Disclosures of the GRI G4 Guidelines (Oil & Gas Sector Disclosures), in line with the details provided for each matter in the tables included in Appendix V "Statement of non-financial information" and Appendix IV "GRI-Standard Index" of the consolidated management report.

This responsibility also includes the design, implementation and maintenance of the internal control considered necessary to ensure that the NFS is free from material misstatement due to fraud or error.

The directors of Repsol, S.A. are also responsible for defining, implementing, adapting and maintaining the management systems from which the information required to prepare the NFS is obtained as well as for the application of Standard AA1000APS (2008).

### Our independence and quality control

We have complied with the independence requirements and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants ("IESBA"), which is based on the fundamental principles of integrity, objectivity, professional competence and professional due care, confidentiality and professional behaviour.

.....  
PricewaterhouseCoopers Auditores, S.L., Torre PwC, Pº de la Castellana 259 B, 28046 Madrid, España  
Tel.: +34 915 684 400 / +34 902 021 111, Fax: +34 915 685 400, www.pwc.es

1





Our firm applies the International Standard on Quality Control 1 (ISQC 1) and therefore has in place a global quality control system which includes documented policies and procedures related to compliance with ethical requirements, professional standards and applicable legal and regulatory provisions.

The engagement team was made up of professionals specialising in non-financial information reviews and specifically in information on economic, social and environmental performance.

### **Our responsibility**

Our responsibility is to express our conclusions in an independent verification report to a limited level of assurance based on the work carried out in relation solely to fiscal year 2018. The data relating to previous years were not subject to the mandatory verification envisaged in current mercantile regulation. Our work was carried out in accordance with the requirements laid down in the current International Standard on Assurance Engagements 3000 (revised), "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (ISAE 3000 Revised) issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) and with the Guidelines for verification engagements on non-financial statements issued by the Spanish Institute of Auditors ("Instituto de Censores Jurados de Cuentas de España"). Additionally, we carried out our moderate level assurance engagement (type 2) in accordance with AA1000 Assurance Standard issued by AccountAbility.

In a limited assurance engagement, the procedures performed vary in terms of nature and timing, and are more limited than in a reasonable assurance engagement. Accordingly, the assurance provided is lower.

Our work consisted of posing questions to Management and various Group units that were involved in the preparation of the NFS, the review of the processes for compiling and validating the information presented in the NFS and the application of certain analytical procedures and review sampling tests, as described below:

- Meetings with Group personnel to understand the business model, policies and management approaches applied and the main risks related to these matters, and obtain the information required for the external review.
- Analysis of the scope, materiality and completeness of the content of the NFS for 2018 based on the materiality analysis performed by the Group, which is described in the section "Materiality and Stakeholder Engagement" of Appendix III of the consolidated management report, taking into account the content required by prevailing mercantile regulation.
- Analysis of the procedures used to compile and validate the information presented in the NFS for 2018.
- Review of information concerning risks, policies and management approaches applied in relation to material matters presented in the NFS for 2018.
- Analysis of the documentation and actions performed in relation to the principles of inclusivity, materiality and responsiveness of the AA1000APS (2008).
- Verification, through sample testing, of the information relating to the content of the NFS for 2018 and its adequate compilation using data supplied by Group information sources.
- Obtainment of a management representation letter from the Directors and Management.





## **Conclusion**

Based on the procedures performed in our verification and the evidence we have obtained, no matters have come to our attention that might lead us to believe that:

- The Group's NFS for the year ended 31 December 2018 has not been drawn up, in all significant respects, pursuant to prevailing mercantile regulations and GRI standards, in conformity with the Core Option and the Oil and Gas Sector Disclosures, in accordance with each topic in the tables included in Appendix V "Statement of non-financial information" and Appendix IV "GRI-Standard Index" in the consolidated management report.
- The information included in the section "Materiality and Stakeholder Engagement" of Appendix III of the consolidated management report, relating to the application of the principles of inclusivity, materiality and responsiveness, has not been prepared in all material respects, in accordance with the content of the AA1000APS (2008).

## **Recommendations**

With respect to the observations and recommendations for improvement arising in the course of our assurance engagement, set out below is a summary of the main recommendations for improvement in the application of the principles of inclusivity, materiality and responsiveness under the AA1000APS (2008), which do not modify our assurance conclusion expressed in this report.

### *Inclusivity:*

The Group is committed to its stakeholder relationships and during 2018 updated its analysis of materiality, enabling it to more accurately reflect the current context in which it operates and carries out activities. As indicated in the section "Materiality and Stakeholder Engagement" of Appendix III, the stakeholders involved were employees, investors and ESG (environment, social and corporate governance) analysts, companies in the value chain (vendors and contractors), civil society organisations and the media.

In order to improve stakeholder representativeness and inclusivity, once stakeholders are identified at an overall level, they should be prioritised in order to focus enquiries and regular surveys, promoting and strengthening additional communication channels. This will enable early identification of emerging topics to be addressed in the materiality analysis.

### *Materiality:*

Updating the materiality study in 2018 entailed analysing new information sources, specifically, the 2018 Sustainability Risk Matrix, the update of the Strategic Plan to 2020 and the Group's Global Sustainability Plan, among others. Including these information sources has enabled the valuation of the relevance of material matters to be adjusted from an internal viewpoint and the review of the prioritisation criteria and materiality thresholds.

From an external viewpoint, in addition to conducting enquiries and surveys of stakeholders, in 2018 the Group carried out specific Roadshows of social, corporate governance and environmental matters in order to learn its stakeholders' opinion first hand and its positioning with respect to these matters. In this respect, in order to improve and deepen its understanding of the significance for stakeholders and prioritise material matters, it is recommended that enquiries are updated regularly and extend the sample to all countries with significant operations.



*Responsiveness:*

During 2018, the Group continued to make progress on the approval of new Local Sustainability Plans, permitting the local definition of the six action components of the Global Sustainability Plan (Climate Change, People, Safe Operation; Environment, Innovation and Technology, Ethics and transparency). Specifically, new Local Sustainability Plans were published in Vietnam, Malaysia, Indonesia, Norway, and Libya and in the industrial centre of Sines (Portugal) in 2018.

Progress should continue to be made on the implementation of Local Sustainability Plans. Also, in order to strengthen the Group's responsiveness, and align decision making and actions to be implemented, impact should be factored in as a variable in the materiality analysis.

**Use and distribution**

This report has been drawn up in response to the requirement laid down in prevailing Spanish mercantile regulation and therefore might not be suitable for other purposes or jurisdictions.

PricewaterhouseCoopers Auditores S.L.

A handwritten signature in blue ink, appearing to be 'Pablo Bascones', written over a faint, light blue circular stamp or watermark.

Original in Spanish signed by Pablo Bascones

28 February 2019

