Repsol, S.A.
and investees comprising the Repsol Group

Audit Report,
Consolidated Financial Statements and
Consolidated Management Report
at 31 December 2018

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 auditor´s report on the consolidated financial statements

To the shareholders of Repsol, S.A.:

Report on the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Repsol, S.A. (the Parent company) and investees comprising the Repsol Group (the Group), which comprise the balance sheet as at December 31, 20x1, and the income statement, statement of other comprehensive income, statement of changes in equity, cash flow statement and related notes, all consolidated, for the year then ended.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the equity and financial position of the Group as at December 31, 2018, as well as its financial performance and cash flows, all consolidated, for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (IFRS-EU) and other provisions of the financial reporting framework applicable in Spain.

Basis for opinion

We conducted our audit in accordance with legislation governing the audit practice in Spain. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report.

We are independent of the Group in accordance with the ethical requirements, including those relating to independence, that are relevant to our audit of the consolidated financial statements in Spain, in accordance with legislation governing the audit practice. In this regard, we have not rendered services other than those relating to the audit of the accounts, and situations or circumstances have not arisen that, in accordance with the provisions of the aforementioned legislation, have affected our necessary independence such that it has been compromised.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

R. M. Madrid, hoja 87.250-1, folio 75, tomo 9.267, libro 8.054, sección 3ª
Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79 031290

Key audit matter	How our audit addressed the key audit matter
Assessment of the recovery of the carrying amount of the Group's non-current assets in Upstream	
The accompanying consolidated financial statements present intangible assets (including goodwill) and property, plant and equipment in the Upstream segment amounting to €3,729 million and €15,297 million, respectively. These assets are allocated to cash generating units (CGUs) as indicated in Notes 11 and 12 to the accompanying consolidated financial statements. As indicated in Note 13 to the accompanying consolidated financial statements, the Group has several investments in the Upstream segment carried under the equity method whose carrying amount at year-end 2018 amounts to €6,812 million, excluding investments in the Venezuelan subsidiaries. The Group carries out an analysis of impairment of the assets indicated by CGU on an annual basis, in accordance with the criteria described in Note 3, and determines their recoverable amount based on the present value of the future cash flows generated by them, taking into account the business plans approved by management. The key assumptions employed in preparing these flows are detailed in Notes 3 and 20 to the accompanying consolidated financial statements. In addition, Management has carried out a sensitivity analysis (Note 20.2) on the key assumptions, which, in light of earlier experience, may reasonably show variations. As a result of the above analyses, Group Management has recorded and reversed value adjustments for the CGUs detailed in Note 20. This area is key because it entails the application of critical judgements and significant estimates by Management concerning the key assumptions used, which are subject to uncertainty and significant future changes in key assumptions could have a significant impact on the Group's consolidated financial statements.	We started our analysis by gaining an understanding and assessing both the methodology applied and the relevant controls that the Group has in place to analyse asset recovery. In addition, we considered the adequacy of the allocation of assets to CGUs and the process for identifying those requiring an assessment of impairment, in accordance with applicable legislation. Also, we verified whether the cash flow projections prepared by the Group in the past have been consistently in keeping with real data, including the monitoring of delivery on the previous year's budgets. With the collaboration of our valuation experts, we assessed the adequacy of the valuation models employed, the assumptions and estimates used in the calculations, including both short and long-term estimates of the evolution of hydrocarbon purchase and selling prices, the estimation of hydrocarbon reserves by internal and external experts, production profiles, operation costs, the necessary investments for the development of existing reserves and the performance of discount rates. Specifically, in relation to future hydrocarbon prices, we verified Management's estimates with the information published by investment banks, consulting companies and relevant industry organisations and found that the price predictions used by the Group are within the range observed in these external publications. In relation to the discount rates, we verified that the methodology applied in their estimation and their value are within a reasonable range.

Key audit matter	How our audit addressed the key audit matter
	For hydrocarbon reserves, we evaluated the internal process for controlling and estimating reserves carried out by Management's internal experts and the competence and objectivity of those experts in order to satisfy ourselves that they were properly qualified to carry out the estimate of the current volumes of reserves and future production profiles, in accordance with the Group's business plans. In addition, we verified the consistency of the volumes estimated by internal experts with the data used in determining the recoverable value of the assets. For those cases where an external expert has issued an audit report on reserves, we gained an understanding of the process established by the Group in this connection, in addition to assessing the results of the experts' work, competence, capacity and independence in order to satisfy ourselves that they were suitably qualified to estimate volumes. We also verified the consistency of the volumes estimated by these third parties with the Group's internal estimates. Furthermore, we checked the mathematical accuracy of the calculations and models prepared by Management and assessed the sensitivity calculations carried out and the estimates of the magnitude of the change required in the key assumptions to trigger asset impairment, or the reversal of the impairment. We verified the recoverable amount calculated by the Group with the carrying amount of the assets in order to assess the existence or otherwise of impairment or reversal of impairment, as appropriate. We also assessed the sufficiency of the information disclosed in the consolidated financial statements with respect to the assessment of the recoverable amount of these assets. Based on the procedures carried out, we consider that Management's approach and conclusions, as well as the information disclosed in the accompanying consolidated financial statements are reasonable and consistent with the evidence obtained.

Key audit matter	How our audit addressed the key audit matter
Assessment of the recovery of the carrying amount of deferred tax assets	
As shown in the accompanying consolidated balance sheet, at 31 December 2018 the deferred tax asset balance amounts to €3,891 million, of which, according to Note 23.3 to the accompanying consolidated financial statements, available tax loss carryforwards and deductions amount to €3,671 million. Group management, when assessing whether the amount recognised in the consolidated financial statements for these assets is recoverable, takes into account, as mentioned in Notes 3 and 23.3, the forecast generation of future tax profits, using the methodology defined to analyse the recovery of its assets, the evaluation of the estimates of results of each entity or tax group in accordance with the Group's strategic plan, applicable tax legislation and the limit as regards the recoverability of such assets. As a result of the aforementioned analyses, Group management has concluded that the carrying amount of these assets is recoverable. This area is key due to the nature and significance of the assets recognised and that it implies applying significant estimates with respect to future tax profits, affecting the assessment of the recovery of these assets.	We started our analysis by assessing the relevant controls that the Group has in place to analyse the recovery of these assets. We also verified the consistency of the assumptions employed by Management in the financial projections used to determine future tax profits with the assumptions used in testing the Group's intangible assets and property, plant and equipment for impairment. Moreover, together with our tax experts, we assessed the estimate of corporate income tax, basically in relation to the appropriateness of the tax treatment of the operations performed and the calculations of deferred tax assets with respect to applicable tax legislation. We also assessed the sufficiency of the information disclosed in the consolidated financial statements with respect to the measurement and recognition of these assets. Based on the work carried out, we consider that the assumptions and estimates employed by Group management with respect to the recovery of the assets analysed are reasonable and consistent with the evidence obtained.
Assessment of the recovery of the Group's assets in Venezuela	
As indicated in Note 20.3 to the accompanying consolidated financial statements, the Group's asset exposure in Venezuela at 31 December 2018 amounts to €456 million. This amount includes the financing in dollars granted by the Group to the joint ventures Cardon IV, S.A. and Petroquiriquire, S.A.(Note 8) amounting to €518 million, and the trade receivables with Petróleos de Venezuela, S.A. (PDVSA) that are presented as Other non-current assets (Note 10.1.3), net of the provision for liabilities and charges for investments in joint ventures (Note 13) at 31 December 2018.	Our analysis started with understanding the processes that the Group has in place to perform the analysis of the assets' value, including the relevant controls implemented. With the collaboration of our team in Venezuela, we gained an understanding of the country's political, social and economic situation. As regards the Cardón IV investment, we assessed the competence and objectivity of the auditor of this component and obtained and assessed the unqualified audit report issued by the auditor, and other documentation associated with the audit work on this component.

Key audit matter	How our audit addressed the key audit matter
As detailed in Note 20.3, the country's general situation is affected by an economic recession, a regulated exchange system, high levels of inflation and the constant devaluation of local currency, an oil sector characterised by major public sector invention and involvement, with sharply declining output in the past few years, political instability, the state of economic emergency and the international disciplinary measures, among others. Except in the case of Quiriquire Gas, S.A., whose carrying amount is zero, the functional currency of investments in Venezuela is the US dollar, as indicated in Note 20.3 to the accompanying consolidated financial statements. Within the context described, the Group has analysed the recovery of its investments in Venezuela and recognised impairment of €1,159 million, of which €316 million was recorded against reserves as a result of the first application of IFRS 9 (Note 20.3) and €843 million in the consolidated income statement, as detailed in Note 20.3. In order to determine the expected loss on the loans to the joint ventures and the accounts receivable with PDVSA, the Group hired an independent expert to validate Management's judgements. This area requires a high level of judgement and estimation that Management should make in order to assess the recovery of its assets in Venezuela. This matter has therefore been considered a key audit matter.	Additionally, we applied certain audit procedures on the financial statements of Cardón IV and Petroquiriquire that have been included in the Group's consolidated financial statements using the equity method. With respect to the analysis of impairment losses on fixed assets of the above companies, we carried out the same audit procedures as those applied for the key audit matters described previously in the section*" Assessment of the recovery of the carrying amount of the Group's non-current assets in Upstream".* In order to analyse the recovery of the loans granted to the joint ventures and accounts receivable with PDVSA, we carried out the following audit procedures: ▪ Obtaining and review of the loan contracts with joint ventures and other relevant contractual information. ▪ Together with our experts in financial instruments, we analysed the reasonableness of the expected loss model prepared by Management. ▪ We analysed the information included in the independent expert report, engaged by the Group to assess Management's judgements on Venezuela's credit risk and assessed the competence of this expert and his objectivity to satisfy ourselves that he was adequately qualified to perform that engagement. Finally, we assessed the sufficiency of the information disclosed in the consolidated financial statements concerning the situation in Venezuela, the Group's presence in the country and the assumptions underpinning the measurement of these assets. Based on the work carried out, we consider that the assumptions and estimates employed by Group management with respect to the recovery of the assets analysed are reasonable and consistent with the evidence obtained.

Other matters

The consolidated financial statements of the Group for the year ended on December 31, 2017 were audited by another auditor who expressed an unqualified opinion on those consolidated financial statements on February 27, 2018.

Other information: Consolidated management report

Other information comprises only the consolidated management report for the 20x1 financial year, the formulation of which is the responsibility of the Parent company´s directors and does not form an integral part of the consolidated financial statements.

Our audit opinion on the consolidated financial statements does not cover the consolidated management report. Our responsibility regarding the information contained in the consolidated management report is defined in the regulation governing financial statement audit work, which establishes two distinct levels of responsibility:

a) A specific level applicable to the consolidated non-financial statement and some of the information included in the Annual Corporate Governance Report, as defined in article 35.2.b) of Spanish Law 22/2015, the Audit Act, which consists of solely checking that the required information has been provided in the management report or, where appropriate, it has been included a reference to the separate report on non-financial information in the prescribed manner; otherwise, reporting that it has not.

b) A general level applicable to the remaining information included in the consolidated management report, which consists on evaluating and reporting on the consistency between the aforesaid information and the consolidated financial statements as a result of our knowledge of the Group obtained during the audit of the aforementioned financial statements, and does not include information different to that obtained as evidence during our audit. Likewise, our responsibility is to evaluate and report on whether the content and presentation of this part of the consolidated management report are in accordance with applicable regulations. If, based on the work we have performed, we conclude that material misstatements exists, we are required to report that fact.

On the basis of the work performed, as described above, we have verified that the information mentioned in a) above is included in the consolidated management report and that the remaining information contained in the consolidated management report is consistent with that contained in the consolidated financial statements for the 2018 financial year, and its content and presentation are in accordance with the applicable regulations.

Responsibility of the directors and the audit committee for the consolidated financial statements

The Parent company´s directors are responsible for the preparation of the accompanying consolidated financial statements, such that they fairly present the consolidated equity, financial position and financial performance of the Group, in accordance with International Financial Reporting Standards as adopted by the European Union and other provisions of the financial reporting framework applicable to the Group in Spain, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Parent company´s directors are responsible for assessing the Group´s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Parent company´s audit committee is responsible for overseeing the process of preparation and presentation of the consolidated financial statements.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor´s report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with legislation governing the audit practice in Spain will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with legislation governing the audit practice in Spain, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group´s internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Parent company´s directors.

- Conclude on the appropriateness of the Parent company´s directors´ use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group´s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor´s report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor´s report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Parent company´s audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Parent company´s audit committee with a statement that we have complied with relevant ethical requirements, including those relating to independence, and we communicate with the audit committee those matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Parent company´s audit committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters.

We describe these matters in our auditor´s report unless law or regulation precludes public disclosure about the matter.

Report on other legal and regulatory requirements

Report to the Parent company´s audit committee

The opinion expressed in this report is consistent with the content of our additional report to the Parent company's audit committee dated February 28, 2019.

Appointment period

The General Ordinary Shareholders' Meeting held on May 19, 2017, appointed us as auditors of the Group for a period of three years, as from the year ended December 31, 2018.

Services provided

Services provided to the audited Group for services other than the audit of the accounts are disclosed in Note 32.2 to the consolidated financial statements.

PricewaterhouseCoopers Auditores, S.L. (S0242)

Iñaki Goiriena Basualdu (16198)

February 28, 2019

REPSOL Group

2018
Consolidated financial statements

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

REPSOL

Repsol, S.A. and investees comprising the Repsol Group
Balance sheet at December 31, 2018 and 2017

ASSETS	Note	€ Million 12/31/2018	€ Million 12/31/2017
Intangible Assets	11	5,096	4,584
Property, plant and equipment	12	25,431	24,600
Investment properties		68	67
Investments accounted for using the equity method	13	7,194	9,268
Non-current financial assets	8	1,103	2,038
Deferred tax assets	23	3,891	4,057
Other non-current assets		701	472
NON-CURRENT ASSETS		43,484	45,086
Non-current assets held for sale		6	22
Inventories	16	4,390	3,797
Trade receivables and other receivables	17	6,105	5,912
Other current assets		296	182
Other current financial assets	8	1,711	257
Cash and cash equivalents	8	4,786	4,601
CURRENT ASSETS		17,294	14,771
TOTAL ASSETS		60,778	59,857

EQUITY AND LIABILITIES	Note	€ Million 12/31/2018	€ Million 12/31/2017
Share capital		1,559	1,556
Share premium and reserves		25,894	25,541
Treasury shares and own equity investments		(350)	(45)
Net income for the year attributable to the parent		2,341	2,121
Other equity instruments		1,024	1,024
SHAREHOLDERS' EQUITY	7	30,468	30,197
Equity instruments with changes through other comprehensive income		13	-
Hedging transactions	9	(106)	(163)
Translation differences		253	(241)
OTHER CUMULATIVE COMPREHENSIVE INCOME		160	(404)
NON-CONTROLLING INTERESTS		286	270
EQUITY	7	30,914	30,063
Non-current provisions	14	4,738	4,829
Non-current financial debt	8	9,392	10,080
Deferred tax liabilities	23	1,028	1,051
Other non-current liabilities	15	1,896	1,799
NON-CURRENT LIABILITIES		17,054	17,759
Liabilities associated with non-current assets held for sale		-	1
Current provisions	14	500	518
Current financial liabilities	8	4,289	4,206
Trade payables and other payables	18	8,021	7,310
CURRENT LIABILITIES		12,810	12,035
TOTAL EQUITY AND LIABILITIES		60,778	59,857

Notes 1 to 34 are an integral part of the balance sheet.

Repsol, S.A. and investees comprising the Repsol Group
Consolidated income statement for the years ending December 31, 2018 and 2017

	Note	€ Million 2018	2017 [1]
Sales		49,701	41,242
Income from services rendered and other income		172	426
Changes in inventories of finished goods and work in progress		130	206
Reversal of impairment provisions and gains on disposal of assets		277	864
Other operating income		1,073	710
OPERATING INCOME		51,353	43,448
Supplies		(38,056)	(30,251)
Amortisation of non-current assets		(2,140)	(2,399)
Personnel expenses		(1,874)	(1,892)
Transport and freights		(1,114)	(1,072)
Supplies		(739)	(842)
Impairment loss provisions recognized and losses on disposal of assets		(1,281)	(922)
Other operating expenses		**(3,696)**	**(3,281)**
OPERATING COSTS		(48,900)	(40,659)
OPERATING INCOME	19	**2,453**	**2,789**
Net interest		(230)	(288)
Change in fair value of financial instruments		200	34
Exchange gains (losses)		467	151
Impairment of financial instruments		(370)	(1)
Other finance income and expenses		(240)	(208)
FINANCIAL RESULT	21	(173)	(312)
INCOME INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	22	1,053	630
NET INCOME BEFORE TAX		**3,333**	**3,107**
Income tax	23	(1,386)	(1,220)
PROFIT FROM CONTINUING OPERATIONS		**1,947**	**1,887**
INCOME FROM CONTINUING OPERATIONS ATTRIBUTED TO NON-CONTROLLING INTERESTS		(18)	(40)
INCOME FROM CONTINUING OPERATIONS ATTRIBUTED TO THE PARENT		**1,929**	**1,847**
INCOME FROM DISCONTINUED OPERATIONS ATTRIBUTED TO THE PARENT	24	412	274
TOTAL INCOME ATTRIBUTABLE TO THE PARENT		**2,341**	**2,121**
EARNINGS PER SHARE ATTRIBUTABLE TO THE PARENT	25	Euros / share	
Basic		1.45	1.29
Diluted		1.45	1.29

[1] Includes the necessary amendments to the 2017 consolidated financial statements in relation to the sale of the stake in Naturgy Energy Group, S.A. (see Note 2.2.1).

Notes 1 to 34 are an integral part of the consolidated income statement.

Repsol, S.A. and investees comprising the Repsol Group
Statement of recognized profit or loss corresponding to the years ending December 31, 2018 and 2017

	Millions of euros	
	2018	2017
CONSOLIDATED NET INCOME FOR THE YEAR [1]	2,359	2,161
Due to actuarial gains and losses	4	1
Investments accounted for using the equity method	25	6
Equity instruments with changes through other comprehensive income	3	1
Tax effect	4	-
OTHER COMPREHENSIVE INCOME. ITEMS NOT RECLASSIFIABLE TO INCOME	36	8
Cash flow hedging:	39	22
Valuation gains / (losses)	3	(5)
Amounts transferred to the income statement	36	27
Translation differences:	332	(2,660)
Valuation gains / (losses)	383	(2,622)
Amounts transferred to the income statement	(51)	(38)
Share of investments in joint ventures and associates:	181	(132)
Valuation gains / (losses)	-	(175)
Amounts transferred to the income statement	181	43
Tax effect	14	(30)
OTHER COMPREHENSIVE INCOME. ITEMS RECLASSIFIABLE TO INCOME	566	(2,800)
TOTAL OTHER COMPREHENSIVE PROFIT/(LOSS)	602	(2,792)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	2,961	(631)
a) Attributable to the parent	2,940	(662)
b) Attributable to non-controlling interests	21	31

[1] Constituting the sum of the following consolidated income statement captions: "*Net income from continuing operation*" and "*Net income attributable to the parent company from discontinued operations*".

Notes 1 to 34 are an integral part of the consolidated statement of recognized income and expense.

Repsol, S.A. and investees comprising the Repsol Group
Statement of changes in equity corresponding to the years ending December 31, 2018 and 2017

	Equity attributed to the parent and other equity instrument holders							
	Shareholders' equity							
€ Million	Share Capital	Share premium and reserves	Treasury shares and own equity instruments	Net income for the year attributable to the parent	Other equity instruments	Other cumulative comprehensive income	Non-controlling interests	Equity
Closing balance at 12/31/2016	1,496	24,232	(1)	1,736	1,024	2,380	244	31,111
Total recognized income/(expenses)	-	2	-	2,121	-	(2,785)	31	(631)
Transactions with partners or owners:								
Share capital increase/(reduction)	60	(60)	-	-	-	-	-	-
Dividends and stockholder remuneration	-	(342)	-	-	-	-	(5)	(347)
Transactions with treasury shares and own equity investments (net)	-	-	(44)	-	-	-	-	(44)
Increases/(reductions) by perimeter variations	-	-	-	-	-	-	-	-
Other transactions with partners and owners	-	-	-	-	-	-	-	-
Other equity variations:								
Transfers between equity-line items	-	1,736	-	(1,736)	-	-	-	-
Subordinated perpetual obligations	-	(29)	-	-	-	-	-	(29)
Other variations	-	2	-	-	-	1	-	3
Closing balance at 12/31/2017	1,556	25,541	(45)	2,121	1,024	(404)	270	30,063
Impact of new standards (see note 2.2.2)	-	(351)	-	-	-	(5)	-	(356)
Adjusted opening balance	1,556	25,190	(45)	2,121	1,024	(409)	270	29,707
Total recognized income/(expenses)	-	29	-	2,341	-	570	21	2,961
Transactions with partners or owners:								-
Share capital increase/(reduction)	72	(72)	-	-	-	-	-	-
Dividends and stockholder remuneration	-	(275)	-	-	-	-	(5)	(280)
Transactions with treasury shares and own equity investments (net)	(69)	(1,072)	(305)	-	-	-	-	(1,446)
Increases/(reductions) by perimeter variations	-	-	-	-	-	-	-	-
Other transactions with partners and owners	-	-	-	-	-	-	-	-
Other equity variations:								
Transfers between equity-line items	-	2,121	-	(2,121)	-	-	-	-
Subordinated perpetual obligations	-	(29)	-	-	-	-	-	(29)
Other variations	-	2	-	-	-	(1)	-	1
Closing balance at 12/31/2018	1,559	25,894	(350)	2,341	1,024	160	286	30,914

Notes 1 to 34 are an integral part of the consolidated statement of changes in equity.

Repsol, S.A. and investees comprising the Repsol Group
Statement of cash flows corresponding to the years ending December 31, 2018 and 2017

	Note	€ Million 2018	2017
Net income before tax		**3,333**	**3,107**
Adjusted result:		**2,360**	**2,146**
Amortisation of non-current assets	11 and 12	2,140	2,399
Other adjustments to net profit/(losses)		220	(253)
Changes in working capital		**(389)**	**(110)**
Other cash flows from / (used in) operating activities:		**(725)**	**(30)**
Collections of dividends		472	511
Income tax receivable / (payable)		(762)	(320)
Other receipts / (payments) of operating activities		(435)	(221)
CASH FLOWS FROM OPERATING ACTIVITIES	26	4,579	5,113
Payments for investments:	4, 11 and 12	**(5,501)**	**(3,094)**
Companies of the group and associates		(807)	(327)
Property, plant and equipment, intangible assets and property investment		(2,661)	(2,300)
Other financial assets		(2,033)	(467)
Proceeds from divestments:	4	**4,074**	**254**
Companies of the group and associates		3,372	16
Property, plant and equipment, intangible assets and property investment		119	78
Other financial assets		583	160
Other cash flows		**68**	**51**
CASH FLOWS FROM INVESTMENT ACTIVITIES	26	(1,359)	(2,789)
Proceeds and (payments) on equity instruments:	7	**(1,595)**	**(293)**
Acquisition		(1,808)	(304)
Disposal		213	11
Proceeds and (payments) on financial liability instruments:	8	**(796)**	**(1,163)**
Issue		18,127	10,285
Return and amortization		(18,923)	(11,448)
Payments on stockholder remuneration and other equity instruments	7	**(297)**	**(332)**
Other cash flows from financing activities:		**(344)**	**(573)**
Payments of interests		(454)	(537)
Other receipts/(payments) of financing activities		110	(36)
CASH FLOWS FROM FINANCING ACTIVITIES	26	(3,032)	(2,361)
EXCHANGE RATE FLUCTUATIONS EFFECT	26	(3)	(49)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		185	(86)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		4,601	4,687
CASH AND CASH EQUIVALENTS AT END OF PERIOD:	8	4,786	4,601
Cash and banks		4,124	3,753
Other financial assets		662	848

Notes 1 to 34 are an integral part of the consolidated cash flow statement.

Repsol, S.A. and Investees comprising the Repsol Group
NOTES TO THE 2018 CONSOLIDATED FINANCIAL STATEMENTS

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GENERAL INFORMATION

(1) ABOUT THIS REPORT

1.1) About the Repsol Group

Repsol is a group of companies in the energy sector (hereinafter, *"Repsol"*, *"Repsol Group"* or *"Group"*) with a presence in five continents.

It performs all its energy generation, transformation and marketing activities on an integrated basis. In the oil and gas industry, such activities include exploration, development and production of crude oil and natural gas, transportation of oil products, liquefied petroleum gas (LPG) and natural gas, refining, the production of a wide range of oil products and the marketing of oil products, oil derivatives, petrochemical products, LPG, natural gas and liquefied natural gas (LNG). In the electricity industry and following the acquisition of Viesgo (see Note 4), it adds the generation and marketing of electricity and natural gas.

1.2) About the parent company

The corporate name of the parent company of the Repsol Group that prepares and files these Financial Statements is Repsol, S.A. It is registered at the Madrid Companies Register in sheet no. M-65289; its tax ID number (C.I.F.) is A-78/374725 and its C.N.A.E. no. is 70.10.

Repsol S.A. is a private-law entity, incorporated in accordance with Spanish legislation, which is subject to the Companies Act (Ley de Sociedades de Capital), whose consolidated wording was approved by Legislative Royal Decree 1/2010 of July 2nd, and all other legislation related to listed companies.

Its registered office is in Madrid, 44 calle Méndez Álvaro, where the Shareholder Information Office is also located, the telephone number of which is 900 100 100.

The shares of Repsol, S.A. are represented by book entries and listed on the continuous market of the Spanish stock exchanges (Madrid, Barcelona, Bilbao and Valencia).[1] The Company also participates in the ADS (American Depositary Shares) Program which, on March 9, 2011, began to trade on the OTCQX market, a platform within the OTC (*over-the-counter*) market in the United States, and which distinguishes issuers with improved market information policies and solid business activities.

1.3) About the consolidated Financial Statements and supplementary information

The accompanying Consolidated Financial Statements of Repsol, S.A. and its investees, comprising the Repsol Group, present fairly the Group's equity and financial position at December 31, 2018, as well as the Group's consolidated earnings performance, the changes in the consolidated equity and the consolidated cash flows for the year then ended.

These consolidated financial statements were prepared by the Board of Directors of Repsol S.A.[2] at its meeting held on February 27, 2019 and they will be submitted, together with the financial statements of its investees, for approval by their respective Annual General Meetings; it is expected that they will be approved without any modifications.[3]

The Group's Management Report is published jointly with the consolidated financial statements. In addition, Repsol has published "*Information on Oil and Gas Exploration and Production Activities*" and the "*Report on Payments to Governments on Oil and Gas Exploration and Production Activities" as supplementary information not reviewed by the external auditor.*" All these reports are available at www.repsol.com.

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[1] On January 28, 2019, the shares of Repsol, S.A. were withdrawn from the public offering and listing regime in Argentina.

2 The preparation of the Consolidated Financial Statements, which is the responsibility of the Board of Directors of the Group's parent company, makes it necessary to use accounting estimates and judgments when applying the accounting standards. The areas in which most significant judgments and estimates have to be made are detailed in Note 3.

3 The 2017 Consolidated Financial Statements were approved at Repsol's Shareholder Annual Meeting held on May 11, 2018.

1.4) Main changes in the Group's activities

On May 18, 2018, Repsol, S.A. sold its stake (20.072%) in Naturgy Energy Group, S.A. to Rioja Bidco Shareholdings. (formerly Gas Natural SDG, S.A. and, hereinafter, "*Naturgy*" or "*Naturg*y Group").

On June 6, 2018, the update of the Strategic Plan for 2018-2020 ("Strategic Plan") was published. 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. To date:

- The acquisition of non-regulated low-emission electricity production businesses operated by Viesgo was completed, together with its gas and electricity marketing company (see Note 4); and

- Valdesolar Hive, S.L. was acquired, which will develop a photovoltaic project in Valdecaballeros (Badajoz), and which will have a rated power of 206.24 MW (263.7 MW peak) and may be operative between 2019 or 2020.

The Group, also in line with its Strategic Plan, increased its international presence in the *Downstream* businesses in Mexico, where it inaugurated the first service stations, and it entered in the Lubricants business with the acquisition of Bardhal de México, S.A. and in Peru where Energy Perú SAC was acquired, adding 26 service stations to the more than 500 that Repsol already had in the country.

1.5) Breakdown of the Group

The Repsol Group contains more than 300 companies incorporated in more than 40 countries (mainly in Spain, the Netherlands, Canada and the United States) that, from time to time, carry out activities abroad through branches, permanent establishments and so on.

The Repsol Group comprises subsidiaries, joint arrangements and associates. Appendix I details the main companies, subsidiaries, joint arrangements and associates that form part of the Repsol Group included in the scope of consolidation.

In the *Oil&Gas* industry, exploration and production activities are usually carried out through partnerships or associations between companies classified as joint arrangements, which are implemented through *Joint Operation Agreements*, which are included in the shareholders' financial statements in accordance with the share of the assets, liabilities, income and expenses arising from the agreement, or as *Joint Ventures*, which are included in shareholders' financial statements using the equity method.

In 2018, significant changes took place in the Group's composition due to the sale of the 20% stake in Naturgy Energy Group, S.A. and the acquisition, within the framework of the strategic update, of the businesses tied to the energy transition. There were no significant changes in the Group's scope of consolidation in 2017.

For further information on changes in the Group's composition, see Note 4. and Appendix I.

(2) BASIS OF PRESENTATION

2.1) Main principles

The consolidated Financial Statements were prepared based on the accounting records of Repsol, S.A. and its investees. They are presented in accordance with the International Financial Reporting Standards (IFRSs) as issued by the *International Accounting Standards Board* (IASB), adopted by the European Union (EU) as of December 31, 2018[1] and other provisions of the applicable regulatory framework.[2] Of the changes in accounting standards that have been applied by the Group as of January 1, 2018[3] that are noteworthy due to their impact on these financial statements were IFRS 9 *Financial Instruments* and IFRS 15 *Revenue from Contracts with Customers*, as described in section 2.2.2 of this Note.

Repsol prepares its consolidated Financial Statements including the investments in all its subsidiaries, joint arrangements and associates,[4] whose accounting standards have been unified with those of the parent in order to present consolidated financial statements by applying uniform accounting policies.

The consolidated Financial Statements are presented in millions of euros, which is the functional currency of the parent company and presentation currency of the consolidated financial statements. The items included in these consolidated financial statements relating to the Group companies are measured using their functional currency, which is the currency in the main economic environment in which they operate; when this differs from the presentation currency, the conversion is carried out as stated below: i) The assets and liabilities in each of the balance sheets presented are translated applying the closing exchange rate on the balance sheet date, ii) income and expense items are translated applying the average cumulative exchange rate for the financial year in which the transactions were performed (however, the transaction-date exchange rate is used to translate significant transactions or when exchange rates have fluctuated significantly during the reporting financial year), and iii) any exchange differences arising as a result of the foregoing are recognized as "Translation Differences" under the Equity heading.

Transactions in currencies other than the functional currency of an entity are deemed to be 'foreign currency transactions' and are translated to the functional currency by applying the exchange rates prevailing at the date of the transaction. At each year end, the foreign currency monetary items on the balance sheet are measured applying the exchange rate prevailing at that date and the exchange rate differences arising from such measurement are recorded as "Net exchange gains/(losses)" under Financial result.

The exchange rates against the euro of the main currencies used by the Group companies at December 31, 2018 and 2017 were as follows:

	December 31, 2018		December 31, 2017	
	Closing rate	Accumulated average rate	Closing rate	Accumulated average rate
US dollar	1.15	1.18	1.20	1.13
Brazilian real	4.44	4.31	3.97	3.61

[1] The IFRSs adopted and in effect in the EU differ in some respects from the IFRSs issued by the IASB; however these differences do not have a material impact on the Group's consolidated financial statements in the years presented.

[2] The policies considered significant in accordance with the nature of the Group's activities are described at the end of this Note and other significant policies and those considered an accounting policy option are shown in the corresponding Notes.

[3] The standards applied effective January 1, 2018, are: i) IFRS 9 *Financial Instrument*; ii) IFRS 15 *Revenue from contracts with customers*; iii) Clarifications to IFRS 15 *Revenue from contracts with customers;*; iv) Amendments to IFRS 4 *Application of IFRS 9 Financial Instruments* with IFRS 4 *Insurance contracts*; v) Annual Improvements to IFRSs, *2014-2016 Cycle*; vi) Amendments to IFRS 2 *Clarifications of classification and measurement of share based payment transactions;* vii) Amendments to IAS 40 *Transfers of investment property;* and viii) IFRIC 22 *Foreign currency transactions and advance consideration. Except as described in section 2.2.2 for IFRS 9 and IFRS 15, the other standards have not had a significant impact.*

[4] Group companies are classified according to the control exercised over them: i) subsidiaries: Those companies over which Repsol exercises direct or indirect control, are fully consolidated, ii) joint arrangements: those whose strategic operational and financial decision-making require unanimous consent from the parties wielding joint control and classified as i) joint operations structured through a *Joint Operating Agreement* (JOA), or a similar vehicle whose stakes are retained by the Group or through a stake in fully consolidated subsidiaries, or ii) joint ventures recognized using the equity method; and iii) associates: stakeholdings over which there is significant influence, where Repsol's consent is not required in strategic operational and financial decision-making, but over which it has power to intervene and that are accounted for using the equity method.

2.2) Comparative information

2.2.1 Changes in the scope of consolidation

Following the sale of the stake in Naturgy (see Note 1.4), income from said stake has been classified under "*Income from discontinued operations, net of taxes*" (see Note 24). The 2017 income statement has been restated for comparative purposes.

2.2.2 Application of new accounting standards

IFRS 9 Financial instruments

IFRS 9 *Financial Instruments* came into force on January 1, 2018, with the option of not restating comparative information corresponding to 2017. The impact of its initial application has been recognized directly in equity, as follows:

Asset impairment:

The initial application of the new scheme of impairment due to credit risk based on expected loss[1] has entailed a negative impact of €348 million, mainly attributable to financial assets associated with Venezuela. This impact has been recognized under "*Retained earnings and other reserves*", (Note 7) broken down as follows:

	12/31/2017			Adjustment IFRS 9 (3)	01/01/2018
	Gross	Impairment provision (2)	Net		
Non-current financial assets (1)	3,744	(1,706)	2,038	(289)	1,749
Other non-current assets	472	-	472	(42)	430
Trade receivables and other receivables	6,085	(173)	5,912	(71)	5,841
Current and non-current provisions	(5,222)	(125)	(5,347)	(19)	5,366
Effect on net assets		**(2,004)**		**(421)**	**(2,654)**
Investments accounted for using the equity method		-	9,268	(12)	9,256
Deferred tax assets				85	
Effect on Equity				**(348)**	

(1) See Note 10.3
(2) Balance of provision model for incurred loss (IAS 39) at December 31.
(3) The accumulated loss, if any, is presented as a reduction of the corresponding asset account.

[1] See Note 10.3 for more information relating to the Group's expected loss model.

Classification of financial assets:

Financial assets have been classified at January 1, 2018, as financial assets measured at fair value through profit or loss under "Other comprehensive income)" according to the nature of the contractual cash flows of the assets and the business model applied by the company,[1] there have been no significant impacts as a result of the changes in classification.

Below is the reconciliation of the classification of financial assets under IAS 39 and IFRS 9 on the date of initial application:

Type of instrument	Classification 12/31/2017 (IAS 39)	Classification 1/1/2018 (IFRS 9)	Amount
Equity Instruments[(1)]	Available for sale	VR[2] with changes through other comprehensive income	101
		VR with changes on profit	17
Derivatives	Held for trading	VR with changes on profit	79
Loans	Loans and receivables	Amortized cost	2,106
Cash and other cash equivalents	Held to maturity investments	Amortized cost	4,593
Other instruments	VR[2] with changes on profit	VR with changes on profit	62

NOTE: Does not include "*Other non-current assets*" and "*Trade receivables and other receivables*" in the balance sheet, which, at December 31, 2017, came to €470 million (non-current) and €5,161 million (current), of which €1,028 million correspond to current accounts receivable on commodities sales agreements, which are measured at fair value with changes through profit and loss; the remainder corresponds mainly to trade accounts receivable measured at amortized cost.

[(1)] Portfolio of companies not consolidated or accounted for using the equity method.
[(2)] VR: Fair value.

In terms of financial liabilities, there has been no significant impact on the classification or measurement as a result of the application of IFRS 9.

Hedge accounting and derivatives:

The Group has chosen to apply IFRS 9 for the accounting of its hedging activities, despite the standard allowing for the continued application of IAS 39 until the IASB completes its "*Dynamic risk management*" project, on account of the greater flexibility provided by the new standard.

The new standard: (i) eliminates the requirement of retroactive assessment in order to evaluate the continuity of the hedge; (ii) allows the mitigation of accounting asymmetries caused by the operation of supply and marketing of *commodity* contracts and derivative instruments used as their economic hedges, through the application of the fair value option to such contracts and; (iii) provides greater flexibility in relation to hedge accounting, specifically in relation to the instruments that can be used as hedging instruments and in relation to the transactions that can be hedged.

There have been no impacts of initial application for IFRS 9 in relation to hedge accounting.

IFRS 15 Revenue from contracts with customers

IFRS 15 *Revenue from contracts with customers* and the amendments to the rest of the IFRS affected by it was applied on January 1, 2018, without re-stating the comparative information relating to 2017.

IFRS 15 replaces IAS 18 *Revenue* and IAS 11 *Construction Contracts* and applies to all revenue arising from contracts with customers, unless such contracts are within the scope of other standards. According to the new accounting recording requirements, the revenue from each of the contract performance obligations must be separately identified,

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[1] Investments in debt held within a business model whose objective is to obtain contractual cash flows consisting exclusively of the principal and interest are generally measured at amortized cost. When these debt instruments are held within a business model whose objective is achieved by obtaining contractual cash flows of the principal and interest and the sale of these instruments, generally speaking, they are measured at fair value with changes in "*Other comprehensive income*". All other investments in debt and equity will be measured at fair value with changes through profit or loss. However, it is possible to irreversibly decide to include subsequent changes in the fair value of certain equity instruments in "*Other comprehensive income*" and, in general, in this case only dividends will be recognized afterwards in income.

classified and accrued. Among other issues, the standard also establishes the accounting criteria for activating the incremental costs of obtaining a contract with a customer.

The Group has reviewed the type of contracts with customers (mainly sales of crude oil, gas, petroleum products, chemicals and lubricants and specialties) and has not identified in these that there is generally more than one performance obligation. Repsol fulfills its performance obligation through delivery of the product, generally hydrocarbons, which occurs at a particular moment in time. The following impacts derived from the application of IFRS 15 are identified, which have been recorded under the balance sheet heading *"Retained earnings and other reserves"*:

	12/31/2017	Adjustment IFRS 15	01/01/2018
Other non-current liabilities [1]	(1,799)	(20)	(1,819)
Trade payables and other payables [1]	(7,310)	(4)	(7,314)
Investments accounted for using the equity method	9,268	9	9,277
Effect on net assets and liabilities		(15)	
Deferred tax assets		6	
Effect on Equity		(9)	

[1] Two distinct performance obligations have been identified in contracts for the bulk supply of liquefied petroleum gases (LPG): (i) the sale of liquefied gas, which occurs at a specific point in time; and (ii) maintenance services, which are provided generally over the life span of the contract, giving rise to a contractual liability shown under "*Other non-current liabilities*" and "*Trade payables and other payables*" for outstanding services and that, as of January 1, 2018, came to €20 million and €4 million respectively, and accumulated losses of €18 million after tax, recognized under "*Retained earnings and other reserves*" (see Note 7).

According to certain *Upstream* segment contracts, for the payment of Group taxes, production deliveries are made to national oil companies which, once the control has been transferred, they can market freely in the market. Based on the economic substance of the transactions, the monetary value of these production volumes is shown under "*Sales*" on the income statement (formerly under "*Services rendered and other income*"). The amounts recognized in 2018 under "*Sales*" come to €570 million for this item.

As regards the incremental costs of obtaining a contract with a customer, the costs that the Group had previously recorded under the balance sheet heading "*Intangible assets*" as reflagging costs have been identified as such. The net balance of this item at January 1, 2018, came to €26 million

Finally, in relation to the additional breakdowns of information, the opening of revenue from ordinary activities (corresponding to the sum of the headings "*Sales*" and "*Services rendered and other income*") by geographical area has been incorporated (see Note 19).

2.2.3 Earnings per share

Earnings per share at December 31, 2017 have been restated with respect to that recognized in the 2017 consolidated financial statements in accordance with accounting standards, as the average number of outstanding shares considered in the calculation should be based on the new number of shares issued after the capital increases carried out as part of the compensation scheme to shareholders known as the *"Repsol Flexible Dividend"* system described in Note 7.

2.3) New standards issued for mandatory application in future years

The standards and amendments to standards issued by the IASB that will be mandatory in future reporting periods are listed below:

Standards and amendments to standards	Date of 1st application
Adopted by the European Union	
IFRS 16 *Leases*	January 1, 2019
Interpretation IFRIC 23 *Uncertainty over income tax treatment* [(1)]	January 1, 2019
Amendments to IFRS 9 *Prepayment features with negative compensation* [(1)]	January 1, 2019
Amendments to IAS 28 Long-term interests in associates and joint ventures[(1)]	January 1, 2019
Pending adoption by the European Union [(2)]	
Annual Improvements to IFRSs, *2015-2017 Cycle* [(3)]	January 1, 2019
Amendments to IAS 19 *Employee benefits: modification, reduction or settlement of the plan*	January 1, 2019
Amendments to References to the Conceptual Framework in IFRS Standards	January 1, 2020
Amendments to IFRS 3: *Business definition*	January 1, 2020
Amendments to IAS 1 and IAS 8: *Definition of materiality*	January 1, 2020
IFRS 17 *Insurance contracts*	January 1, 2021
Amendments to IFRS 10 and IAS 28 *Sale or contribution of assets between an investor and its associate or joint venture*[(4)]	Undefined

1 No significant impacts have been identified resulting from its application.
2 With regard to these standards and amendments, the Group is currently assessing the impact their application may have on the consolidated financial statements, without any significant impacts having been identified to date.
3 Includes Amendments to IAS 12 *Income tax*, to IAS 23 *Borrowing costs* and IFRS 3 *Business combinations* and to IFRS 11 *Joint arrangements*.
4 The application of these amendments to IFRS 10 and IAS 28, which were originally issued in September 2014, was deferred indefinitely in December 2015, until such time as the IASB completes the project relating to the equity method, which, in turn, has been delayed until the post-implementation phase of IFRS 10, IFRS 11 and IFRS 12.

IFRS 16 *Leases:*

IFRS 16, Leases, was issued in January 2016, adopted by the European Union in October 2017, replacing IAS 17 *Leases* and the related interpretation IFRIC 14 *Determining whether an Arrangement Contains a Lease*. IFRS 16 establishes the principles for the recognition, measurement, presentation and breakdown of lease information.

Changes in accounting regulations

The main change introduced by IFRS 16 was the requirement for leases currently classified as operating leases by the lessee to be recognized in the balance sheet with similar methods to those used for finance leases under IAS 17 in force until 31 December 2018. IFRS 16 is effective for the annual periods commencing from January 1, 2019.

IFRS 16 does not introduce significant changes regarding the recognition of lease arrangements by the lessor. It does introduce significant changes for the lessee who, on the date on which the lease commences, must recognize a liability for lease payments and an asset for the right to use the "underlying asset" during the lease term in the balance sheet. Likewise, lessees must separately recognize the expense for the financial update of the lease liability and the amortization charge for the "asset for the right of use". Accordingly, the adoption of IFRS 16 will improve operating income in 2019, while increasing the finance cost. Cash flows from operating activities will also increase while, on the other hand, cash flows from financing activities will be reduced.

The lessees must also re-assess the amount of liabilities from leases if certain events occur (for example, changes in the lease period, fluctuations in future lease payments due to variations in an index or rate used to determine such payments, changes with regard to the exercise of purchase options, etc.). Lessees will recognize the amount of the new measurement of the lease liability as an adjustment to the carrying amount of the asset for the right of use, with the exception of a downward adjustment that exceeds such value, in which case, income would be recognized for the amount of such excess.

First-time application options

The Group decided to opt to perform a simplified retrospective application of the regulation, whereby the impact of the first application will be recognized in the heading *"Retained earnings and other reserves"* without a re-expression of the comparative periods. Within this option, the Group calculated the lease liability as the current value of the outstanding payments of the arrangements in force at the date of first-time application and retrospectively calculated the value of the asset for the right of use, only for those arrangements with the greatest quantitative significance, having considered for the remaining arrangements the value of the leased liability as the initial value of the asset for the corresponding right of use.

It will also make use of the options envisaged in the standard for lessees, which permit the lease liability and the asset for the right of use corresponding to lease arrangements for assets of little value (equivalent amount in euros to US $5,000) and short-term leases (leases for a period equal to or less than a year) not to be recognized in balance sheet.

In agreements that contain leasing and other components, mainly services, the Repsol Group will separate such components and recognize solely the lease component, pursuant to IFRS 16, *Leases*, and recognize other component as a performance contract, in accordance with the accrual criterion of the expense under the agreement.

A specific review was performed of the lease arrangement inventory classified as operating leases in accordance with the new standard, and new lease arrangements not identified previously did not arise.

With regard to the discount rate[1] used for these calculations, the Group generally used the incremental rate of the lease payable on the date of first-time application, which was determined taking into consideration, among other factors, the term of the arrangement, the economic climate of the country and the currency in which it was denominated and, when significant, the characteristics of the underlying asset.

Lastly, in relation to the recognition of leases in *Joint Operations*, which is very common in the performance of oil exploration and production activities, the Group performed a specific analysis of all its contractual obligations and will recognize all those arrangements for which it has a contractual obligation with the lessor in the balance sheet, that is, all those arrangements which: (i) it has signed in full as operating partner on its own behalf; (ii) it has jointly signed a joint arrangement with the remaining partners, in line with his percentage of ownership in the arrangement; and (iii) those that have been signed by the operating partner on behalf of the consortium or the remaining partners of the joint arrangement, in line with the terms and percentage of ownership of each partner in the arrangement. With regard to the arrangements signed on its behalf by a third party in the position of operating partner in a joint arrangement, the Group will recognize, as its percentage of ownership in the arrangement, those contracts for which it is determined that a sub-lease exists, considering in this assessment, both the repayment obligation to the operating partner of the costs of the main lease arrangement, and the control of the right to use the asset identified by the Group.

[1] The average discount rate applied to operating lease liabilities recognized at the date of first-time application of IFRS 16 was 3%.

Impacts of first-time application

The first-time application of IFRS 16 will represent an estimated impact of -€83 million after taxes recognized in "*Retained earnings and other reserves*":

	12/31/2018	Adjustment IFRS 16[2]	01/01/2019
Assets for rights of use of the assets [1]	768	1,169	1,937
Investments accounted for using the equity method	7,194	(48)	7,146
Accounts receivable	-	29	29
Other current and non-current liabilities[2][3]	(1,624)	(1,367)	(2,991)
Non-current provisions	(4,738)	122	(4,616)
Effect on net assets and liabilities		(95)	
Deferred tax assets and liabilities		12	
Effect on Equity		(83)	

[1] In 2018, they were recognized in the property, plant and equipment and intangible assets headings for the amount of €768 million corresponding to financial lease arrangements prior to the first-time application of IFRS 16 which, from January 1, 2019, will be recognized under "Assets for rights of use" (see Note 15).

[2] Basically relates to the lease of offices, service stations and facilities, cargo ships and Upstream operation platforms, Likewise, the burdensome provision associated with certain operating lease arrangements will be cancelled against the corresponding asset.

[3] Includes the financial lease liability in accordance with the previous accounting standard.

Although the Group does not expect significant changes in these estimates, these figures may vary as a result of the review process under way at the date these financial statements were prepared.

The reconciliation between the operating lease commitments at December 31 and the liabilities recognized on January 1, 2019 in accordance with IFRS 16 is as follows:

	€ Million
Operating lease commitments as at 31 December (see Note 19,8)	**1,599**
Financial discount on future payments	(209)
Short-term and low-value leases	(23)
Operating lease liability recognized as at 1 January	**1.,367**

Other impacts

As a result of the new accounting treatment of leases under IFRS 16, the Group's net income will not be affected (or the impact will be immaterial). However, other financial aggregates will be affected and, for example, operating profit will increase (lower operating expenses) and financial profit will decrease (higher financial expenses). Net cash change will also not be altered by the application of IFRS 16, but its classification will: cash flow from operating activities will increase and cash flow from financing activities will decrease, to the same extent.

In relation to the Alternative Performance Measures used by the Group, the application of the new IFRS 16 will also have impacts. Thus, for example, EBITDA ("*Earnings Before Interest, Tax, Depreciation and Amortization*") and cash flow from operations will be increased. The calculation of net debt at December 31, 2018 does not include lease liabilities (recognized in "*Other non-current liabilities*" and "*Trade and other payables"* of the balance sheet).

ACTIVITY-SPECIFIC ACCOUNTING POLICIES

Hydrocarbon exploration and production operations:

Repsol recognizes hydrocarbon exploration and production operations using accounting policies mostly based on the "*successful efforts*" method. Under this method, the various costs incurred are treated as follows for accounting purposes:

i. The costs of acquiring exploration permits and the costs of geology and geophysics (G&G) incurred during the exploration phase are capitalized under the heading "Exploration permits" of intangible assets. During the exploration and evaluation phase they are not amortized and the existence of impairment is assessed at least once a year and, in any case, when there is an indication that impairment may have occurred, in accordance with the indicators of IFRS 6. Once the exploration and evaluation phase is over, if no reserves are found, the amounts capitalized are recognized as an expense in the profit and loss account.

ii. The costs of acquiring new interests in areas with proved and unproved reserves and resources (including bonds, resource-related costs, legal costs, etc.) are capitalized as incurred under the *"Investments in areas with reserves"* item of property, plant and equipment.

iii. Exploratory drilling costs, including those relating to stratigraphic exploration wells, are recognized as assets under the heading *"Investments in Exploration"* until it is determined whether reserves justifying their commercial development have been found. If no reserves are found, the capitalized drilling costs are registered in the income statement. In the event that reserves are found but remain under evaluation for their classification as proved, their recognition depends on the following:

- If additional investments are required prior to the start of production, they continue to be capitalized whilst the following conditions are met: (i) the amount of proved reserves found justifies the completion of a productive well if the required investment is carried out, and; (ii) satisfactory progress has been made in the evaluation of reserves and the operational viability of the project. If any of these conditions fails to be met, they treated as impaired, and are expensed in the income statement.

- In all other cases, if there is no commitment to carry out significant activities to evaluate reserves or develop the project within a reasonable period after well drilling has been completed, or if activities have been halted, they must be recorded as an expense in the income statement.

- Costs incurred in exploratory drilling work that has yielded a commercially exploitable reserve are reclassified to *"Investments in areas with reserves"* under property, plant and equipment at their carrying amount.

iv. Exploration costs other than G&G costs ("Exploration rights and geology and geophysical costs"), excluding the costs of drilling exploration wells and exploration licenses, are recognized as an expense in the income statement when incurred.

v. Development expenditure incurred in lifting proved reserves and in processing and storing oil and gas (including costs incurred in drilling relating to productive wells and dry wells under development, oil rigs, recovery improvement systems, etc.) are recognized as assets under the "Investments in areas with reserves" heading of property, plant and equipment.

vi. Future field abandonment and dismantling costs (environmental, safety, etc.) are estimated, on a field-by-field basis, and are capitalized at their present value when they are initially recognized under *"Investments in areas with reserves"* against the dismantling provision item (see Note 14).

The investments capitalized as described above are depreciated according to the following method (see Note 3).

i. Investments in the acquisition of proved and probable reserves and common facilities are depreciated over the estimated commercial life of the field on the basis of the production for the financial year as a proportion of the proved and probable reserves.

ii. The costs incurred in surveys for the development and extraction of hydrocarbon reserves are depreciated over the estimated commercial life of the oil field on the basis of the relationship between the production of the period and the total of the most probable proved reserves of the field.

iii. Investments carried out in fields that are in the development or exploitation phase are not depreciated. These investments are tested for impairment at least once a year and whenever indications of impairment are detected.

The changes in estimated reserves are considered on a prospective basis in calculating depreciation.

Service/Gas station association rights and other rights:

Primarily corresponds to the costs of agreements linked to gas station association rights, incremental costs of obtaining contracts with customers through reflagging rights and image rights of publicity and exclusive supply to gas stations recognized under intangible assets. They are amortized on a straight-line basis over the period of the contract (between 25 and 30 years for the former and 1 year, which may be extended to a maximum of 3 years at the request of the counterparty for the others).

Swaps of oil products:

The Group arranges swaps of oil products of similar nature with other companies in a number of geographical locations so as to minimize transport costs and optimize the Group's logistics chain. These transactions are not recognized in the income statement as separate purchases and sales, but are recognized for the net amount.

Carbon emission allowances:

Emission allowances are recognized as an intangible asset and are measured when initially acquired in the market at their acquisition price, whereas free of charge emission allowances are measured at the market value prevailing at the beginning of the year to which they were issued, against deferred income as a grant (see Note 31).

(3) ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of financial statements in accordance with generally accepted accounting principles makes it necessary to make assumptions and estimates that affect the valuation of the amounts of the assets and liabilities recognized, the presentation of contingent assets and liabilities at year end and the income and expenses recognized during the year. The actual results could differ depending on the estimates made.

The accounting policies and areas which require the highest degree of judgment and estimates in the preparation of the consolidated financial statements are: (i) crude oil and natural gas reserves; (ii) calculation of the recoverable value of assets (see Notes 11, 12, 13 and 20); (iii) business combinations (see Note 4), (iv) assessment of investments in Venezuela (see Notes 13 and 20); (v) provisions for litigation, dismantling and other contingencies (see Note 14); (vi) income tax, tax credits and deferred tax assets (see Note 23); and (vii) market value of derivative financial instruments (see Note 9).

Crude oil and gas reserves

The estimate of[1,2] oil and gas reserves is a key component of the Company's decision-making process. Oil and gas reserve volumes are used to calculate depreciation and amortization charges, applying the unit-of-production ratio method, and to test these *Upstream* assets for impairment (see "*Testing assets for impairment and calculating their recoverable amounts*" in this Note). Changes in reserve volumes could have a significant impact on the Group's results.

To estimate proven and unproven 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).

In 2018, a change in the accounting estimate was made prospectively in relation to the depreciation of certain assets relating to hydrocarbon exploration and production operations. Since January 1, 2018, the production unit criterion (see previous section) has been applied considering all the amounts of reserves expected to be produced with the investments made (proved reserves plus probable reserves, or proved reserves plus probable developed reserves). Repsol considers that the new amortization ratio will provide a better reflection of the consumption pattern of the economic benefits of this class of assets, having been applied from January 1 with the availability of the necessary reserves information and the completion of the relevant asset performance analyses. The estimated positive effect of this change on results for 2018 amounts to 336 million euros.[3]

Calculating the recoverable amount of assets

In order to ascertain whether its assets have become impaired, the Group compares their carrying amount with their recoverable amount at least annually and whenever there are indications that an asset might have become impaired ("*impairment test*"). If the recoverable amount of an asset is estimated to be less than its net book value, the carrying amount of the asset is reduced to its recoverable amount, and an impairment loss is recognized in the consolidated income statement.

After an impairment loss has been recognized, amortization charges are calculated prospectively on the basis of the reduced carrying amount of the impaired asset.

When there are new events, or changes in existing circumstances, which prove that an impairment loss recognized on a

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[1] The classification of reserves can be consulted below:

<u>Proved reserves:</u> Proved reserves (scenario 1P) are those quantities of crude oil, natural gas and natural gas liquids that, with the information available to date, are estimated to be recoverable with reasonable certainty. There should be at least a 90% probability that the amounts recovered will equal or exceed the 1P estimate.

<u>Probable reserves:</u> Probable reserves are those additional reserves, which together with proved reserves make up scenario 2P. There should be at least a 50% probability that the amounts recovered will equal or exceed the 2P estimate. This scenario reflects the best estimate of the reserves.

<u>Contingent resources:</u> Those quantities of oil that are estimated, at a given date, to be potentially recoverable from accumulations known from the application of development projects, but which are not currently considered commercially recoverable due to one or more contingencies.

Repsol applies "*SPE/WPC/AAPG/*SPEE/SEG/SPWLA/EAGE Petroleum *Resources Management System*", where these definitions can be consulted.

[2] Independent engineering firms (at least 95% of the reserves are audited externally in a three-year cycle) periodically audit registered volumes.

[3] The future impact (distribution of depreciation over time) will depend on their production and the variation in estimated reserves.

prior date could have disappeared or decreased, there is a new estimate of the recoverable value of the corresponding asset, to determine whether it is applicable to reverse the impairment losses recognized in previous periods. An impairment loss of goodwill cannot be reversed in the following years.

In the event of a reversal of a previously recorded impairment, the carrying amount of the asset is increased to the revised estimate of its recoverable value, so that the increased carrying amount does not exceed the carrying amount that would have been determined in the event no impairment loss had been recognized for the asset in prior years.

For the "*impairment test*", assets are grouped into cash-generating units (CGUs), to the extent that such assets, when individually considered, do not generate cash inflows that are independent of the cash inflows from other assets of the CGU. The grouping of assets into the various CGUs implies the use of professional judgments and the determination, among other criteria, of the business segments and geographic areas in which the Company operates. Against this backdrop, in the *Upstream* segment, each CGU corresponds to one of the various contractual exploration areas widely known as *'blocks'*; exceptionally, if the cash flows generated by more than one block are mutually interdependent, these blocks will be grouped into a single CGU. In the *Downstream*, segment, the CGUs are defined as a function of business activities (mainly Refining, Chemicals, commercial businesses -Marketing, LPG, Lubricants, Asphalt and Specialisms- and electricity generation and marketing) and geographical areas. With respect to the North American Gas Trading business, the Group includes a single CGU that essentially encompasses the North American assets.

Goodwill acquired on a business combination is allocated among the CGUs or groups of cash-generating units (CGUs) that benefit from the synergies of the business combination and the recoverable amount thereof is estimated, generally, by discounting the estimated future cash flows of each unit, up to the limit of the business segment.

The recoverable amount is the higher of fair value less costs of sale and value in use.

The methodology used by the Group to estimate the recoverable amount of assets is, in general, the value in use calculated by discounting to present value the future cash flows after tax expected to derive from the operation of these assets.

The cash flow projections are based on the best available estimates of the CGUs' income and expenses using sector forecasts, prior results and the outlook for the business's performance and market's development:

- The Group's annual budget and the business plan set macroeconomic forecasts for each of the countries where it has business operations, which include variables such as inflation, GDP growth, exchange rates, etc. that are used to quantify the abovementioned income and expense estimates. The aforementioned macroeconomic forecasts are prepared on the basis of the content of internal reports that use in-house estimates, based on updated external information of relevance (forecasts prepared by consultants and specialized entities).

- The Group's oil and natural gas price trend estimates (see Note 20.1) are prepared on the basis of available macroeconomic, financial and market information and analysts' forecasts. Key market variables and their foreseeable evolution are analyzed in order to calculate this, including their own forecasts of the balance of supply and demand of energy and prices. The longer-term vision is also explained by the monitoring of other variables such as: the decline; the current CAPEX; the financial sustainability of the companies in the sector to certain price environments; and the dynamics in OPEC countries in terms of fiscal sustainability. Econometric models of prices are made with all these elements, which are compared with both public and private external forecasts.

    i. To estimate near-term (2-3 years) price trends, we basically use forecast reports produced by a selection of, investment banks, macro consultants and international benchmark agencies.[1]

    ii. The sources that present a sufficiently detailed analysis of long-term forecasts are the macro consultants and benchmark agencies (IEA and EIA). The latter perform detailed research on supply, demand and price forecasts under various scenarios

  The resulting prices are consistent with the annual budget and the updated business plans.

Valuations of Exploration & Production assets (*Upstream*) use cash flow projections for a period that covers the economically productive useful lives of the oil and gas fields, limited by the contractual expiration of the operating

[1] The macro consultants used are Platts Analytics (previously PIRA), IHS and Wood Mackenzie. For long-term estimates, the only sources that produce sufficiently detailed analysis and forecasts are the benchmark agencies (IEA and EIA), so only these views are considered.

permits, agreements or contracts. The key valuation assumptions used to determine the variables that most affect this business´ cash flows are summarized below:

- Oil and gas sales prices. The international benchmark prices used by the Group are: Brent, WTI (West Texas Intermediate) and HH (Henry Hub). In countries where international list prices do not reflect local market circumstances, the prices modeled factor in local market prices.
- Reserves and production profiles. Production profiles are estimated on the basis of output levels at existing wells and the development plans in place for each productive field. As a consequence, these profiles are then used to estimate proved and unproved reserves and resources. (See previous heading "Crude oil and gas reserves").
- Operating expenses and capital expenditure. These are calculated for the first year on the basis of the Group's annual budget and thereafter in keeping with the asset development programs, applying an escalation factor for operating expenses and investments basically of 2%.

In the *Downstream* segment, the various businesses' cash flows are estimated on the basis of the outlook for its key variables (unit contribution margins, fixed costs and investment flows required to maintain the level of activity), in keeping with the expectations reflected in the annual budget and in the strategic plans for each business. Cash inflows and outflows corresponding to future restructuring exercises or initiatives to enhance the assets' performance are not considered. The cash flow projection period considered for this is generally five years; cash flows after year five are extrapolated without factoring in any further growth. Specifically:

- In the Refining business, and given the impact of the expansion work and upgrades carried out at the refineries, long-term projections (specifically at over 20 years) will be performed.[1] For the purpose of calculating residual values, the only investment considered is maintenance capital expenditure and any investment needed for renovation purposes in order to maintain the CGU's productive capacity.
- The key assumptions for the North American & Gas Trading businesses cash flow estimates are as follows:
    i. Gas and LNG prices. The international benchmark prices used are: Brent, HH, Algonquin, JKM (*Japan Korea Marker*) and NBP (National Balancing Point), adjusted as required for local market considerations in the event that these benchmarks do not fully reflect local market circumstances. The price trend used is consistent with the one employed for the annual budget and the strategic plan.
    ii. Gas and LNG marketing volumes and margins. The volumes used for cash flow forecasting purposes are estimated on the basis of the contracts in force at year-end and activity estimates, all of which in keeping with the annual budget and strategic plan. Margins factor in historical data, the price forecasts detailed in the previous point and the outlook for margins going forward.

These estimated after-tax cash flows are discounted to present value using CGU-specific discount rates determined as a function of the currency in which their respective cash flows are denominated and the risks associated with these cash flows, including country risk. Repsol discounts projected cash flows using post-tax weighted average costs of capital[2] for each country and business. These rates are reviewed at least once a year. This rate endeavors to reflect the current market assessments regarding the time value of money and the specific risks of the asset. Accordingly, the discount rate used takes into account the risk-free rate, the country risk, the currency in which cash flows are generated and the market, credit and business risk. To ensure that the calculations are consistent, the cash flow projections do not factor in risks that have already been built into the discount rates used, and vice versa. The discount rates used factor in average sector leverage as a reasonable proxy for the optimal capital structure, to which end management monitors leverage rates at comparable oil and gas companies during the last five years.

Furthermore, to determine whether it is necessary to recognize any impairment losses on investments in associates and joint ventures, the entire carrying amount of the investment is tested for impairment in accordance with IAS 36 *Impairment of assets*, including any goodwill that may be implicit within the investment, by comparing its recoverable amount with its carrying amount. The recoverable amount of an investment in an associate or a joint venture is evaluated individually, unless it does not generate cash inflows from continuing use that are largely independent of those generated by other Group assets or cash-generating units.

[1] The use of the period of more than 5 years began in 2011 after the refinery expansion and improvement projects came into operation. To keep the amortization rate in step with the pace of investment, we extended the timeline of cash flow projection, so that, from the fifth year onwards, EBITDA is projected, continuing at a similar level of activity and in a similar business environment.

As a result of all of the foregoing, modifications to key assumptions used to calculate the recoverable value of the assets may have a significant effect on the Group's earnings (see Note 20.2).

Business combinations

The Group's business combinations are accounted for using the acquisition method (see Note 4) and require judgments and estimates when assigning their fair values to the assets acquired and liabilities assumed in the transaction and assigning the purchase price to those fair values. In this regard, the process of valuing Viesgo's assets and liabilities should ne highlighted, and has required the use of significant judgments and estimates by the Group´s management team (see Note 4).

Provisions for litigation, dismantling and other contingencies

The final cost of settling claims, grievances and lawsuits could vary due to estimates based on differing interpretations of the technical rules, opinions and final assessments of the amount of the damages.

Repsol uses judgments and estimates to recognize provisions for the cost of dismantling its oil and gas production operations. These calculations are complex on account of the need to recognize the present value of the estimated future costs and to adjust this figure in subsequent years in order to reflect the passage of time and changes in the estimates due to changes in the underlying assumptions on account of technological advances and regulatory changes, economic, political and environmental security factors, as well as changes in the initially-established schedules or other terms. The dismantling provisions are updated regularly to reflect trends in estimated costs and the discount rates. These discount rates take into account the risk-free rate, by term and currency, country risk and a spread according to debt structure and the cash flow projection period. Specifically, the weighted average rate set by the Group was 4.9%

Additionally, Repsol makes judgments and estimates in recording costs and establishing provisions for environmental clean-up and remediation costs which are based on current information regarding costs and expected plans for remediation. For environmental provisions, costs can differ from estimates because of changes in laws and regulations, discovery and analysis of site conditions and changes in clean-up technology.

Therefore, any change in the factors or circumstances related to provisions of this nature, as well as changes in laws and regulations could, as a consequence, have a significant effect on the provisions recognized for these costs (see Note 14).

Evaluation of investments in Venezuela

Repsol has a presence in Venezuela through its shareholdings in mixed oil companies and gas licensees. The current situation of crisis in Venezuela and PDVSA generates uncertainty regarding business performance. To assess the recoverability of the investments in this country, which include both the investment in the share capital of the companies and the financing granted through loans, it is necessary to use certain hypotheses and assumptions, such as asset development plans, compliance with the agreements signed and the development of a climate which involves judgments and estimates that may vary from those previously made (see Notes 13 and 20).

Calculation of income tax, tax credits and deferred tax assets

The appropriate assessment of the income tax expense is dependent on several factors, including estimates of the timing and realization of deferred tax assets and the timing of income tax payments. Actual collections and payments may differ materially from these estimates because of changes in tax laws as well as unanticipated future transactions affecting the Company's tax balances (see Note 23).

MAIN ACQUISITIONS AND DIVESTMENTS

(4) MAIN ACQUISITIONS AND DIVESTMENTS

Accounting policies: Business combinations

Business combinations in which the Group acquires control of one or more businesses through the merger or spin-off of several companies or through the acquisition of all the assets and liabilities of a company or of a party constituting one or more businesses, are recognized using the acquisition method in accordance with the provisions of IFRS 3 Business Combinations. The acquisition method involves, except for the recognition and measurement exceptions set out in IFRS 3, the accounting at the acquisition date of the identifiable assets acquired and liabilities assumed at their fair value at that date, provided that this value can be measured reliably. Within the liabilities assumed in the business combination, any identified contingent liabilities are also accounted for at the acquisition date, although these would not have been recognized in accordance with the general accounting criteria for provisions because the outflow of economic benefits is not probable, provided that it corresponds to a present obligation arising from past events and its fair value can be measured reliably. Acquisition-related costs are recognized as expenses in the income statement.

The difference between the cost of the business combination and the value of the identifiable assets acquired less the liabilities assumed is recognized as goodwill if it is positive, or as income in the income statement if it is negative.

4.1) Acquisition of businesses from Viesgo

On November 2, the non-regulated low emission electricity production businesses, as well as their regulated and non-regulated gas and electricity trading companies were acquired from Viesgo in the framework of the Strategic Plan.

As regards to the generation business, the purchase encompasses hydroelectric power stations in the north of Spain and two combined cycle gas power stations in Algeciras (Cádiz) and Escatrón (Zaragoza), with Viesgo's operating coal power plants being excluded from the transaction. With regards to regulated and non-regulated gas and electricity retail marketing, the operation implies the acquisition of nearly 750,000 customers that are distributed throughout the Spanish territory, mainly in Cantabria, Galicia, Andalucía, Asturias, Castilla y Leon and the Madrid Region.

The acquisition price amounts to €732 million.

The purchase price has been allocated to the assets acquired and liabilities assumed based on the estimated fair values at the acquisition date for the integration of the businesses in the Group's financial statements, in accordance with accounting regulations (see Note 2 "*Basis of presentation*").

The fair value of electricity generation assets (property, plant and equipment) has been calculated using an "*Income approach*" (discount of cash flows based on variables not observable in the market[1]). The most sensitive assumptions incorporated in the asset cash flow projections are: i) electricity prices[2], (ii) operating costs and (iii) discount rates.[3] For the valuation of the customer portfolio (Intangible assets), a revenue approach was also followed, taking into account profitability and the estimated number of years of relationship with them.

The difference between the acquisition price of the businesses acquired and the fair value of the assets and liabilities recognized, including the deferred taxes arising from the differences between the new fair value of the assets acquired and their tax value, is allocated to goodwill (€49 million). The value of the goodwill is justified both by the valuation of the businesses acquired and by the synergies expected to materialize after the acquisition as a result of the integration of the generation and marketing businesses in the Repsol Group.

Repsol has obtained an independent valuation report to review the allocation of the acquisition price of the assets acquired and liabilities assumed on the basis of their fair value. The conclusions of this report have been considered in the valuation and do not differ significantly from those used by Repsol.

[1] Level 3 input data according to fair value hierarchies defined by IFRS 13"*Measurement of the fair value*".
[2] Price trend of the electricity pool: 2018: €56/Mw/h, 2019: €56/Mw/h, 2020: €55/Mw/h, 2021: €56/Mw/h, 2022: €55/Mw/h, 2023: €55/Mw/h, 2024: €55/Mw/h, 2025: €54 /Mw/h.
[3] The discount rate used after tax was 6.5%.

The accounting for this business combination, given that the twelve-month period from the acquisition has not yet expired, would be reviewed if the circumstances set out in IFRS 3 "*Business Combinations*" were to arise.[1]

The breakdown of the net assets acquired at November 2, 2018 and the goodwill generated after this acquisition is as follows:

€ Million	Fair value	Carrying value of the acquired company
Intangible assets	133	60
Property, plant and equipment	354	391
Deferred tax assets	247	247
Other non-current assets	20	20
Other current assets	137	137
Cash and cash equivalents	22	22
Total Assets	**913**	**877**
Current and non-current provisions	(59)	(61)
Deferred tax liabilities	(9)	-
Other current liabilities	(162)	(162)
Total Liabilities	**(230)**	**(223)**
NET ASSETS ACQUIRED	**683**	**654**
COST OF ACQUISITION	**732**	
GOODWILL	**49**	

During the period and from the date of acquisition, the businesses acquired generated operating revenues of €274 million, with a net loss of -€31 million, mainly due to the measurement at market value of derivatives contracted during the year. Transaction expenses incurred in the period amount to €4 million, which are recognized under "*Other Operating Expenses*".

4.2) Sale of the stake in Gas Natural SDG, S.A.

On May 18, 2018, Repsol, S.A. completed the sale of its stake in Naturgy Energy Group, S.A. (200,858,658 shares, representing 20.072% of the share capital) for the total price of €3,816,314,502, equivalent to €19 per share, pursuant to the provisions of the purchase agreement entered into with Rioja Bidco Shareholdings, S.L.U. on February 22, 2018.

The gain generated by the sale amounted to €344 million net of taxes recognized under "Profit from discontinued operations" in the income statement (see Note 24), which also includes the income generated by this investment until February 22, 2018, amounting to €68 million. The income derived from the ownership interest in Naturgy in 2017 (€274 million), which were recognized under "Income Investments Accounted for Using the Equity Method", were classified under the new heading and, therefore, the income statement for 2017 was restated for comparison purposes (see Note 1.4).

[1] Business combinations for which the valuation process required to apply the acquisition method has not been completed on the year-end closing date are posted using provisional values. These values must be adjusted within a maximum of one year from the acquisition date to reflect new information obtained about facts and circumstances that existed at the acquisition date and which, if known, would have affected the measurement of the amounts recognized at that date. Such adjustments shall be recognized retrospectively so that the resulting values are those that would result from initially having had such information, adjusting, to the extent necessary, the comparative information presented in the financial statements for prior periods.

SEGMENT REPORTING

(5) SEGMENT REPORTING [1]

5.1) Definition of segments and presentation model of the results for the period by segments

The segment reporting disclosed by the Group in this section is presented in accordance with the disclosure requirements of IFRS 8 *Operating segments*.

The definition of the Repsol Group´s business segments is based on the delimitation of the different activities performed and from which the Group earns revenue or incurs expenses, as well as on the organizational structure approved by the Board of Directors for business management. Using these segments as a reference point, Repsol's management team (Executive Committees) analyzes the main operating and financial indicators in order to make decisions about segment resource allocation and to assess how the Company is performing.

At December 31, 2018, the operating segments of the Group are:

- *Upstream*, corresponding to the exploration and production of crude oil and natural gas reserves.
- *Downstream*, corresponding, mainly, to the following activities: (i) refining and petrochemistry, (ii) trading and transportation of crude oil and oil products, (iii) marketing of oil, petrochemical and LPG products, (iv) marketing, transport and regasification of natural gas and liquefied natural gas (LNG) and (v) generation of electricity and the marketing of electricity and gas in Spain.

Lastly, *Corporation and others* includes activities not attributable to the aforementioned business segments, and specifically, corporate expenses, financial result and inter-segment consolidation adjustments.

The Group has not aggregated any operating segments for presentation purposes.

In presenting the results of its operating segments Repsol includes the results of its joint ventures[2] and other companies managed as such[3] in accordance with the Group's stake, considering its operational and economic metrics in the same manner and with the same detail as for fully consolidated companies. 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.

In addition, the Group, considering its business reality and in order to make its disclosures more comparable with those in the sector, utilizes as a measure of segment profit the so-called Adjusted Net Income, which corresponds to net income from continuing operations at replacement cost (*"Current Cost of Supply"* or CCS), net of taxes and non-controlling interests, without including certain income and expenses (*"Special Items"*). Financial income is assigned to the adjusted net income of *Corporation and others*.

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. Under Income at CCS, the cost of volumes sold during the reporting period is calculated using the costs of procurement and production incurred during that same period Due to the above, adjusted net income does not include the so-called Equity effect. This Inventory Effect is presented separately, net of tax and non-controlling interests, and corresponds to the difference between Income at CCS and that arrived at using the Weighted Average Cost approach, which is the method used by the Group to determine its earnings in accordance with European accounting regulations.

Furthermore, Adjusted Net Income does not include the so-called Special Items, i.e. certain material items whose separate presentation is considered appropriate in order to facilitate analysis of the ordinary business performance. This heading includes gains/losses on divestments, staff restructuring charges, asset impairment gains/losses and

[1] Some of metrics presented in this Note are classified as Alternative Performance Metrics (APMs) in accordance with ESMA guidelines (for further information, see Appendix I of the Consolidated Management Report or www.repsol.com. All of the figures shown throughout this Note have been reconciled with IFRS-EU financial statements in Appendix III.

[2] In the segment reporting model, joint ventures are consolidated proportionally in accordance with the Group's percent holding. See Note 13 and Appendix I, where the Group's main joint ventures are identified.

[3] Corresponds to Petrocarabobo, S.A., an associated entity of the Group (Venezuela).

provisions for contingencies and other relevant income or expenses. These special items are presented separately, net of the tax effect and non-controlling interests.

Following the agreement reached on February 22, 2018 for the sale of the 20.072% stake in Naturgy Energy Group. S.A. (see Note 4.2), its income prior to said date has been classified as "*Discontinued operations*" under *Special items* (previously classified under "*Corporate and other*"), restating the comparative figures published in the consolidated Financial Statements for the financial year 2017.

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 the first half of 2017 have not been restated, given their immateriality.

5.2) Results for the period by segments

	€ Million	
SEGMENTS	2018	2017 (1)
Upstream	1,325	632
Downstream	1,583	1,877
Corporate and other	(556)	(378)
ADJUSTED NET RESULT	2,352	2,131
Inventory effect	(68)	104
Special items	57	(114)
NET INCOME	2,341	2,121

(1) Includes the necessary modifications with respect to the 2018 consolidated financial statements (see Note 2 "*Basis of presentation*") in relation to the sale of the stake in Naturgy.

For a description of segment income for 2018, see section 4 of the consolidated Management Report at www.repsol.com.

5.3) Disclosures by geography and segment

The breakdown by geography and segment of the main year-end 2018 and 2017 metrics for which geographic segmentation is material is provided below:

	Results from operations		Adjusted net income		Operating investments (1)		Non-current assets (2)		Capital employed (3)	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Upstream	2,514	1,009	1,325	632	1,973	2,089	25,514	25,636	21,515	21,612
Europe, Africa and Brazil	1,614	726	768	355	442	437	4,319	4,182	-	-
Latin America-Caribbean	726	594	501	386	314	477	4,813	4,940	-	-
North America	273	(58)	212	(43)	659	564	8,584	8,555	-	-
Asia and Russia	465	251	264	161	166	213	2,537	2,750	-	-
Exploration and other	(564)	(504)	(420)	(227)	392	398	5,261	5,209	-	-
Downstream	2,143	2,467	1,583	1,877	1,831	805	11,118	10,312	11,338	9,749
Europe	2,039	2,420	1,500	1,852	1,578	632	9,500	8,933	-	-
Rest of world	104	47	83	25	253	173	1,618	1,379	-	-
Corporate and other	(261)	(262)	(556)	(378)	70	42	733	3,968	1,500	1,745
TOTAL	4,396	3,214	2,352	2,131	3,874	2,936	37,365	39,916	34,353	33,106

(1) Includes investments accrued during the period net of divestments but does not include investments in *"Other financial assets."*
(2) Excludes *"Non-current financial investments"*, *"Deferred tax assets"* and *"Other non-current assets"*.
(3) Includes capital employed from continuing operations.

For more segment reporting and the reconciliation of these figures with the IFRS-EU Financial Statements, see Appendix II.

CAPITAL STRUCTURE AND FINANCIAL RESOURCES

(6) CAPITAL STRUCTURE

Repsol, as an essential part of its strategy, has committed to a policy of financial prudence. The financial structure targeted is defined by this commitment of solvency and the aim to maximize shareholder returns, by optimizing the cost of capital.

The determination of the target financial structure takes into account the leverage ratio, defined as the relationship between net debt[1] and capital used[2] (both metrics calculated in accordance with the Group's Reporting Model described in Note 5). This ratio evolves and is analyzed on a continued basis, also making certain future estimates of them as a key limiting factor in the Group's investment strategy and dividend policy. The calculations of these ratios, based on the following balance sheet headings at December 31, 2018 and 2017, are as follows:

	€ Million	
	2018	2017
Equity	30,914	30,063
Non-current financial debt	9,392	10,080
Current financial liabilities	4,289	4,206
Non-current financial assets (1)	(974)	(1,920)
Other current financial assets	(1,711)	(257)
Cash and cash equivalents	(4,786)	(4,601)
Financial instruments from interest rate derivatives and others (see Note 9)	(48)	(70)
Net debt from joint ventures	(2,723)	(1,171)
Net debt (2) (3)	3,439	6,267
Capital employed (2)	34,353	36,330
Leverage ratio	10.0%	17.3%

(1) Corresponds to balance sheet heading "Non-Current Financial Assets" without including equity instruments.
(2) Alternative Performance Measures. For further information, see Appendix I of the consolidated Management Report.
(3) Does not include €1,624 Million and €1,541 Million, relating to debts for current and non-current financial leases in 2018 and 2017, respectively (see Note 15).

(7) EQUITY

	€ Million	
	2018	2017
Shareholders' equity:	**30,468**	**30,197**
Share capital	1,559	1,556
Share premium and reserves:	25,894	25,541
Share premium	6,428	6,428
Legal reserve (1)	299	299
Retained earnings and other reserves (2)	19,342	18,967
Dividends and remuneration on account	(175)	(153)
Treasury shares and own equity investments	(350)	(45)
Net income for the year attributable to the parent	2,341	2,121
Other equity instruments	1,024	1,024
Other cumulative comprehensive income	**160**	**(404)**
Non-controlling interests	**286**	**270**
TOTAL EQUITY	30,914	30,063

(1) Under the Spanish Companies Act, 10% of profit for each year of the parent company must be transferred to the legal reserve until the balance of this reserve reaches at least 20% of share capital. The legal reserve can be used to increase capital provided that the remaining reserve balance does not fall below 10% of the increased share capital amount. Otherwise, until the legal reserve exceeds 20% of share capital, it can only be used to offset losses, provided that sufficient other reserves are not available for this purpose.
(2) "Other reserves" includes, in 2018, the impact of the standards of initial application (see Note 2.2.2).

[1] The formula considers net and not gross debt to factor in the effect of financial investments. In keeping with its conservative financial policy, Repsol holds cash and cash equivalents and undrawn credit lines. As a result, the net debt leverage ratio provides a more accurate picture of the Group's financial solvency.
[2] Corresponds to the sum of net financial debt and equity.

7.1) Share capital

The subscribed share capital at December 31, 2018 and 2017, registered within the Companies Register, consisted of 1,527,396,053 fully subscribed and paid up shares of €1 par value each, in book entry form, and all listed on the Spanish stock exchanges and the Buenos Aires Stock Exchange[1].The Company participates in an ADS (*American Depositary Share*) program in the United States, whose shares are traded on the OTCQX market.

Following the bonus share issue, concluded in January 2019, the share capital of Repsol, S.A. is currently represented by 1,558,877,582 shares, each with a par value of €1. Under accounting regulations, because the abovementioned capital increase had been registered within the Companies Register before the Board of Directors authorized the consolidated financial statements for issue, this bonus share issue has been recognized in the Group's financial statements as of December 31, 2018.

At the Annual General Meeting held on May 11, 2018, the Company's stockholders approved two bonus share issues to execute the stockholder remuneration scheme known as "*Repsol Flexible Dividend*", in substitution of what would have been the traditional final dividend from 2017 profits and the interim dividend from 2018 earnings, under which stockholders can instead choose between receiving their remuneration in cash (by selling their bonus share rights in the market or back to the Company) or in Company shares.

The first of these two bonus share issues took place between June and July 2018 and the second, between December 2018 and January 2019. The main characteristics of these issues are detailed below:

		June/July 2018	Dec 2018 /January 2019
IN CASH	Holders who accepted the irrevocable purchase commitment (1)	13.26% rights	27.86% rights
	Deadline for requesting sale of rights to Repsol at guaranteed price	June 29	December 31
	Fixed price guaranteed by right	€0.485 gross/right	€0.411 gross/right
	Gross amount of the rights acquisition by Repsol	€ 100 Million	€ 175 Million
IN SHARES	Holders who opted to receive new Repsol shares	86.74% rights	72.14% rights
	Number of rights required for the allocation of a new share	34	35
	New shares issued	39,708,771	31,481,529
	Approximate share capital increase	2.55%	2.06%
	Capital increase close	July 10	January 11

(1) Repsol has renounced the bonus share rights acquired by virtue of the above-mentioned purchase commitment and, by extension, the shares corresponding to those rights. The balance sheet as of December 31, 2018 recognizes the obligation to pay the shareholders that had accepted the irrevocable purchase commitment in the bonus issue completed in January 2019, corresponding to the sale or rights to Repsol for €175 million, as a reduction in equity under "*Dividends and shareholders' remunerations*".

On November 14, 2018, a capital reduction was made through the redemption of 68,777,683 own shares, of €1 par value each, approved by Repsol's General Shareholders' Meeting held on May 11, 2018. The capital reduction aims to offset the dilutive effect of the bonus share issues executed in 2018. The capital reduction was performed with a charge to unrestricted reserves, through the provision of a reserve for redeemed capital, for an amount equal to the par value of the redeemed shares. These shares were delisted from the Madrid, Barcelona, Bilbao and Valencia stock markets.

According to the latest information available at the date of authorization of the accompanying Consolidated Financial Statements for issue, the significant shareholders are:

Significant shareholders	% on share capital
Sacyr, S.A. (1)	7.87
Blackrock, Inc (2)	4.63
CaixaBank, S.A. (3)	3.58

(1) Sacyr, S.A. retains its shareholding via Sacyr Securities, S.A., Sacyr Investments S.A. and Sacyr Investments II, S.A.
(2) Blackrock, Inc. holds its investment through a number of controlled entities. The information relating to BlackRock, Inc. is based on the statement filed by that entity with the CNMV on August 2, 2018 on the share capital figure of 1,596,173,736 shares.
(3) On September 20, 2018, CaixaBank S.A. announced the agreement adopted by its Board of Directors to sell its current shareholding in Repsol, S.A.

1 On January 28, 2019, the shares of Repsol, S.A. were withdrawn from the public offering and listing regime in Argentina.

At December 31, 2018, the following Group companies' shares were publicly listed:

Company	traded	listed	Stock exchanges [1]	closing	quarter	Currency
Repsol, S.A.	1,527,396,053	100%	Spanish stock exchanges (Madrid, Barcelona, Bilbao, Valencia)	14.08	15.48	Euros
			Buenos Aires [2]	615.00	666.29	pesos
			OTCQX [3]	16.03	17.66	Dollars
Refinería La Pampilla, S.A.	3,534,890,000	100%	Lima stock exchange	0.126	0.134	soles

[1] Exchanges or markets for which the Group has specifically applied for admission to trading. Other exchanges, markets or multilateral trading platforms on which the shares may be traded without having been specifically requested by the Group are not included.
[2] On January 28, 2019, the exclusion of Repsol, S.A. shares from the Argentine Stock Market took effect.
[3] Since March 9, 2011, Repsol's ADSs have been traded on the OTCQX market, a US OTC (*over-the-counter*) trading platform.

7.2) Treasury shares and own equity investments

The main transactions undertaken by the Repsol Group involving treasury shares[1] were as follows:

	2018			2017		
Million euros	No. of shares	Amount	% capital	No. of shares	Amount	% capital
Opening balance for the year	3,028,924	45	0.19%	94,185	1	0.01%
Market purchases [1]	149,753,457	2,343	9.61%	23,630,054	339	1.52%
Market sales [1]	(60,081,841)	(913)	3.85%	(20,716,006)	(295)	1.33%
Capital redemption [2]	(68,777,683)	(1,125)	4.41%	-	-	0.00%
Repsol Flexible Dividend [3]	234,697	-	0.00%	20,691	-	0.00%
Balance at year end [4]	24,157,554	350	1.55%	3,028,924	45	0.19%

[1] In 2018, "Market Purchases" includes purchases made under the Share Repurchase Program for their amortization (see previous section), which commenced on September 4 and ended on November 8, for which 62,705,079 shares have been acquired. Also in 2018 and 2017 "Market Purchases" and "Market Sales" include the shares acquired and delivered within the framework of the Share Purchase Plan and Share Purchase Plans by the beneficiaries of the multi-year variable remuneration programs (in 2018 567,754 shares were delivered in accordance with the provisions of each of the plans (see Note 29.4) and other transactions within the framework of the discretionary treasury stock operations described in the Repsol Group's Internal Code of Conduct in the securities market area
[2] Includes 6,072,604 treasury shares acquired before April 4 (date of calling the 2018 General Shareholders' Meeting).
[3] New shares received in the share capital increases carried out within the framework of the "Repsol Flexible Dividend" Program corresponding to the shares held in treasury stock.
[4] The balance at December 31, 2018, includes derivatives contracted by Repsol, S.A. from financial institutions for a notional total of 24 million shares, under which voting rights and economic risk intrinsic to the underlying were transferred to the Group.

7.3) Dividends and shareholder remuneration

During 2018 and 2017, the Company's shareholders were also remunerated by means of the program denominated *"Repsol Flexible Dividend"*, whose main characteristics are described in section 1 *"Share capital"* of this Note and whose figures are compiled in the following chart:

	No. of free allocation rights sold to Repsol	Purchase commitment price (€/right)	Disbursement in cash (€ Million)	New shares issued	Remuneration in shares (€ Million)
December 2016/January 2017	296,735,539	0.335	99	30,760,751	392
June/July 2017	442,703,938	0.426	189	30,991,202	449
December 2017/January 2018	393,708,447	0.388	153	29,068,912	440
June/July 2018	206,366,731	0.485	100	39,708,771	655

[1] Transactions carried out exercising the powers delegated by the Company's shareholders at the Annual General Meeting of March 28, 2014 and May 11, 2018, authorizing the Board of Directors, for a five-year period, to carry out the derivative acquisition of Repsol shares, directly or through subsidiaries, up to a maximum number of shares such that the sum of those acquired plus treasury shares already held by Repsol and any of its subsidiaries does not exceed 10% of the Company's capital, insofar as the price or value of the consideration delivered is not less than the par value of the shares or more than their quoted price on the stock exchange. The current authorization (conferred by the Annual Shareholders' Meeting of May 11, 2018) was granted for five years running from the date of the Annual General Meeting, and nullified the equivalent resolution ratified at the ordinary Annual General Meeting held on March 28, 2014, in relation to any part thereof that had not been used.

In addition, in January 2019, under the *"Repsol Flexible Dividend"* program, replacing what would have been the interim dividend from 2018 profits, Repsol paid out €175 million in cash (€0.411 per right before withholdings) 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 shares from the Parent Company.

At the date of the authorization for issue of these Consolidated Financial Statements, the Company's Board of Directors is expected to submit a proposal to the next Ordinary General Shareholder's 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 together with the corresponding share capital reduction through the amortization of own shares to offset the dilutive effect of these share capital increases.

7.4) Other equity instruments

On March 25, 2015, Repsol International Finance, B.V. (hereinafter, *"RIF"*) issued perpetual subordinated bonds guaranteed by Repsol, S.A., with a value of €1,000 million (redeemable at the request of the issuer from year six or under certain circumstances stipulated in the bond terms and conditions).

This bond was placed with qualified investors and trades on the Luxembourg Stock Market, accruing a fixed annual coupon of 3.875% from the issuance date until March 25, 2021, which is payable to the bondholders annually from March 25, 2016 and a fixed annual coupon equal to the 6-year swap rate applicable plus a spread from March 25, 2021.

The issuer can defer the coupon payments without triggering an event of default. Coupons so deferred will be cumulative and will be mandatorily settled following certain events described in the related terms and conditions of the issue.

This bond was recognized under *"Other equity instruments"*, included under equity in the balance sheet, considering that it does not meet the accounting conditions required to be treated as a financial liability[1]. The finance cost, net of taxes, associated with the coupon on the subordinated bond has been recognized under *"Retained earnings and other reserves"* amounting to -€29 million.

7.5) Non-controlling interests

The equity attributable to non-controlling interests at December 31, 2018 and 2017 relates basically to the following companies:

	€ Million	
	2018	2017
Petronor, S.A.	173	153
Refinería La Pampilla, S.A.	66	72
Repsol Comercial de Productos Petrolíferos, S.A.	32	32
Otras compañías	15	13
TOTAL	**286**	**270**

[1] This bond does not involve a contractual obligation to make payment in cash or other financial assets or an obligation to exchange financial assets or liabilities.

(8) FINANCIAL INSTRUMENTS

8.1) Financial assets

The breakdown of financial assets included in the balance sheet line-items can be found below:

	€ Million	
	2018	2017
Non-current financial assets	1,103	2,038
Non-current trade operation derivatives [(1)]	33	2
Other current financial assets. [(2)]	1,711	257
Current trade operation derivatives [(3)]	241	60
Cash and cash equivalents [(2)]	4,786	4,601
TOTAL	7,874	6,958

(1) Recognized in "Other non-current liabilities" on the balance sheet.
(2) This variation can mainly be attributed to the cash generated by the stakeholding in Naturgy (see Note 4.2).
(3) Recognized in *"Other receivables"* of the balance sheet.

The detail, by type of assets, of the Group's financial assets at December 31, 2018 and 2017, is as follows:

	December 31, 2018 and 2017							
	At fair value with changes through P&L		At FV with changes through Other comprehensive income		At amortised cost [(3)]		Total	
Millions of euros	2018	2017	2018	2017	2018	2017	2018	2017
Equity instruments [(2)]	24	-	105	118	-	-	129	118
Derivatives [(4)]	33	2	-	-	-	-	33	2
Loans	-	-	-	-	921	1,868	921	1,868
Others	53	52	-	-	-		53	52
Non-current	110	54	105	118	921	1,868	1,136	2,040
Derivatives [(4)]	308	77	10	-	-	-	318	77
Loans	-	-	-	-	174	4	174	4
Time deposits	-	-	-	-	1,455	231	1,455	231
Cash and cash equivalents	9	9	-	-	4,777	4,592	4,786	4,601
Others	3	1	-	-	2	4	5	5
Current	320	87	10	-	6,408	4,831	6,738	4,918
TOTAL [(1)]	430	141	115	118	7,329	6,699	7,874	6,958

(1) Headings *"Other non-current assets"* and *"Trade and other receivables"* of the consolidated balance sheet include €667 Million classified under long-term and €5,864 Million classified under short-term in 2018 (2017: €470 Million classified under long-term and €5,161 Million classified under short-term), corresponding to commercial receivables not included in the breakdown of the financial assets in the previous table net of the corresponding impairment provisions.
(2) This heading includes minority financial investments in certain companies over which the Group does not have management influence.
(3) The items which do not accrue explicit interest are recognized at their face value whenever the effect of not discounting the related cash flows is not significant.
(4) Includes non-current hedging derivatives amounting to €10 Million (see Note 9).

Loans

In 2018 and 2017, within current and non-current *"Loans"* are loans granted to Group companies, mainly transactions carried out with companies consolidated using the equity method, which are not eliminated in the consolidation process, amounted to €1,095 million and €1,871 million, respectively. These included financing to joint ventures in Venezuela (see Notes 13 and 22), the balance of which at December 31, 2018 and 2017 amounted to €518 million and €1,296 million,[1] respectively.

1. Includes in 2018 and 2017, -€480 million and -€214 million, respectively, for the negative value of Cardón IV's investment (see Note 13).

The average accrued return on these financial assets amounts to an average interest rate of 5.07% and 6.51% in 2018 and 2017, respectively, and their maturity is as follows:

	€ Million	
	2018	2017
2019	-	4
2020	195	504
2021	142	181
2022	60	69
Subsequent years	524	1,110
TOTAL	921	1,868

Deposits and cash

The corresponding carrying amount at December 31, 2018 and 2017 can be seen below:

	€ Million	
	2018	2017
Cash equivalents (1)	662	848
Cash and Banks	4,124	3,753
TOTAL	4,786	4,601

(1) They primarily correspond to liquid financial assets, deposits or liquid investments needed to meet payment obligations in the short term that can be converted into a known amount of cash within a period usually shorter than three months and that are subject to an insignificant risk of changes in value.

8.2) Financial liabilities

The breakdown of financial liabilities included in the consolidated balance sheet line-items can be found below:

	€ Million	
	2018	2017
Non-current financial liabilities (1)	9,392	10,080
Non-current trade operation derivatives (2)	18	-
Current financial liabilities (1)	4,289	4,206
Current trade operation derivatives (3)	250	215
TOTAL	13,949	14,501

(1) This change reflects the cancelation of the bonds upon their maturity and the reclassification of bonds maturing in no more than 12 months between both headings.
(2) Recognized in *"Other non-current liabilities"* on the consolidated balance sheet.
(3) Recorded in *"Other payables"* on the consolidated balance sheet. (see Note 18).

The breakdown of these financial liabilities at December 31, 2018 and 2017 is provided below:

	December 31, 2018							
	At VR with changes in profit/(losses)		At amortized cost		Total		Fair value	
€ Million	2018	2017	2018	2017	2018	2017	2018	2017
Bonds and obligations	-	-	5,243	6,323	5,243	6,323	5,493	6,812
Loans	-	-	2,789	2,625	2,789	2,625	2,789	2,625
Bank borrowings	-	-	1,208	1,013	1,208	1,013	1,161	992
Derivatives [(3)]	74	68	-	-	74	68	74	68
Other financial liabilities	-	-	96	51	96	51	97	51
Non-current	**74**	**68**	**9,336**	**10,012**	**9,410**	**10,080**	**9,614**	**10,548**
Bonds and obligations	-	-	2,855	3,406	2,855	3,406	2,862	3,419
Loans	-	-	660	233	660	233	660	233
Bank borrowings	-	-	704	539	704	539	704	539
Derivatives[(3)]	300	243	-	-	300	243	300	243
Other financial liabilities	-	-	20	-	20	-	20	-
Current	**300**	**243**	**4,239**	**4,178**	**4,539**	**4,421**	**4,546**	**4,434**
TOTAL [(1) (2)]	**374**	**311**	**13,575**	**14,190**	**13,949**	**14,501**	**14,160**	**14,982**

(1) At December 31, 2018 this heading includes €1,427 million corresponding to *"Other non-current liabilities"* (year-end 2017: €1,346 million) and €197 and €195 million corresponding to *"Other payables"* related to finance leases carried at amortized cost that are not included in the table above.
(2) In relation to liquidity risk, the distribution of funding by maturity at December 31, 2018 and 2017 is provided in Note 10.
(3) In 2018, it includes non-current and current hedging derivatives (see Note 9) amounting to €56 million and €1 million, respectively (€68 million and €2 million in 2017, respectively).

The breakdown of average financial balances outstanding and cost by instrument is as follows:

	2018		2017	
€ Million	Average volume	Average cost	Average volume	Average cost
Bonds and obligations	8,598	2.59%	10,318	2.76%
Bank borrowings	2,037	2.99%	1,815	2.72%
Loans and other financial liabilities	3,016	2.98%	2,939	2.48%
TOTAL	**13,651**	**2.74%**	**15,072**	**2.70%**

Bank borrowings

This heading reflects the loans granted to the Group companies, mainly in Spain and Peru, by several banks in order to fund their projects and operations. It also includes drawdowns under short-term credit facilities extended by banks.

Bonds and obligations

Key issues, repurchases and redemptions carried out in 2018[1]

- In January 2018, ROGCI repurchased a bond maturing in February 2021 and a fixed-annual coupon of 3.75% for a total of $251 Million. (see Note 21).
- In February 2018 the bond issued by Repsol International Finance B.V. (RIF) was canceled at maturity. (RIF) in September 2012 as part of the EMTN Program was repaid at maturity for the nominal amount of €750 million, with a fixed annual coupon of 4.375%.
- In July 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

[1] Key issues, repurchases and redemptions carried out in 2017: i) in February a bond issued by RIF was cancelled at maturity (nominal amount of €886 Million and fixed annual coupon of 4.75%), ii) in May, RIF issued a green bond guaranteed by Repsol, S.A. (nominal of €500 Million, maturing 2022 and a fixed annual coupon of 0.50%), iii) in June ROGCI repurchased bonds for an amount $87 Million, iv) in September, ROGCI repurchased a bond maturing December 2017 and fixed annual coupon of 6.625%, for a total amount of £266 million, v) in November, ROGCI repurchased a bond maturing in June 2019 and a fixed annual coupon 7.75%, for a total amount of $403 Million }

point spread.

The outstanding balance of bonds and obligations at December 31, 2018:

ISIN	Issuing entity	Issue date	Currency	Nominal (millions)	Average rate %	Maturity	Listed [5]
US87425EAE32 [3]	Repsol Oil & Gas Canada Inc.	oct-97	Dollar	50	7.250%	oct-27	-
US87425EAH62 [3]	Repsol Oil & Gas Canada Inc.	may-05	Dollar	88	5.750%	may-35	-
US87425EAJ29 [3]	Repsol Oil & Gas Canada Inc.	ene-06	Dollar	102	5.850%	feb-37	-
US87425EAK91 [3]	Repsol Oil & Gas Canada Inc.	nov-06	Dollar	115	6.250%	feb-38	-
XS0733696495 [1]	Repsol International Finance, B.V.	ene-12	Euros	1,000	4.875%	feb-19	LuxSE
US87425EAN31 [3]	Repsol Oil & Gas Canada Inc.	may-12	Dollar	57	5.500%	may-42	-
XS0933604943 [1]	Repsol International Finance, B.V.	may-13	Euros	1,200	2.625%	may-20	LuxSE
XS0975256685 [1]	Repsol International Finance, B.V.	oct-13	Euros	1,000	3.625%	oct-21	LuxSE
XS1148073205 [1]	Repsol International Finance, B.V.	dic-14	Euros	500	2.250%	dic-26	LuxSE
XS1207058733 [2]	Repsol International Finance, B.V.	mar-15	Euros	1,000	4,500% [4]	mar-75	LuxSE
XS1334225361 [1]	Repsol International Finance, B.V.	dic-15	Euros	600	2.125%	dic-20	LuxSE
XS1352121724 [1]	Repsol International Finance, B.V.	ene-16	Euros	100	5.375%	ene-31	LuxSE
XS1451452954 [1]	Repsol International Finance, B.V.	jul-16	Euros	100	0.125%	jul-19	LuxSE
XS1613140489 [1]	Repsol International Finance, B.V.	may-17	Euros	500	0.500%	may-22	LuxSE

Note: Does not include the perpetual subordinated bond issued by RIF on March 25, 2015 in the amount of €1,000 million, which qualifies as an equity instrument.

(1) Issues made under EMTN Program, which is guaranteed by Repsol, S.A., as renewed in October 2018.
(2) Subordinated bond issued by Repsol International Finance B.V. and guaranteed by Repsol, S.A. This issue does not correspond to any open-ended or shelf program.
(3) Repsol Oil & Gas Canada, Inc. issues guaranteed by Repsol, S.A.
(4) Coupon scheduled for reset on March 25, 2025 and March 25, 2045.
(5) LuxSE (Luxembourg Stock Exchange). Multilateral trading systems or other trading centers or non-official over-the-counter markets are not considered.

RIF also runs a Euro Commercial Paper (ECP) Program, arranged on May 16, 2013 and guaranteed by Repsol, S.A., with a limit up to € 2,000 Million. Under this program, several issues and cancellations took place in 2018, with the nominal contracted at December 31, 2018 being €1,635 million (€1,710 million at December 31, 2017).

Financial conditions and debt obligations

In general, the financial debt agreements include the early termination clauses customary in agreements of this nature.

The ordinary bonds issued by RIF and guaranteed by Repsol, S.A. - with an aggregate face value at year-end of €5,000 Million - contain certain early termination clauses (including *cross-acceleration* or *cross-default* - applicable to the issuer and the guarantor) and negative pledge covenants in relation to future bond issues. In the event of breach of any of these covenants, the *trustee*, at its sole discretion or at the behest of the holders of at least one-fifth of the bonds or on the basis of an extraordinary bondholder resolution, is entitled to declare the call of the bonds immediately. In addition, the holders of the bonds issued in 2012, 2013, 2014, 2015, 2016 and 2017 can elect to have their bonds called in the event of a change of control at Repsol or if, as a result of such change of control, Repsol's credit ratings are downgraded to below investment grade status.

Additionally, the €1,000 million subordinated bonds issued on March 25, 2015 by RIF and guaranteed by Repsol, S.A. do not have early redemption covenants other than in the event of dissolution or liquidation. The same conditions apply to the subordinated bond of €1,000 million described in Note 7.4.[1]

At the date of preparation, the accompanying Consolidated Financial Statements, the Repsol Group was not in breach of any of its financial obligations or of any other obligation that could trigger the early repayment of any of its financial commitments.

At December 31, 2018 and 2017 there are no amounts secured by the Group companies in issuances, repurchases or redemptions made by associates, joint arrangements or companies that are not part of the Group.

[1] This bond does not involve a contractual obligation to make payment in cash or other financial assets or an obligation to exchange financial assets or liabilities.

Loans

Includes loans granted to Group companies or entities which are not eliminated in the consolidation process, corresponding mainly to those granted by companies consolidated using the equity method. Worth particular note is the loan granted by Repsol Sinopec Brasil S.A., for the sum of €3,449 million and €2,858 million in 2018 and 2017, respectively, via its subsidiary Repsol Sinopec Brasil B.V. to its shareholders (including the Repsol Group) in proportion to their respective shareholdings (see Note 13), which at December 31, 2018 and 2017 showed a balance for the Group of €2,788 Million and €2,624 Million, respectively.

8.3) Fair value

The classification of the financial assets and liabilities recognized in the financial statements at fair value, by fair value calculation method, is as follows:

€ Million	Level 1		Level 2		Level 3[1]		Total	
Financial assets	2018	2017	2018	2017	2018	2017	2018	2017
Financial assets at FV with changes through P&L	204	68	202	73	24	-	430	141
Financial assets at FV with changes through Other income	-	1	10	-	105	-	115	1
TOTAL	**204**	**69**	**212**	**73**	**129**	**-**	**545**	**142**

	Level 1		Level 2		Level 3		Total	
Financial liabilities	2018	2017	2018	2017	2018	2017	2018	2017
Financial liabilities at FV with changes through P&L	223	139	151	172	-	-	374	311
TOTAL	**223**	**139**	**151**	**172**	**-**	**-**	**374**	**311**

Level 1: Valuations based on a quoted price in an active market for an identical instrument and relate mainly to derivatives held for trading and investments funds.
Level 2: Valuations based on a quoted price in an active market for similar financial assets or based on other valuation techniques that rely on observable market inputs.
Level 3: Valuations based on inputs that are not directly observable in the market.

[1] Does not include €117 Million in 2017 related to investments in shares of companies that are recognized at acquisition cost in accordance with IAS 39.

The valuation techniques used for financial instruments classified under level 2, in accordance with accounting regulations, are based on the income approach, which entail the discounting to present value of future cash flows, either known or estimated, using discount curves from the market reference interest rates (in the case of derivative instruments, estimated using implicit forward curves offered in the market), including adjustments for credit risk based on the life of the instruments. In the case of options, price-setting models based on the Black & Scholes formula are used.

The most significant variables for valuing financial instruments vary depending on the type of instrument, but fundamentally include: exchange rates (*spot and forward*), interest rate curves, counterparty risk curves, prices of equity securities and the volatilities of all the aforementioned factors. In all cases, market data is obtained from reputed information agencies or correspond to quotes issued by official bodies.

(9) DERIVATIVE AND HEDGING TRANSACTIONS

9.1) Accounting hedges

The instruments designated as accounting hedges[1] at December 31, 2018 and 2017 are detailed below:

	Nominal hedging instruments [(1)]		Book value of hedging instrument										Changes in FV	
			Non-Current Assets		Current Assets		Non-Current Liabilities		Current Liabilities		Total FV			
€ Million	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Cash flows	**407**	**297**	**-**	**-**	**10**	**-**	**(56)**	**(68)**	**(1)**	**(2)**	**(47)**	**(70)**	**23**	**18**
Interest rate	298	297	-	-	-	-	(56)	(68)	(1)	(2)	(57)	(70)	13	18
Product price	109	-	-	-	10	-	-	-	-	-	10	-	10	-
Net investment	**(2,714)**	**(2,568)**	**-**	**-**	**-**	**-**	**(2,714)**	**(2,568)**	**-**	**-**	**(2,714)**	**(2,568)**	**(126)**	**354**
Exchange rate	(2,714)	(2,568)	-	-	-	0	(2,714)	(2,568)	-	-	(2,714)	(2,568)	(126)	354
TOTAL [(2)(3)]	**(2,307)**	**(2,271)**	**-**	**-**	**10**	**-**	**(2,770)**	**(2,636)**	**(1)**	**(2)**	**(2,761)**	**(2,638)**	**(103)**	**372**

[(1)] Instruments in United States dollars translated into euros at year-end rates.
[(2)] Fair value measurement methods are described in Notes 8.3.
[(3)] The information relating to hedged items is broken down as follows:

	Changes in FV	
€ Million	2018	2017
C. Cash flows: Interest rate	(13)	(21)
C. Cash flows: Product price	(10)	0
C. Net investment : Exchange rate	126	(354)

The changes in reserves relating to hedging instruments at December 31, 2018 and 2017 recognized under "Accumulated Other Comprehensive Income" in the balance sheet are detailed below:

	2018		2017	
€ Million	Cash flow hedge	Net investment hedging [(1)]	Cash flow hedge	Net investment hedging
Opening balance at December 31	(163)	54	(171)	(212)
Gains/(Losses) for measurement allocated to Other Comprehensive Income	3	(126)	(5)	354
Amounts transferred to the income statement	36	-	27	-
Translation differences	(3)	-	10	-
Share of investments in joint ventures and associates	11	-	(21)	-
Effective tax rate	10	31	(3)	(88)
Closing balance at December 31	(106)	(41)	(163)	54

[(1)] The cumulative amount of translation differences from discontinued hedges amounts to -€77 million.)

[(1)] In cash flow hedges, the effective portion of changes in fair value is recognized under "Hedging Transactions" in equity and the gain or loss relating to the ineffective portion (absolute excess of the cumulative change in fair value of the hedging instrument over the hedged item) is recognized in profit or loss account. Accumulated amounts in equity are transferred to the income statement in periods in which the hedged items affect the income statement or, in the case of a hedge of a transaction that results in the recognition of a non-financial asset or liability, are included in the cost of the asset or liability when the asset or liability is recognized in the balance sheet. Net investment hedges are accounted for in the same way as cash flow hedges, although changes in the valuation of these transactions are recognized in equity under "Translation differences" until the hedged foreign operation is disposed of, at which time they are transferred to the income statement.

The cumulative balances by type of hedging instrument at December 31, 2018 and 2017 are as follows:

	Cash flow hedging reserve and translation reserve	
€Million	2018	2017
Cash flow hedges	**(106)**	**(163)**
Interest rate	(162)	(188)
Product price	10	-
Share of investments in joint ventures and associates	-	(11)
Tax effect	46	36
Net investment hedge	**(41)**	**54**
Exchange rate	(80)	46
Tax effect	39	8

The Group contracts derivatives to hedge exposure to changes in cash flows, most notably in 2018 and 2017:

- A cash flow hedge in dollars in the form of interest rate swaps associated with the facility funding the investment in the Canaport LNG project (Canada), written over a notional amount of €298 Million, maturing after 2019 and with a negative fair value of €57 Million at December 31, 2018.

- Cash flow hedges in the form of interest rate swaps arranged in 2014 for a notional amount of €1,500 Million to hedge future bond issues in late 2014 and early 2015. Under these arrangements, the Group paid a weighted average interest rate of 1.762% and received 6-month Euribor. The fair value recognized in equity pending to be recognized in results amounts to -€73 million after taxes at December 31, 2018 (-€83 Million after taxes at December 31, 2017). The impact recognized on the income statement in 2018, before tax, amounted to €13 million (€12 million in 2017).

- The hedges arranged in 2018 over product prices to cover the variability of gas prices, maturing in less than one year and with a positive fair value of €10 Million.

In addition, the Group maintains instruments to hedge its exposure to variations in foreign exchange rates relating to the stake in the net assets of foreign operations. Of note are the financial instruments designated as net investment hedges with respect to certain dollar assets in the Upstream segment, the notional value of which at December 31 amounted to $3,108 million (€2,714 million).

9.2) Other derivative transactions

The breakdown of other derivative instruments is as follows:

	Non-Current Assets		Current Assets		Non-Current Liabilities		Current Liabilities		Total	
€ Million	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Exchange rate	-	-	77	17	-	-	(49)	(26)	28	(9)
Product price	33	2	231	60	(18)	-	(250)	(215)	(4)	(153)
TOTAL [1]	33	2	308	77	(18)	-	(299)	(241)	24	(162)

[1] In 2018, this heading includes derivatives whose measurement in respect of interest rates amounts to €9 Million.

Repsol has arranged a series of derivatives to manage its exposure to foreign exchange rate and price risk of crude oil and oil products (including CO_2) that are not recognized as accounting hedges under IAS 39. These derivatives include currency forward contracts which mature in less than a year, as part of the global strategy to manage the exposure to exchange-rate risk. Additionally, for the coverage of the product risk that derives from future physical transactions such as the selling and/or purchase of oil and other petroleum products, the Group has entered into futures and swap contracts.

The breakdown of these derivatives at December 31, 2018 and 2017 is provided below:

€ Million	Maturity fair values 2018						2017					
	2019	2020	2021	2022	Seq.	Total	2018	2019	2020	2021	Seq.	Total
Exchange rate	28	-	-	-	-	28	(9)	-	-	-	-	(9)
Product price	(19)	10	-	1	4	(4)	(155)	2	-	-	-	(153)
Purchase agreements	(454)	1	(1)	-	-	(454)	400	-	(2)	(1)	-	397
Sale agreements	365	(13)	-	-	2	354	(409)	2	2	1	-	(404)
Options	-	-	-	-	-	-	1	-	-	-	-	1
Forwards	(1)	-	-	-	-	(1)	13	-	-	-	-	13
Swaps	54	6	1	1	2	64	(156)	-	-	-	-	(156)
Others [(1)]	17	16	-	-	-	33	(4)	-	-	-	-	(4)
TOTAL	9	10	-	1	4	24	(164)	2	-	-	-	(162)

(1) Long-term oil and gas sale and purchase firm commitments are analyzed with the aim of determining whether they correspond to the supply or marketing needs of the normal business activities of the Group or whether, on the contrary, these should be considered as a derivative instrument and be recognized in accordance with the criteria set forth in IFRS 9.

In 2018 and 2017, short-term forward contracts and currency swaps were arranged that generated a pre-tax gain of €127 million and €16 million respectively, which are recognized under “Change in fair value of financial instruments” of the financial result.

In 2018 and 2017, the impact of the valuation of product derivatives and the price of CO_2 on the "operating result" was €134 million and -€61 million, respectively.

The physical units and the fair value of the product price derivatives are itemized below:

	31/12/2018		31/12/2017	
	Physical Units	Fair Value (€ Million)	Physical Units	Fair Value (€ Million)
Purchase agreements		**(454)**		**397**
IPE GO (Thousand Tons)	355	(12)	-	-
BRENT (Thousand barrels)	41,605	(399)	38,097	260
NYMEX HHO (Thousand gallons)	-	-	-	-
RBOB (Thousand gallons)	67,788	(16)	150,704	38
WTI (Thousand barrels)	2,625	(19)	7,488	38
NAT GAS (MMBTU)	67,288,570	(23)	33,457,468	(5)
GO (Thousand tons)	1,657	(130)	909	49
HO (Thousand gallons)	51,618	(12)	85,093	18
EUAs CO2 (Thousand tons)	33,334	158		-
Others	-	(1)	-	(1)
Sale agreements		**354**		**(404)**
IPE GO (Thousand Tons)	883	3	-	-
BRENT (Thousand barrels)	42,815	383	41,569	(247)
NYMEX HHO (Thousand gallons)	-	-	-	-
RBOB (Thousand gallons)	131,292	21	225,339	(35)
WTI (Thousand barrels)	485	12	6,712	(32)
Physical SoNAt (Thousand gallons)	20,000	-	-	-
Physical Tenn 800 Leg (Thousand gallons)	12,486,800	-	-	-
Physical Tenn 500 Leg (Thousand gallons)	17,506,755	-	53,180,304	-
GO (Thousand tons)	2,020	173	1,166	(54)
Physical Dom South (MMBTU)	182,000	-	7,433,753	-
NAT GAS (MMBTU)	3,981,586	79	171,513,598	(16)
EUAs CO2 (Thousand tons)	35,829	(326)	-	-
HO (Thousand gallons)	28,938	18	105,378	(18)
Others	-	(9)	-	(2)
Swaps		**64**		**(156)**
NAT GAS (MMBTU)	199,684,794	10	104,600,000	(14)
Electricity (MWh)	3,460,408	36	3,301	1
Fuel Oil (Thousand Tons)	3,543	24	4,355	(73)
Crude (Thousands barrels)	23,094	5	22,123	(73)
NAPHTHA (Thousand tons)	1,826	2	1,489	(2)
Others	-	(13)	-	5
Forwards		**(1)**		**13**
NAT GAS (MMBTU)	756,577,500	(2)	478,062,500	13
Others	-	1	-	-
Options		-		**1**
Others	-	-	-	1
Other		**33**	-	**(4)**
TOTAL		(4)		(153)

(10) FINANCIAL RISKS

Group business is exposed to different kinds of financial risk, including: market risk, liquidity risk and credit risk. Repsol has a risk management structure and systems that enable it to identify, measure and control the risks to which the Group is exposed.

10.1) Market risk

Market risk is the potential loss faced due to adverse movements in market variables. The Group is exposed to several types of market risks: exchange rate risk, interest rate risk and "*commodities*" risk.

The Company monitors exposure to market risk through ongoing sensitivity analysis. These strategies are complemented with other risk management measures when required by the nature of the risk exposure. For example, *commodity* risk, exchange rate and interest rate risk that affect the financial results are subject to maximum risk levels, measured in terms of *Value at Risk* (VaR), defined by the Corporate Executive Committee in line with the different authorization levels and supervised on a daily basis by a separate area to the area responsible for management.

A sensitivity analysis of the main risks inherent in financial instruments is included for each of the market risks described below, showing how income and equity could be affected (under the "Other Comprehensive Income" heading). Sensitivity analysis uses changes in variables representative of their historical behavior. Estimates are based on both favorable and unfavorable scenarios. The impact on results and/or equity is estimated on the basis of the financial instruments held by the Group at year-end.

a) <u>Exchange rate risk</u>

The Group's profit and equity are exposed to fluctuations in the exchange rates of the currencies in which it transacts, with the US dollar generating the greatest level of exposure.

Exposure to exchange-rate risk can be traced, on the one hand, to financial assets and investments and monetary flows and liabilities in currencies other than the functional currency of the Group's parent company (in this connection, Repsol hedges assets in foreign currency, often regarding decisions to proceed with divestments or the sale of assets, which are normally designated as net investment hedges, structured through derivative instruments or loans in the corresponding currencies, primarily US dollars) and, on the other hand, exchange-rate risk extends to Group companies whose assets, liabilities and monetary flows are denominated in a currency other than the functional currency of said companies, with the following of particular importance in this connection: (i) cash flows from international trade operations involving crude oil, natural gas and refined products are carried out, generally speaking, in US dollars; and (ii) local operations carried out in the countries in which Repsol operates are exposed to fluctuations in the exchange rates of the corresponding local currencies compared to currencies in which commodities are traded.

Repsol permanently monitors the Company's exposure to fluctuations in the exchange rate of currencies in which it undertakes significant operations and actively manages exchange-rate risk positions that affect the financial result of the income statement. To this end, it contracts derivative financial instruments that seek to provide a consolidated economic hedge of currencies for which there is a liquid market.

Furthermore, cash flows are subject to accounting hedges with a view to protecting the economic value of the flows corresponding to investment and divestment operations, corporate operations or project execution or one-off contracts for which the monetary flow is distributed over a period of time.

For exchange rate derivatives, see Note 9.

The sensitivity of net income and equity to exchange rate risk, as a result of the appreciation or depreciation of the euro against the dollar, on the financial instruments held by the Group at December 31, is illustrated below:

	Appreciation (+) / depreciation (-) in exchange rates	€ Million
Effect on profit after tax	5%	(30)
	-5%	33
Effect on equity	5%	17
	-5%	(19)

b) Interest rate risk

Fluctuations in interest rates can affect interest income and expense of financial assets and liabilities with variable interest rates; which may also impact the fair value of financial assets and liabilities with a fixed interest rate. Furthermore, these variations can affect the carrying value of assets and liabilities due to variations in the discount rates of applicable cash flows, the profitability of investments and the future cost of raising financial resources.

Repsol's debt is linked to the most competitive financial instruments at the time, both in terms of the capitals market and banking market and based on the market conditions considered most ideal accordingly. Furthermore, Repsol contracts interest rate derivatives to reduce the risk of variations in financial burdens and in the fair value of its debt, and to mitigate the interest-rate risk on future fixed-time debt issues, which are designated in general as hedging instruments (see Note 9).

At December 31, 2018 and 2017, the net debt balance at fixed rates amounted to €7,183 Million and €8,094 Million respectively. This is equivalent to 116% and 108%, respectively, of total net debt including interest rate derivatives.

The sensitivity of net income and equity, as a result of the effect of fluctuations in interest rates on the financial instruments held by the Group at December 31 is illustrated in the following table:

	Increase (+) / decrease (-) in interest rates (basic points)	€ Million
Effect on profit after tax	50 b.p.	4
	-50 b.p.	(4)
Effect on equity	50 b.p.	11
	-50 b.p.	(12)

c) Commodity price risk

As a result of its trade operations and activities, the Group's results are exposed to volatility in the prices of oil, natural gas and their derivative products.

Repsol enters into derivative transactions to mitigate its exposure to price risk. These derivatives provide an economic hedge of the Group's results, although they are not always designated as hedging instruments for accounting purposes (see Note 9).

At December 31, 2018 an increase or decrease of 10% in the prices of crude oil, natural gas and derivative products would have approximately led to the following changes in net income as a result of their effect on the financial instruments held by the Group at that date.

	Increase (+) / decrease (-) in crude oil and byproducts prices	€ Million
Effect on profit after tax	+10%	(39)
	-10%	39

10.2) Liquidity risk

The liquidity policy applied by Repsol is structured around guaranteeing the availability of the necessary funds to ensure compliance with obligations assumed and the evolution of the Group's business plans, whilst retaining the ideal amount of liquid resources and seeking the highest level of efficiency in the management of financial resources at all times. In line with this prudent financial policy, Repsol maintains cash resources and other liquid financial instruments[1] and undrawn credit lines sufficient to cover current debt maturities 2.0 times.

Repsol controls and monitors its financial needs ranging from the production of daily cash flow forecasts to the financial planning involved in the annual budgets and its strategic plan; it maintains diversified and stable sources of financing that facilitate efficient access to financial markets, all within the framework of a financing structure that is compatible with the corresponding credit rating in the investment grade category.

The Group had undrawn credit facilities amounting to €2,249 million and €2,503 million at December 31, 2018 and 2017, respectively.

The tables below contain an analysis on the maturities of the financial liabilities existing at December 31, 2018 and 2017:

	Maturities (€ Million)							Maturities (€ Million)						
	2018							2017						
December 31, 2018	2019	2020	2021	2022	2023	Seq.	Total	2018	2019	2020	2021	2022	Seq.	Total
Bonds and obligations (1)	2.953	1.966	1.122	586	83	4.606	11.316	3.511	1.314	1.966	1.121	585	4.702	13.199
Loans and other financial debts (1)	1.426	250	239	337	88	3.465	5.805	802	209	211	128	110	3.223	4.683
Derivatives (2)	59	7	7	6	6	23	108	34	9	8	7	6	30	94
Suppliers	3.244	-	-	-	-	-	3.244	2.738	-	-	-	-	-	2.738
Other payables	4.506	-	-	-	-	-	4.506	4.280	-	-	-	-	-	4.280

NOTE: The amounts shown are the contractual undiscounted cash flows; therefore, they differ from the amounts included on the consolidated balance sheet. Obligations under finance leases are not included (See Note 15)

(1) Corresponds to future maturities of amounts registered under the "*Non-current financial liabilities*" and "*Current financial liabilities*" items, including interests or future dividends related to those financial liabilities. It does not include financial derivatives.

(2) The contractual maturities of the derivatives included under this heading are outlined in Note 9. It does not include trade derivatives recognized under the *"Other non-current liabilities"* and *"Other payables"* items on the consolidated balance sheet.

[1] Includes immediately available time deposits recorded under "Other Current Financial Assets" amounting to € 1,455 million.

10.3) Credit risk[1]

Credit risk is defined as the possibility of a third party not complying with their payment obligations, thus creating credit losses. The Group specifically evaluates all available information consistent with internal credit risk management for each financial instrument, including those of a commercial nature.

The Group's exposure to credit risk, according to the type of financial instrument together with the impairment recognized at December 31, 2018 for each of them, is broken down as follows:

	Credit risk (probability of default)	Gross balance	Impairment	Net balance
Other current financial assets and cash	< 2%	6,497	(1)	6,497
Non-current financial assets	< 2%	584	(1)	584
	> 8%	3,118	(2,119)(2)	999
Other current and non-current assets	< 2% and < 8%	681	(1)	680
	> 8%	906	(590)(3)	316
Trade and other receivables	< 2% and < 8%	5,833	(14)	5,869
	> 8%	411	(175)(4)	236

(1) Impairments of less than one million euros due to the high credit quality of the counterparties (banks and financial institutions with ratings equal to or greater than BB).

(2) Includes assets impaired in Phase III of the debtor's credit risk statement (see following section, "Expected loss"); impairment in Phase II are not material. Impairment at December 31, 2017 amounted to €1,714 million, relating to situations pending litigation and insolvency proceedings. In 2018, €405 million was provisioned, the majority of which relating to loans and credit lines to joint ventures in Venezuela (see Note 8 and 20.3).

(3) Includes assets impaired in Phase III of the debtor's credit risk statement; the impairment in Phase II is not material. Impaired amounts at December 31, 2018 mainly relate to receivables related to business in Venezuela.

(4) Includes assets impaired in Phase III of the debtor's credit risk statement; impairment in Phase II is not material. The impaired balance at December 31, 2017 amounted to €173 million.

Trade and other receivables

The trade debts are shown on the balance sheet at December 31, 2018 and 2017 net of allowances for impairment provisions for an amount of €6,105 million and €5,912 million, respectively. The following table shows the age of trade receivables net of impairment provisions:

	€ Million	
Maturities	2018	2017
Unmatured debt	5,667	5,527
Unmatured debt 0-30 days	257	240
Unmatured debt 31-180 days	116	94
Unmatured debt over 180 days	65	51
TOTAL	6,105	5,912

The Group’s credit risk on trade receivables is not significantly concentrated as it is spread out among a large number of customers and other counterparties. The maximum net exposure to a third party, including official bodies and public sector entities, does not exceed 2.6%.

As a general rule, the Group establishes a bank guarantee issued by the financial entities as the most suitable instrument of protection from credit risk. In some cases, the Group has contracted insurance credit policies whereby this transfers partially to third parties the credit risk related to the business activity of some of their businesses.

As part of its business activities, the Group has guarantees extended by third parties in an aggregate amount of €3,584million at December 31, 2018 and €3,402 million at December 31, 2017. Of this balance, the amount of trade

[1] The credit risk information included in this section does not include the credit risk of investees or joint ventures, the impact of which is recognized under "Profit from Investments Accounted for Using the Equity Method. Expected credit losses are an estimate, weighted by probability, of credit losses (i.e. the present value of all cash deficits) over the expected life of the financial instrument. A cash deficit is defined as the difference between the cash flows due to the entity under the contract and the cash flows it expects to receive. Because expected credit losses take into account both the amount and timing of payments, there is a credit loss if the entity expects to collect in full, but later than contractually agreed.

receivables secured by guarantees stood at €531 million and €537 million at December 31, 2018 and December 31, 2017, respectively.

EXPECTED LOSS:

The Group calculates the expected credit loss on its **trade accounts receivable** using its own risk assessment models for its customers, taking into account the probability of non-payment, the balance at risk and the estimated LGD, taking into account all the information available for each customer. As a general criterion, the Group applies a threshold of more than 180 days in default for the consideration that objective evidence of default/deterioration has been incurred. These criteria are applied in the absence of other objective evidence of non-compliance, such as bankruptcy situations, etc.

In the remaining **financial instruments**, mainly certain loans and financial guarantees granted to joint ventures are individually monitored for the purposes of determining when, if any, there may have been a significant impairment in credit risk or default.

The expected loss on financial instruments is calculated based on the stage of the debtor's credit risk statement:

- **Phase 1:** At the time of initial recognition, the expected credit loss is calculated with the probability of default in the first 12 months. In the case of trade receivables, the calculation is spread over the life of the instrument, in accordance with the accounting standard.
- **Phase 2:** When the instrument undergoes a significant increase in risk, the expected loss is calculated with the probability of default for the entire life of the instrument.
- **Phase 3**: When the instrument is already impaired, the expected loss for the entire life of the instrument is calculated and, in the event that interest accrues, it is calculated on the net balance of the provision for credit losses.

The assessment of the impairment of the value of the **financial assets,** to which the expected credit loss model is applicable, is calculated according to the following formula:

Expected credit loss = Probability of default x Exposure x Severity

- **Probability of default**: is calculated individually for each trade debtor according to the solvency models approved by the Repsol Group, except for individuals, for whom an average default rate is used. The models take into account quantitative information (economic-financial variables of the customer, external and internal payment behavior, etc.), qualitative information (sector of activity, macroeconomic data on the country, etc.) and market sensitivity variables (e.g. price evolution). An internal rating and an associated probability of default are obtained for each debtor, according to the models. The probability of default determined according to the Group's internal rating model can be grouped into three categories: (i) less than 2% probability of default, (ii) greater than 2% and less than 8% probability, and (iii), greater than 8% probability.
- **Exposure**: this is calculated taking into account the total amount of outstanding credit and a potential future exposure according to the available risk limit.
- **Severity:** reflects the percentage of unrecovered exposure in the event of default, also taking into account whether or not such exposure is guaranteed, and is based on the historical behavior of customers.

With respect to financial instruments relating to operations in **Venezuela**, the expected loss estimation model has been carried out by estimating the cash flow scenarios foreseen for the business, weighted by their estimated probability. Since the financial assets are impaired (phase 3 of the credit risk statement), to quantify the loss three severity scenarios (moderate, significant and severe) are applied with different assumptions and economic impacts on the estimated cash flows. The probability of occurrence of these scenarios is weighted according to the historical information of sovereign defaults (Report Moody´s: "Sovereign Default and recovery rates 1983-2017") and the Management's expectations. The estimation of the cash flow scenarios is consistent with those used for the purpose of calculating the impairment of property, plant and equipment. The assessment of credit risk impairment in Venezuela required estimates of the implications and evolution of a highly uncertain environment, which made it advisable to have an independent expert to validate Management's judgments.

NON CURRENT ASSETS AND LIABILITIES

(11) INTANGIBLE ASSETS

The breakdown of the intangible assets and of the related accumulated depreciation and impairment losses at December 31, 2018 and 2017 is as follows:

	€ Million									
		Upstream			Downstream				Corporate	
	Goodwill	Exploration permits	Computer software	Other assets	Gas station association rights and other rights [2]	Computer software	CO_2 emission allowances [3]	Concessions and others [4]	Computer software and others	**Total**
GROSS COST										
Balance at January 1, 2017	**3,295**	**2,329**	**186**	**110**	**768**	**266**	**84**	**198**	**291**	**7,527**
Investments [1]	-	170	16	-	17	41	19	1	21	285
Retirements or removals	-	(16)	(11)	-	(58)	-	-	(8)	2	(91)
Translation differences	(330)	(266)	(18)	(2)	(12)	(5)	-	(2)	-	(635)
Change in scope of consolidation	(9)	(44)	-	-	-	-	-	-	-	(53)
Reclassifications and other movements	(9)	48	3	(28)	31	(2)	(34)	(7)	(7)	(5)
Balance at December 31, 2017	**2,947**	**2,221**	**176**	**80**	**746**	**300**	**69**	**182**	**307**	**7,028**
Balance at January 1, 2018	**2,947**	**2,221**	**176**	**80**	**746**	**300**	**69**	**182**	**307**	**7,028**
Investments [1]	84	192	12	4	56	48	50	9	33	488
Retirements or removals	(2)	(112)	(8)	(6)	(70)	(16)	-	-	(5)	(219)
Translation differences	110	97	9	5	8	2	-	1	-	232
Change in scope of consolidation	64	-	-	-	3	18	-	136	-	221
Reclassifications and other movements	-	22	9	-	63	13	(7)	6	(2)	104
Balance at December 31, 2018	**3,203**	**2,420**	**198**	**83**	**806**	**365**	**112**	**334**	**333**	**7,854**
ACCUMULATED AMORTIZATION AND IMPAIRMENT LOSSES										
Balance at January 1, 2017	**(180)**	**(1,061)**	**(96)**	**(36)**	**(491)**	**(156)**	**(13)**	**(165)**	**(220)**	**(2,418)**
Amortization/Depreciation	-	(48)	(26)	(1)	(40)	(20)	-	(1)	(24)	(160)
Retirements or removals	-	9	10	-	57	-	-	1	(2)	75
Provision/(reversal) impairment losses	(4)	(70)	-	(66)	(1)	-	-	(2)	-	(143)
Translation differences	-	115	10	-	9	1	-	1	2	138
Change in scope of consolidation	-	20	-	-	-	-	-	-	-	20
Reclassifications and other movements	-	(17)	-	37	(2)	-	13	7	6	44
Balance at December 31, 2017	**(184)**	**(1,052)**	**(102)**	**(66)**	**(468)**	**(175)**	**-**	**(159)**	**(238)**	**(2,444)**
Balance at January 1, 2018	**(184)**	**(1,052)**	**(102)**	**(66)**	**(468)**	**(175)**	**-**	**(159)**	**(238)**	**(2,444)**
Amortization/Depreciation	-	(122)	(21)	(1)	(40)	(21)	-	(6)	(24)	(235)
Retirements or removals	-	113	8	-	69	8	-	-	5	203
(Provision)/Reversal impairment losses	(8)	(210)	-	(1)	-	-	-	1	(4)	(222)
Translation differences	-	(49)	(6)	(5)	(3)	(1)	-	(1)	-	(65)
Change in scope of consolidation	-	-	-	-	-	-	-	-	-	-
Reclassifications and other movements	-	12	-	-	-	-	-	(7)	-	5
Balance at December 31, 2018	**(192)**	**(1,308)**	**(121)**	**(73)**	**(442)**	**(189)**	**-**	**(172)**	**(261)**	**(2,758)**
Net balance at December 31, 2017 [5]	**2,763**	**1,169**	**74**	**13**	**278**	**125**	**69**	**23**	**69**	**4,584**
Net balance at December 31, 2018 [5]	**3,011**	**1,112**	**77**	**10**	**364**	**176**	**112**	**162**	**72**	**5,096**

(1) Investments in 2018 and 2017 come from the direct acquisition of assets. Investments in "*Exploration permits*" mainly refer to acquisition of acreage and to activating geology and geophysics costs in the amount of €192 million and €170 million in 2018 and 2017 respectively.

(2) It includes both the service/gas stations association rights and whose ownership is conditioned by the term of the contracts giving rise to them. At December 31, 2018, the capitalized costs of obtaining contracts amounted to € 51 million.

(3) In 2018, it includes €63 million corresponding to the carbon emission rights assigned free of charge for 2018 in accordance with the National Allocation Plan (€51 million in 2017) and the reduction of the rights consumed by the emissions made in 2018 amounting to €70 million (€72 million in 2017). For additional information on CO_2 allowance, see Note 31.2.

(4) In 2018 it includes the customer portfolio acquired from Viesgo (see Note 4), as well as the right to use the Punta Langosteira marine terminal (A Coruña Refinery).

(5) In 2018 and 2017 includes assets acquired under finance leases amounting to €285 million and €203 million.

Goodwill

The breakdown of goodwill, by segment and company, at December 31, 2018 and 2017 is as follows:

	€ Million	
Goodwill	2018	2017
Upstream [1]:		
Repsol Oil & Gas Canada, Inc.	2,441	2,333
Other companies	89	14
Downstream [2]:		
Repsol Portuguesa, S.A.	154	154
Repsol Gas Portugal, S.A.	106	106
Repsol Comercial de Productos Petrolíferos, S.A.	104	104
Viesgo Generación, S.L.	49	-
Other companies	68	52
TOTAL [3]	3,011	2,763

(1) Almost the entirety of this item reflects the goodwill arising from the acquisition of ROGCI in 2015 and allocated for the purpose of evaluating its recoverability in the *Upstream* segment.
(2) Corresponds to 11 CGU being the most significant individual amount not exceeding to 27% of the total of segment. Of the total, €443 million and €389 million in 2018 and 2017, respectively, correspond to companies whose main activities are undertaken in Europe.
(3) Includes €191 million and €184 million of impairment losses in 2018 and 2017 respectively.

For CGUs with goodwill and/or assets with indefinite useful lives allocated, the Group performs sensitivity analysis in order to quantify if changes in the recoverable amounts, calculated according to the method described in Note 3, of these CGUs would have a significant impact in the financial statements. Specifically, in performing the most significant sensitivity analysis, the following inputs have been taken into consideration.

Sensitivity analysis	
Decrease in the price of hydrocarbons (Brent and HH)	10%
Decrease in sales volume	5%
Increase in operating and investment costs	5%
Decrease in the unit contribution margin	5%
Increases in the discount rate	100 b.p.

Repsol considers, based on its current knowledge, that the reasonably predictable changes in the key inputs for determining the fair value of CGUs to which goodwill has been allocated would not have a material impact on the Group's financial statements at December 31, 2018 as a result of the recoverable value of its goodwill.

(12) PROPERTY, PLANT AND EQUIPMENT

The breakdown of *"Property, plant and equipment"* and of the related accumulated depreciation and impairment losses at December 31, 2018 and 2017 is as follows:

	Property, plant and equipment								
	Upstream			Downstream				Corporate	
GROSS COST (1)	Investments in areas with reserves	Operating investments	Other property, plant and equipment	Land, buildings and other constructions	Machinery and fixtures	Other property, plant and equipment	Non-current assets in progress	Land, constructions and others (5)	**Total**
Balance at January 1, 2017	**25,998**	**4,279**	**480**	**2,002**	**19,125**	**1,214**	**689**	**1,023**	**54,810**
Investments	922	274	33	1	11	27	670	14	1,952
Retirements or removals	(157)	(19)	(20)	(22)	(171)	(7)	(3)	(1)	(400)
Translation differences	(3,208)	(456)	(55)	(66)	(350)	(39)	(21)	-	(4,195)
Change in scope of consolidation (2)	(5)	(116)	(2)	-	-	-	-	-	(123)
Reclassifications and other movements (3)	558	(427)	1	26	419	23	(491)	1	110
Balance at December 31, 2017	**24,108**	**3,535**	**437**	**1,941**	**19,034**	**1,218**	**844**	**1,037**	**52,154**
Balance at January 1, 2018	**24,108**	**3,535**	**437**	**1,941**	**19,034**	**1,218**	**844**	**1,037**	**52,154**
Investments	1,188	266	92	6	16	22	788	25	2,403
Retirements or removals	(1,431)	(203)	(18)	(22)	(167)	(16)	(7)	(2)	(1,866)
Translation differences	1,082	147	23	24	125	15	7	-	1,423
Change in scope of consolidation (2)	-	-	-	5	345	-	7	-	357
Reclassifications and other movements (3)	(40)	(125)	49	53	643	91	(801)	-	(130)
Balance at December 31, 2018	**24,907**	**3,620**	**583**	**2,007**	**19,996**	**1,330**	**838**	**1,060**	**54,341**
ACCUMULATED AMORTIZATION AND IMPAIRMENT LOSSES (1)									
Balance at January 1, 2017	**(10,743)**	**(2,381)**	**(194)**	**(1,017)**	**(11,900)**	**(853)**	**-**	**(425)**	**(27,513)**
Amortization/Depreciation	(1,371)	(135)	(21)	(35)	(602)	(38)	-	(37)	(2,239)
Retirements or removals	121	8	11	21	168	6	-	-	335
Provision/(reversal) impairment losses	170	(247)	-	4	5	(1)	-	-	(69)
Translation differences	1,351	270	21	51	241	15	-	-	1,949
Change in scope of consolidation	10	10	1	-	-	-	-	-	21
Reclassifications and other movements (3)	(14)	(23)	(6)	(6)	(33)	44	-	-	(38)
Balance at December 31, 2017	**(10,476)**	**(2,498)**	**(188)**	**(982)**	**(12,121)**	**(827)**	**-**	**(462)**	**(27,554)**
Balance at January 1, 2018	**(10,476)**	**(2,498)**	**(188)**	**(982)**	**(12,121)**	**(827)**	**-**	**(462)**	**(27,554)**
Amortization/Depreciation	(1,028)	(115)	(14)	(35)	(635)	(41)	-	(37)	(1,905)
Retirements or removals	1,385	179	15	18	162	15	-	2	1,776
Provision/(reversal) impairment losses	(438)	(29)	(34)	1	14	(60)	-	-	(546)
Translation differences	(470)	(100)	(9)	(18)	(86)	(6)	-	-	(689)
Change in scope of consolidation	-	-	-	(1)	-	-	-	-	(1)
Reclassifications and other movements (3)	19	(15)	3	-	(2)	4	-	-	9
Balance at December 31, 2018	**(11,008)**	**(2,578)**	**(227)**	**(1,017)**	**(12,668)**	**(915)**	**-**	**(497)**	**(28,910)**
Net balance at December 31, 2017 (4)	**13,632**	**1,037**	**249**	**959**	**6,913**	**391**	**844**	**575**	**24,600**
Net balance at December 31, 2018 (4)	**13,899**	**1,042**	**356**	**990**	**7,328**	**415**	**838**	**563**	**25,431**

(1) The Repsol Group uses the cost model by which items of property, plant and equipment are measured initially at acquisition cost. With the exception of *Upstream* activities (see Note 2), amortization is carried out on a straight-line basis, in line with its estimated useful life, once in ideal conditions of use. The estimated useful life of the main assets of *Downstream* and Corporation is broken down below:

Estimated useful life	Years
Buildings and other constructions	20-50
Machinery and plant:	
Machinery, plant and tooling	8-25
Specialized complex installations (Refining and Chemical industrial complexes):	
- Units	8-25
- Storage tanks	20-40
- Cabling and networks	12-25
Specialized complex installations (electricity and Gas):	
- Electricity generation plants	18-40
- Gas and electricity infrastructure and distribution	12-40
Transport elements	5-20
Other property, plant and equipment:	
- Furniture and fixtures	9-15

(2) See Note 4.

(3) In 2018 y 2017 this item includes reclassifications from "*Assets under construction*" mainly to "*Machinery and plant*", as a result of several upgrade, repair and remodeling projects of the Group.

(4) At December 31, 2018 and 2017, the value of accumulated inventory impairment came to €3,532 Million and €4,023 Million, respectively.

(5) Includes, in 2018 and 2017, property, plant and equipment in progress correspond to investments in the industrial complexes of the Refining and Chemicals businesses, mainly in Spain and, to a lesser extent, in Peru and Portugal.

(6) Includes mainly "*Land and buildings*" amounting to €460 Million and €468 Million in 2018 and 2017, respectively. The section "*Other*" mainly includes, "*Machinery and plant*" and "Other property" for the amount of €103 Million and €106 Million in 2018 and 2017, respectively.

The breakdown by geography of the Group's most significant investments is detailed in Note 5.2 "*Disclosures by geography and segment*", which is presented using the Group's reporting model.

"Property, plant and equipment" includes €471 million and €517 million in 2018 and 2017, respectively, corresponding to the carrying value of assets acquired under finance leases. Worth particular mention among the assets acquired under finance leases at year-end 2018, are the gas pipelines and other assets for the transportation of gas in the USA and Canada, in the carrying amount of €423 million and €489 million at December 31, 2018 and 2017, respectively (see Note 15).

This heading also includes investments made by the Group in service concession arrangements in the amount of €256 million and €269 million at December 31, 2018 and 2017, respectively. These concessions revert to the State over a period of time ranging from 2019 to 2066.

Repsol capitalizes qualifying borrowing costs. In 2018 and 2017, the average activation cost was 2.69% and 2.77% and the activated expense for this item amounted to €54 million and €98 million, respectively, recorded under *"Financial result"* in the income statement.

The figures corresponding to non-depreciable assets, that is, land and assets under construction, amount, respectively, to €584 million and €974 million at December 31, 2018, respectively and €577 million and €929 million at December 31, 2017, respectively.

"Property, plant and equipment" includes fully depreciated items with an original carrying amount of €9,303 million and €8,898 million at December 31, 2018 and 2017, respectively.

In accordance with industry practices, Repsol insures its assets and operations worldwide. Among the risks insured are damage to property, plant and equipment, together with the subsequent interruptions in its business that such damage may cause. The Group believes that the current coverage level is, in general, appropriate for the risks inherent to its business.

(13) INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Movement in this consolidated balance sheet heading during 2018 and 2017 was as follows:

	€ Million	
	2018	2017
Opening balance for the year	**9,268**	**10,176**
Net investments [(1)]	5	313
Changes in scope of consolidation [(2)]	(3,235)	81
Income investments accounted for using the equity method [(3)]	1,053	630
Profit from discontinued operations	68	274
Dividends paid out	(597)	(676)
Translation differences	209	(913)
Reclassifications and other movements[(4)]	423	(617)
Balance at year end	**7,194**	**9,268**

(1) In 2017 it mainly included capital contributions in BPRY Caribbean Ventures, LLC. and Repsol Sinopec Resources UK, Ltd.
(2) Mainly includes the write down of the investment in Naturgy (see Note 4).
(3) See Note 22.
(4) Includes mainly the reclassification of the negative value of the equity of Petroquiriquire and Cardón (see "Value of interest in joint ventures" below).

The breakdown of the investments accounted for using the equity method is as follows:

	€ Million	
	Carrying amount of the investment [(2)]	
	2018	2017
Joint ventures	7,037	5,969
Associates [(1)]	157	3,299
TOTAL	**7,194**	**9,268**

(1) This mainly includes the stake in Petrocarabobo, S.A. together with Oleoducto de Crudos Pesados (OCP) Ltd in 2018 and Naturgy's stake in 2017. (Naturgy's summarized financial information for 2017 is available in the 2017 Annual Accounts).
(2) In 2018 €6,812 million correspond to *Upstream* (€5,753 million in 2017), mainly relating to joint ventures.

Joint ventures are considered those that are based on the shareholder agreements signed with each of the shareholders in each company, by virtue of which strategic operational and financial decisions require the unanimous consent of the parties sharing control. The most significant joint ventures are:

Repsol Sinopec Brasil (RSB)

Repsol, S.A. holds a 60% interest in the Repsol Sinopec Brasil (RSB) group, which comprises Repsol Sinopec Brasil, S.A. and its subsidiaries. Repsol's stake is implemented by holding 60% interest in Sinopec Brasil, S.A.

This entity´s main businesses are oil and gas exploration and production, the import and export of crude oil and gas and derivative products, the storage, distribution and sale of crude oil, oil derivatives and natural gas, as well as the provision of services related to these activities. It operates mainly in Brazil.

For loans granted to the Repsol Group by RSB, see Note 8.2. For the guarantees granted by the Group to RSB, see Note 27.

YPFB Andina, S.A.

Repsol holds 48.33% of YPFB Andina, S.A., through Repsol Bolivia, S.A., which chiefly engages in oil and gas exploration, operation and marketing. It operates mainly in Bolivia.

BPRY Caribbean Ventures, LLC. (BPRY)

Repsol holds a 30% interest in BPRY Caribbean Ventures LLC (through Repsol Exploración, S.A.), which, together with its subsidiaries, engages in oil and gas exploration, operation and marketing and related activities, such as construction and operation of oil rigs, pipelines and other facilities in Trinidad and Tobago.

Petroquiriquire, S.A.

Repsol has a 40% stake in Petroquiriquire, S.A. through Repsol Exploración, S.A. Petroquiriquire is a public-private venture, partly held by Corporación Venezolana de Petróleo, S.A. (CPV) with 56% and PDVSA Social, S.A. with 4%. Its core activity is the production and sale of oil and gas in Venezuela. For information on the Group's risks and exposure in Venezuela, see Note 20.3.

Cardón IV, S.A.

Repsol has a 50% stake in Cardón IV, S.A. through Repsol Exploración, S.A. The other 50% is owned by the ENI group. Cardón IV is a gas licensee whose core activity is the production and sale of gas in Venezuela. For information on the Group's risks and exposure in Venezuela, see Note 20.3.

Repsol Sinopec Resources UK Ltd. (RSRUK)

Company held by Talisman Colombia Holdco, Ltd, and Addax Petroleum UK Limited ("Addax"), a subsidiary of the Sinopec Group, with a 51% and 49% stake, respectively, and whose core business is the exploration and exploitation of oil and gas in the North Sea. This joint venture is governed by a shareholder agreement that requires the unanimous consent of both shareholders for all significant financial and operating decisions. For information on the arbitration procedure concerning the purchase by Addax of its 49% stake in RSRUK, see Note 14.

Equion Energía Ltd.

Equion is a company held 51% and 49% by Ecopetrol, S.A. and Talisman Colombia Holdco, Ltd, respectively. Equion mainly explores for, researches, exploits, develops and sells oil and gas and derivative products in Colombia. Based on a shareholder agreement with Ecopetrol, S.A., Repsol treats Energía Ltd. as one of its joint ventures.

The tables below provide summarized financial information for these investments, prepared in keeping with IFRS-EU accounting policies, as detailed in Note 2 and reconcile these disclosures with the amounts at which these investments are carried in the Group's consolidated financial statements:

Income from joint ventures:

	RSB		YPFB Andina		BPRY		Petroquiriquire		Cardon IV		RSRUK [5]	Equion	
€Million	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2018	2017
Operating income	1,560	1,353	217	230	2,162	1,504	277	342	570	725	1,253	399	403
Amortization and impairment provisions [1]	(253)	(399)	(96)	(151)	(990)	(739)	(122)	(1,068)	(650)	(731)	(336)	(169)	(142)
Other operating expenses [2]	(782)	(632)	(139)	(84)	(1,037)	(952)	(77)	(130)	189	(231)	186	(34)	(49)
Operating income	**525**	**322**	**(18)**	**(5)**	**135**	**(187)**	**78**	**(856)**	**109**	**(237)**	**1,103**	**196**	**212**
Net interest	128	98	7	5	(95)	(103)	(37)	(29)	(189)	(173)	-	3	(1)
Other financies	15	(16)	(10)	(10)	(10)	(18)	(5)	4	(5)	(83)	(146)	2	(5)
Income from investments accounted for using the equity method - net of taxes	23	19	13	12	-	-	-	-	-	-	-	-	-
Net income before tax	**691**	**423**	**(8)**	**2**	**30**	**(308)**	**36**	**(881)**	**(85)**	**(493)**	**957**	**201**	**206**
Tax expense [3]	(238)	(80)	6	7	(93)	(24)	193	338	(282)	51	373	(84)	32
Net income attributable to the parent	**453**	**343**	**(2)**	**9**	**(63)**	**(332)**	**229**	**(543)**	**(367)**	**(442)**	**1,330**	**117**	**238**
Repsol stakeholding	60%	60%	48%	48%	30%	30%	40%	40%	50%	50%	51%	49%	49%
Consolidation income	**272**	**206**	**(1)**	**4**	**(19)**	**(100)**	**92**	**(217)**	**(184)**	**(221)**	**678**	**57**	**117**
Dividends	**283**	**132**	**1**	-	-	**5**	**247**	**140**	-	-	-	-	**64**
Other comprehensive income [4]	**193**	**(574)**	**21**	**(61)**	**29**	**(75)**	**(22)**	**(5)**	**(18)**	**14**	**(5)**	**11**	**(23)**

Note: The itemized amounts below feature the percentage stake of the Group in each of the companies:

(1) In 2018 Petroquiriquire and Cardón IV include the impairment of property, plant and equipment and accounts receivable from PDVSA amounting to €324 million (€734 million in 2017).

(2) In 2018 and 2017 RSB includes operating lease expenses for the year amounting to €126 million and €123 million, respectively, arising mainly from the floating production platforms (FPSO) lease commitments secured by the Group (see Note 27).

(3) Venezuela includes the impact of the cancellation of deferred tax assets as a consequence of Presidential Decree No. 35 (see Note 20.3), compensated by the positive tax impacts arising from translation differences.

(4) Relates to *"Income and expenses recognized directly in equity"* and *"Amounts transferred to the consolidated income statement"* in the consolidated statement of recognized income and expenses.

(5) The value of the investment in 2017 was nil.

Value of interest in joint ventures:

	RSB		YPFB Andina		BPRY		Petroquiriquire		Cardón IV		RSRUK [3]	Equion	
€Million	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2018	2017
Assets													
Non-current assets	7,951	7,781	867	876	7,660	8,055	210	491	1,009	1,409	3,543	252	537
Current assets	473	402	445	324	797	865	3,926	3,417	222	899	1,016	541	88
Cash and cash equivalents	35	46	53	124	64	73	13	12	41	60	26	50	48
Other current assets	438	356	392	200	733	792	3,913	3,405	181	839	990	491	40
Total Assets	**8,424**	**8,183**	**1,312**	**1,200**	**8,457**	**8,920**	**4,136**	**3,908**	**1,231**	**2,308**	**4,559**	**793**	**625**
Liabilities													
Non-current liabilities	648	662	235	205	5,910	6,051	852	789	1,803	2,112	2,857	124	145
Financial liabilities	—	229	—	-	1,810	1,839	698	482	1,410	2,057	—	—	-
Other non-current liabilities [1]	648	433	235	205	4,100	4,212	154	307	393	55	2,857	124	145
Current liabilities	528	609	121	77	345	702	4,284	3,635	388	623	283	134	89
Financial liabilities	213	229	—	—	—	-	—	-	—	-	—	—	-
Other current liabilities	315	380	121	77	345	702	4,284	3,635	388	623	283	134	89
Total Liabilities	**1,176**	**1,271**	**356**	**282**	**6,255**	**6,753**	**5,136**	**4,424**	**2,191**	**2,735**	**3,140**	**258**	**234**
NET ASSETS	**7,248**	**6,912**	**956**	**918**	**2,202**	**2,167**	**(1,000)**	**(517)**	**(960)**	**(427)**	**1,419**	**535**	**391**
Repsol stakeholding	60%	60%	48%	48%	30%	30%	40%	40%	50%	51%	51%	49%	49%
Share in net assets [2]	4,349	4,147	459	441	661	650	(400)	(207)	(480)	(214)	724	262	192
Capital gains / (losses)	-	-	-	-	-	-	-	-	-	-	-	-	-
Carrying amount of the investment	**4,349**	**4,147**	**459**	**441**	**661**	**650**	-	-	-	-	**724**	**262**	**192**

Note: The itemized amounts below feature the percentage stake of the Group in each of the companies:

(1) In 2018 and 2017, RSB includes non-current provisions for dismantling obligations for the amount of €101 million and €102 million.

(2) Petroquiriquire: In 2018 and 2017 a provision was recorded for contingencies and expenses rose to €400 million and €207 million at December 31, respectively, corresponding to the negative value of Petroquiriquire's equity (See Note 14).
Cardón IV: The value of the investment is made equal to zero by deducting the carrying amount from the loan granted to Cardón IV which is considered a net investment (see Note 8.1).

(3) The value of the investment in 2017 was nil.

Lastly, and regarding joint arrangements and associates that are material or of significant relative importance: (i) there are no legal restrictions on the capacity to transfer funds; (ii) the financial statements that have been used refer to the same date as the financial statements of Repsol, S.A.; and (iii) there are no unrecognized losses.

(14) CURRENT AND NON-CURRENT PROVISIONS

14.1) Provisions

At December 31, 2018 and 2017, the balance and changes in these items during 2018 and 2017 are as follows:

€ Million	Provisions for risks and current/non-current expenses				
	Field decommissioning	Onerous contracts	Judiciary and Tax [4]	Other provisions	Total
Balance at January 1, 2017	**2,335**	**1,159**	**1,501**	**2,004**	**6,999**
Contributions charged to results [1]	91	60	340	220	711
Applications with credits to income [2]	(85)	(128)	(144)	(86)	(443)
Cancellation due to payment [3]	(89)	(105)	(43)	(144)	(381)
Changes in scope of consolidation	(1)	-	-	-	(1)
Translation differences	(242)	(112)	(149)	(119)	(622)
Reclassifications and other [5]	166	(62)	8	(1,028)	(916)
Balance at December 31, 2017	**2,175**	**812**	**1,513**	**847**	**5,347**
Contributions charged to results [1]	85	55	677	244	1,061
Applications with credits to income [2]	(93)	(54)	(397)	(64)	(608)
Cancellation due to payment [3]	(67)	(85)	(132)	(162)	(446)
Changes in scope of consolidation	16	-	7	36	59
Translation differences	50	34	52	12	148
Reclassifications and other [5]	(204)	(31)	(224)	136	(323)
Balance at December 31, 2018	**1,962**	**731**	**1,496**	**1,049**	**5,238**

(1) Includes €186 million and €155 million reflecting the discounting to present value of provisions in 2018 and 2017. In 2018, a change in the discount rate of +/-50bp would have the effect of decreasing/increasing provisions for dismantling costs by -€98 million and €110 million, respectively. In 2018 the endowments of a fiscal nature and in *"Other provisions"* associated to consumption of CO_2 allowances are worthy of note (See Note 31).
(2) In 2018 it includes mainly the reversals of provisions of a fiscal nature, among others those of Ecuador, after the end of the existing disputes in fiscal matters (see Note 23). In 2017 it included the reversal of the provision for *Ship or Pay* in Ecuador.
(3) In 2018 it mainly includes, the payment derived from the transactional agreement that has put an end to the "*Galley*" pipeline lawsuit (see section 2 of this Note) and in "*Other provisions*" for the payments that cancel the provisions for workforce restructuring. In 2017, this heading mainly reflects, under "*Onerous contracts*" payments for drilling platform leases and other long-term onerous contracts, and, under "*Other provisions*", personnel restructuring payments.
(4) See section 14.2 and Note 23.
(5) In 2018 "*Other provisions"* includes the update of the negative value of the investment in Petroquiriquire (see Note 13) and in 2017 included the reversal by €911 million under the heading "*Investments accounted for using the equity method*" (see Note 13) of the provision for obligations associated with the net disbursements foreseen in the stake in RSRUK for the operational improvements and efficiencies obtained in the operation of this asset since its acquisition in 2015.

The item *"Other provisions"* includes mainly the provisions recognized to cover obligations deriving from environmental risks (see Note 31), pension commitments (see Note 29), consumption of CO_2 allowances (Note 31), employee incentive schemes (Notes 29), provisions for workforce restructuring[1] and other provisions to cover obligations arising from the Group's interests in companies.

The following table provides an estimation of maturities of provisions at year-end 2018.

€ Million	Less than one year	From 1 to 5 years	> 5 years and/or	Total
Provisions for decommissioning fields	136	579	1,247	1,962
Provision for onerous contracts	69	328	334	731
Provision for legal and tax risks	34	1,134	328	1,496
Other provisions	261	657	131	1,049
TOTAL [1]	500	2,698	2,040	5,238

(1) Due to the nature of the risks provisioned, these timing assessments are subject to uncertainty and changes that are beyond the Group's control. As a result, this schedule could change in the future according to the circumstances underpinning the estimates.

1 In 2017 it includes a provision for workforce restructuring calculated under the conditions agreed in the framework of the Collective Dismissal in Spain for the amount of €111 million, for the current value of the estimated future disbursements to be made to the Public Treasury. In 2017, payments under this item amounted to €55 Million. As recorded in the minutes of proceedings of the Oversight Committee for the Seventh Framework Agreement signed on June 8, 2016 between union representatives and Repsol's management, it was decided that the most suitable mechanism to implement the workforce downsizing in Spain was to set in motion a collective dismissal process.

14.2) Disputes

The Group's general criterion is to recognize provisions for proceedings that it deems it is likely to lose and does not recognize provisions when the risk of losing the case is considered possible or remote. The amounts to be provisioned are calculated on the basis of the best estimate of the amount needed to settle the lawsuit in question, underpinned, among others, by a case-by-case analysis of the facts, the legal opinions of its in-house and external advisors and prior experience in these matters.

As of December 31, 2018, Repsol's consolidated balance sheet includes provisions for proceedings in the ordinary course of its activities totaling €106 Million (€98 Million as of December 31, 2017). The most significant legal or arbitration proceedings and their status on the date these Consolidated Financial Statements were drawn up are summarized below.

United Kingdom

Addax arbitration in relation to the purchase of Talisman Energy (UK) Limited (TSEUK)

On July 13, 2015, Addax Petroleum UK Limited *("Addax")* and Sinopec International Petroleum Exploration and Production Corporation *("Sinopec")* filed a *"Notice of Arbitration"* against Talisman Energy Inc. (now known as *"ROGCI"*) and Talisman Colombia Holdco Limited (*"TCHL"*) in connection with the purchase of 49% of the shares in TSEUK (now known as *"RSRUK",* see Note 13). ROGCI and TCHL filed their response to the *Notice of Arbitration* on October 1. On May 25, 2016, Addax and Sinopec filed the Statement of Claim, in which they seek, in the event that their claims were confirmed in their entirety, repayment of their initial investment in RSRUK, which was executed in 2012 through the purchase of 49% of RSRUK from TCHL, a wholly-owned subsidiary of ROGCI, together with any additional investment, past or future, in such company, and further for any loss of opportunity, and which they estimate in a total approximate amount of $5,500 million. The Court of Arbitration has decided, among other procedural matters, to split the proceedings into two phases. The oral hearing on liability issues took place between January 29 and February 22, 2018 and between June 18 and 29, 2018, the latter being limited to the questioning of the experts of each party. The hearing on the oral findings was held from July 9 to 11, 2018 and the written findings were presented on September 29. The procedure is now ready for the Court to issue its ruling. Repsol maintains its opinion that the claims included in the Statement of Claim are without merit.

"Galley" pipeline lawsuit

In August 2012 there was damage and a leak in the *Galley* pipeline, in which RSRUK at that time had a 67.41% stake. In September 2012, RSRUK filed a claim seeking coverage of the damages and losses sustained as a result of the incident from the insurance company Oleum Insurance Company (''*Oleum*''), a wholly-owned subsidiary of ROGCI, which in turn owns 51% of RSRUK. In July 2014, RSRUK presented Oleum with a $351 Million claim for property damage and business disruption.

On August 8, 2016, RSRUK filed a request for arbitration in London, and in June 2017 the Court split the proceeding into in two stages (liability and, as appropriate, *quantum*). By decision dated May 10, 2018, the Court concluded that the policy did not exclude coverage for material damage arising from the incident. In September 2018, the claimant revised the amount claimed to $311 Million. On November 8, 2018, the parties signed a settlement agreement which put an end to the dispute and under which *Oleum* paid RSRUK $125 Million, with no significant impact on the Group's results as this litigation had been previously provisioned.

United States of America

The Passaic River / Newark Bay lawsuit

The events underlying this litigation related to the sale by Maxus Energy Corporation (*"Maxus"*) of its former chemicals subsidiary, Diamond Shamrock Chemical Company ("*Chemicals"*) to Occidental Chemical Corporation (*"OCC"*). Maxus agreed to indemnify Occidental for certain environmental contingencies relating to the business and activities of Chemicals prior to September 4, 1986. After that (1995), Maxus was acquired by YPF S.A. ("*YPF*") and subsequently (in 1999) Repsol S.A. acquired YPF.

In December 2005, the New Jersey Department of Environmental Protection (*"DEP"*) and the New Jersey Spill Compensation Fund (together, the *"State of New Jersey"*) sued Repsol YPF S.A. (today called Repsol, S.A., hereinafter, "*Repsol"*), YPF, YPF Holdings Inc. (*"YPFH"*), CLH Holdings (*"CLHH"*), Tierra Solutions, Inc. (*"Tierra"*), Maxus and OCC for the alleged contamination caused by the former Chemicals old plant which allegedly contaminated the Passaic River, Newark Bay and other bodies of water and properties in the vicinity.

On September 26, 2012 OCC lodged a Second Amended Cross Claim (the "Cross Claim") against Repsol, YPF, Maxus, Tierra and CLHH (all of which together "the Defendants"). Between June 2013 and August 2014, the Defendants signed different agreements with the State of New Jersey, in which they do not acknowledge liability and through certain payments in exchange for the withdrawal by the State of New Jersey of its proceedings against them.

On April 5, 2016 the Presiding Judge decided to dismiss OCC's suit against Repsol in full. The decision can be appealed. On June 16, 2016, the Special Master allowed the Motion for Summary Judgment presented by Repsol with regard to its claim against OCC for the $65 million paid as part of the settlement reached with the State of New Jersey. On January 30, 2017, OCC appealed the Special Master's recommendation. On June 17, 2016, Maxus filed for bankruptcy protection before the United States Bankruptcy Court for the District of Delaware, also seeking release from its main litigation liability, a petition the Court must rule on. On October 19, 2017, the presiding Judge decided to uphold all of the recommendations issued by the Special Master*,* thereby upholding the Motion for Summary Judgment presented by Repsol in full with regard to its claim against OCC for the $65 million. On November 22, 2017, OCC was formally condemned to pay the $65 million plus interest and expenses. On September 14, 2018, Maxus (assuming right of ownership of the claim on behalf of OCC) and OCC formalized an appeal against these rulings. On June 14, 2018, the Maxus Bankruptcy Administration filed a lawsuit ("*New Claim*") in the Federal Bankruptcy Court of the State of Delaware against YPF, Repsol and certain subsidiaries of both companies for the same claims as those contained in the *Cross Claim*. On October 19, 2018, Repsol filed the *Motion to Dismiss. On February 15, 2019, the Federal Bankruptcy Court rejected the Motion to Dismiss.* Repsol maintains the view, as has been shown in the *Cross Claim*, that the claims made in the *New Claim* are unfounded.

(15) OTHER NON-CURRENT LIABILITIES

A breakdown of "*Other non-current liabilities*" can be found below:

	€ Million	
	2018	2017
Obligations under finance leases	1,427	1,346
Guarantees and deposits [(1)]	121	120
Deferred income [(2)]	44	47
Others [(3)]	304	286
TOTAL	1,896	1,799

(1) This item includes, among others, deposits received by Repsol Butano, S.A. from the users of gas bottles in accordance with applicable legal regulations. These amounts are refundable when the corresponding contracts are cancelled.
(2) Includes the amounts associated to the CO_2 emission allowances granted free of charge (see Note 11).
(3) In 2018 and 2017 this includes €4 Million in capital grants.

The breakdown of the amounts payable under finance leases at December 31, 2018 and 2017 is as follows:

	€ Million			
	Lease payments		Value minimum lease payments	
	2018	2017	2018	2017
During following year	201	202	197	195
From 2nd to 5th year, included	797	732	613	553
After 6th year	2,081	2,112	814	793
	3,079	3,046	1,624	1,541
Less:				
Future finance costs	(1,455)	(1,505)		
Total debt on financial leases	1,624	1,541		
Non-current	1,427	1,346		
Current	197	195		

The effective average interest rate on obligations under finance leases at December 31, 2018 was 8.84% (8.93% at December 31, 2017).

The main liabilities related to finance leases shown in this heading at December 31 are as follows:

- On May 15, 2006 the Group signed an agreement with Emera Brunswick Pipeline Company, Ltd. for the transportation of natural gas through a pipeline that connects the Canaport plant with the US border for a period of 25 years (renewable for up to an additional 30 years). It came into effect in July 2009. At December 31, 2018 and 2017, the amount recognized in this heading amounted to $443 million ($387 million) and $454 million ($379 million), respectively.

- In addition, on April 21, 2006 the Group signed an agreement with Maritimes & North East Pipeline for the transportation of Canadian natural gas from the Canadian border to Dracut for an initial term of 25 years (renewable for up to an additional 30 years). It initially came into effect in March 2009. At December 31, 2018 and 2017, the amount recognized in this heading was $1,105 million (€965 million) and $1,136 million (€947 million), respectively.

CURRENT ASSETS AND LIABILITIES

(16) INVENTORIES

The breakdown of "Inventories" at December 31, 2018 and 2017 is as follows:

	€ Million	
	2018	2017
Crude oil and natural gas	1,640	1,244
Finished and semi-finished products	2,426	2,252
Materials and other stocks (1)	324	300
TOTAL (2)	**4,390**	**3,797**

(1) Includes CO_2 allowances or a total of 2,704 thousand tons valued at €79 million.
(2) Includes provisions for inventory impairment losses of €74 million and €32 million at December 31, 2018 and 2017, respectively. The impairment provisions recognized and reversed amounted to €-55 million and €13 million, respectively (-€10 million recognized and €6 million reversed in 2017).

At December 31, 2018, the balance of *commodity* inventories, related to *trading* activity, at fair value less costs to sell amounted to €342 million, and the effect of their measurement at market value represented income of €7 million. Recoverable amounts are calculated using market information and benchmarks. Specifically, *forward* price/benchmark price curves provided by the market as well as a benchmark time horizon for pricing purposes. The main variables used are: prices taken from official publications (Platt's, Argus, OPIS, the brokerage community…) and historic or *mark-to-market* premiums, if available.

In the assessment of refinery products, production costs are allocated in proportion to the selling price of the related products (*iso margin* method) due to the existing difficulty to recognize the conversion costs of every product.

At December 31, 2018 and 2017, the Repsol Group complies with the legal requirements regarding minimum safety stocks established under prevailing legislation (see Appendix III) through its Spanish Group companies.

(17) TRADE RECEIVABLES AND OTHER RECEIVABLES

The breakdown of this heading at December 31, 2018 and 2017 is as follows:

	€ Million	
	2018	2017
Customer receivables for sales and services (gross amount)	3,947	4,152
Insolvency provisions	(189)	(173)
Customer receivables for sales and services	3,758	3,979
Receivables on traffic activities and other receivables	917	943
Receivables from operations with staff	41	41
Public administrations	303	198
Trade operation derivatives (Note 9)	241	60
Other receivables	1,502	1,242
Current tax assets	845	691
Trade receivables and other receivables	6,105	5,912

The changes in the provision for doubtful accounts in 2018 and 2017 were as follows:

	€ Million	
	2018	2017
Opening balance for the year	173	131
Impact of new standards (Note 2.2.2)	71	-
Adjusted opening balance	244	131
Provision/(reversal) impairment losses [1]	(21)	57
Changes in scope of consolidation	28	—
Translation differences	5	(9)
Reclassifications and other movements	(67)	(6)
Balance at year end	189	173

[1] It is recognized under "Provisions for Impairment and Losses on Disposal of Assets" in the balance sheet.

(18) TRADE PAYABLES AND OTHER PAYABLES

Repsol had the following accounts payable classified under *"Trade payables and other payables"*:

	€ Million	
	2018	2017
Suppliers	3,244	2,738
Obligations under finance leases (Note 15)	197	195
Payables to public administrations	538	656
Derivative financial instruments (Note 8)	250	215
Others	3,521	3,214
Other receivables	4,506	4,280
Current tax liabilities	271	292
TOTAL	8,021	7,310

Information regarding deferrals of payments settled with suppliers in Spain

The disclosures made in respect of the average payment term for trade payables are presented in keeping with the stipulations of additional provision three of Spanish Law 15/2010 of July 5 (as amended by means of final provision two of Law 31/2014, of December 3) and prepared in keeping with the related resolution issued by the ICAC (acronym in Spanish for the Audit and Accounting Institute) in January 2016.

The information regarding the average term of payment to the suppliers of the Group's Spanish companies in 2018 pursuant to the sole additional provision of the above-mentioned resolution is as follows:

	Days	
	2018	2017
Average payment period to suppliers [1]	23	25
Ratio of paid operations [2]	24	25
Ratio of operations pending payment [3]	26	28
	Amount (€ Million)	
Tax payments made	10,757	10,995
Total pending payments	563	521

[1] ((Ratio of paid transactions * total amount of payments made) + (Ratio of outstanding payment transactions * total outstanding payments)) / (Total payments + total outstanding payments).
[2] Σ (number of days of payment * amount of the transaction paid) / Total payments.
[3] Σ (number of days outstanding payment * amount of the transaction outstanding payment) / Total outstanding payments.

According to the transitional provision of Law 15/2010, the maximum legal payment deadline is 60 days.

INCOME

(19) OPERATING INCOME

19.1) Sales and services rendered and other income

The distribution of revenue[1] from ordinary activities ("*Sales*" and "*Services rendered and other income*") per country in 2018 is shown below:

	€ Million	
	2018	2017
Spain	25,332	20,727
United States	3,095	2,898
Peru	2,941	2,572
Portugal	2,673	2,403
Other	15,832	13,068
Total (1)(2)	**49,873**	**41,668**

(1) The distribution by geography has been drawn up depending on the markets to which the sales or income are destined.
(2) The distribution of the target markets are: i) E.U. euro zone: €33,514 million (€29,351 million in 2017), (ii) EU non-euro zone: €1,066 million (€4,660 million in 2017), and (iii) Other countries: €15,293 million (€7,657 million in 2017).

In 2018, ordinary income from Upstream activities amounted to €5,182 million, while that of the Downstream segment totaled €46,712 million (€4,093 million and €39,211 million, respectively, in 2017).[2] In *Upstream*, income was generated, either from the sale of crude oil, condensed oil and LPG and natural gas, or from the provision of a service for the operation of resources, depending on the contracts in force in each of the countries in which the Group operates. In *Downstream*, income is generated mainly from the marketing of oil products (petrol, fuel oil, LPG, asphalt, lubricants, etc.), petrochemicals (ethylene, propylene, polyolefins and interim products), gas (natural gas and LNG) and electricity.

This heading includes excise tax and similar taxes levied on the production and/or sale of oil and gas products amounting to €6,295 million in 2018 and €6,310 million in 2017.

In sales in which the Group acts as an agent, the Group does not recognize all the income and expenses associated with the transaction, recognizing as revenue only the margin received or pending to receive.

19.2) Income from reversal of impairment provisions and on disposal of assets

These headings include the following items:

	€ Million	
	2018	2017
Income from reversal of impairment provisions (Note 14 and 20)	175	802
Earnings arising from the disposal of assets	102	62
TOTAL	277	864

19.3) Other operating income

This item reflects, inter alia, income recognized on the remeasurement of trade derivatives (see Note 9) and the reversal of provisions, taken to the income statement (see Note 14).

This also includes grants released to income for the amount of €20 million and €23 million in 2018 and 2017, respectively.

1) Income is recognized based on compliance with performance obligations to customers. Income from ordinary activities represents the transfer of committed goods or services to customers for an amount that reflects the consideration to which the entity expects to be entitled to a right to exchange those goods and services. Five steps are differentiated in income recognition: i) Identify the customer's contract(s), ii) Identify performance obligations, iii) Determine the transaction price, iv) Assign the transaction price to the different performance obligations and v) Income recognition according to the fulfillment of each obligation.
2) For additional information see Appendix II

19.4) Supplies

"*Supplies*" includes the following items:

	€ Million	
	2018	2017
Purchases	38,481	30,420
Variation in the inventories	(425)	(169)
TOTAL	**38,056**	**30,251**

"*Supplies*" includes excise tax and similar taxes levied on the production and/or sale of oil and gas products disclosed in section *"Sales and Services rendered and other income"* of this note.

19.5) Personnel expenses

"*Personnel expenses*" includes the following items:

	€ Million	
	2018	2017 [(1)]
Remuneration and other	1,456	1,481
Social Security costs	418	411
TOTAL	**1,874**	**1,892**

[(1)] In 2017 the heading *"Salaries and others"* included the workforce restructuring charges deriving mainly from the collective redundancy program in Spain (see Note 14), the adjustments for workforce restructuring in other countries and the changes made to the management team.

19.6) Exploration expenses

The geographic distribution of costs taken to the income statement in respect of exploration activities (see Note 2) is as follows:

	€ Million	
	2018	2017
Europe	213	136
America	143	236
Africa	146	54
Asia	108	34
Oceania	17	87
TOTAL	**627**	**547**

Exploration costs amounted to €627million and €547 million in 2018 and 2017, of which €227 million and €177 million, respectively, are recognized under *"Depreciation and amortization of non-current assets"* and €298 Million and €478 Million under *"Impairment losses recognized and losses on disposal of non-current assets"* in 2018 and 2017, respectively. In addition, in 2017 reversals of impairment were recognized for an amount of €147 million under *"Reversal of impairment losses and gains on disposal of non-current assets"*.

For more information, see the Information on oil and gas exploration and production activities (non-audited information) at (www.repsol.com).

19.7) Impairment losses recognized and losses on disposal of non-current assets

These headings include the following items:

	€ Million	
	2018	2017
Impairment provisions (Notes 10.3, 17 and 20)[(1)]	1,241	901
Losses arising from the disposal of assets	40	21
TOTAL	**1,281**	**922**

[(1)] Includes the provision for credit risk impairment of trade and other receivables and other non-current assets (€300 million in 2018 mainly for Venezuela, see Notes 10.3 and 20.3).

19.8) Other operating expenses

"*Other operating expenses*" includes the following items:

	€ Million	
	2018	2017
Operator expenses [1]	605	538
Freelance Services	506	448
Operating leases	307	313
Taxes	423	367
Repair and conservation	271	300
Remeasurement of trade derivatives	126	112
Consumption of CO_2 [2] emission allowances	116	69
Others [3]	1,342	1,134
TOTAL	3,696	3,281

(1) Includes, among other items, the cost of agency services at the facilities of Compañía logística de Hidrocarburos CLH, S.A., product bottling, storage, loading, transportation and dispatch services.
(2) See Note 31.2.
(3) This includes, among others, the provisions (see Note 14).

Operating lease expenses correspond to a large number of contracts, none of which are individually considered significant, although the lease contracts for service stations (Spain, Portugal, Italy, Mexico and Peru), as well as land and real estate leases, transport vessels and operating platforms in Upstream. See Note 2.3 for the new regulation for leases applicable in 2019.

The future minimum payments due to the lease portfolio with a term of more than one year in force at December 31, 2018 amounted to €1,576 million (2019: €205 million, 2020: €203 million, 2021: €180 million, 2022: €156 million, 2023: €134 million and subsequent years: €698 million).

(20) ASSET IMPAIRMENT

20.1) Asset impairment test

The Group has assessed the recoverable amount of cash-generating units as per the methodology described in Note 3 and the predictable economic scenarios of its business plans. The main hypotheses are described below:

a) Price trend:

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Subsequent
Brent ($/ barrel)	65	70	75	81	86	89	92	94	97	100	103	106	+2%
WTI	60	65	70	76	81	84	87	89	92	95	98	101	+Brent - $5/bbl
HH ($/ Mbtu)	3.3	3.5	3.5	3.6	4.0	4.3	4.7	5.0	5.3	5.4	5.6	5.9	+2%

b) Discount rates:[1]

	2018	2017
UPSTREAM [(1)]		
Latin America-Caribbean	7.7% - 37.6%	7.8% - 30%
Europe, Africa and Brazil	6.9% - 11.8%	7.1% - 12%
North America	8.2% - 8.3%	8.3% - 8.4%
Asia and Russia	8.2% - 10.7%	8.3% - 11.2%
DOWNSTREAM [(2)]	3.7% - 8.7%	4.2% - 9.3%

(1) Discount rates in US dollars.
(2) Discount rates in euros and US dollars.

In 2018, provisions have been recognized, net of reversals, for the impairment of value of assets amounting to -€827 million[2] (-€296 million in 2017[3]), which correspond mainly to (i) intangible assets (-€96 million, see Note 11); (ii) items of property, plant and equipment and provisions for onerous contracts (-€490 million, see Notes 12 and 14), and (iii) impairment losses on investments accounted for using the equity method (-€241 million, see Note 13).

Upstream *Assets*

The Group has written its *Upstream* assets down for net impairment by €793 million. These charges mainly affect:

- North America (-€479 million): Impairment of value in North American assets mainly as a result of lower volumes due to lower activity and lower expected gas prices.

- Latin America (-€146 million): impairment losses on Venezuelan assets (-€205 million) due to the increase in risk and the discount rate (37.6% versus 30% in 2017), and the review of the business plans for the assets; partially offset by the reversal of impairment losses on Colombian assets (€107 million) due to the improvement in volumes and the favorable evolution of the business plans.

- Asia and Russia (-€128 million): mainly impairment of assets in South East Asia (-€82 million) due to delays in exploratory block development projects.

The recoverable value of the above assets came to €11,476 million.

In 2017, net impairment losses of -€293 million were recorded, mainly in North America +€127 million (due to the increase in expected production volumes in Canada and the US, and Latin America -€297 Million (due to the increase in discount rates in Venezuela as a result of the evolution of country risk indicators).

Downstream Assets

Despite the increase in the assumptions for raw material prices, energy and CO_2 allowances, no significant impairment has been recorded in the segment in 2018, just as in 2017.

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[1] The main components of the discount rate are as follows:
- The risk-free interest rate for dollar flows matches that for 10-year U.S. Treasuries; for euro flows, the risk-free interest rate matches the 10-year German sovereign bond;
- The country risk uses i) the spread between the sovereign bonds in euros or U.S. dollars and the debt issued by Germany (euros) and the U.S. (U.S. dollars), respectively, ii) the EMBI (Emerging Markets Bond Index) published by JP Morgan and iii) the country risk information published by three external providers (Country Risk Rating (IHS Global Insight), International Country Risk Guide (PRS Group) and Business Monitor (Fitch Group), all adjusted by specific business risks;
- A different credit risk premium is used depending on the currency (EUR and USD); and
- With respect to βetas or business risk premiums, they are calculated specifically from 5-year historical series of comparable companies, for the Upstream, Refining and Marketing, Chemical, LPG and Gas & Power businesses.

  In 2018, in comparison to 2017, there were no material changes in country risk year-on-year or in inherent business risk, except in the case of Venezuela.

[2] In addition, "Provisions for Impairment and Disposal of Assets" includes provisions for bonds, G&G and exploratory surveys amounting to €164 million in 2018 (€167 million in 2017), associated with contracts for which no technically or economically viable project exists at this date.

[3] In 2017 it corresponds mainly to intangible fixed assets (- €73 million), property, plant and equipment and provision for onerous contracts (+ € 134 million) and investments accounted for using the equity method (- €357 million).

20.2) Sensitivities

A change in the estimated future price curves and used discount rates would affect the amount of the impairment of the Repsol Group assets. The principal sensibilities to these variations without bearing in mind the rebalancing of other related variables or the possible adjustments of the operative plans, which would allow the negative impact of the above mentioned variations to be mitigated, are indicated in the table below:

		€ Million	
	Increase (+) / decrease (-)	Operating income	Net income
Change in oil and gas prices	+10%	639	610
	-10%	(1,049)	(949)
Change in discount rate	+100 p.b.	(310)	(269)
	-100 b.p.	332	276

20.3) Geopolitical risks[1]

Repsol is exposed to risks arising in countries that may present specific economic, social and political circumstances that may have a negative impact on its businesses (unexpected regulatory changes; highly volatile exchange rate; high inflation; possibility of economic and financial crises or political instability or social tensions and public unrest, etc.).

According to the ratings in the *Country Risk Rating* of *IHS Global Insight* and the *Country Risk Score* of the *Economist Group*, the Repsol Group is exposed to a particular geopolitical risk in Venezuela, Libya and Algeria. On the other hand, in 2018, Vietnam has been added because the activities have been affected by the territorial conflict in the South China Seas.

Venezuela

Repsol's total equity exposure[2] to Venezuela at December 31, 2018 amounts to approximately €456 million and mainly comprises the financing extended to the Venezuelan subsidiary companies[3,4] (see Note 8). Exposure was significantly lower than at December 31, 2017 (€1,480 million), due to the write-downs recognized during 2018 on the assets held by the Repsol Group in the country.

Repsol has had a presence in Venezuela since 1993 and currently has a presence in the country through its stake in the following companies: (i) Mixed crude oil companies (E.M.): 40% in E.M. Petroquiriquire, S.A. (Quiriquire, Menegrande, Barúa Motatán blocks, all until 2031) and 11% in E.M. Petrocarabobo, S.A. Carabobo block, until 2035[5]) and (ii) gas licensee companies: 60% in Quiriquire Gas (until 2027) and 50% in Cardón IV, S.A. (until 2036). All these investments are accounted for using the equity method (see Note 13), the US dollar being the functional currency, except in the case of Quiriquire Gas, where the bolivar is the reference currency for its operating income and expenses.[6] In 2018, Repsol's average production in Venezuela reached 62 thousand barrels of oil equivalent/day and its proved reserves at December 31, amounted to 514 million barrels of oil equivalent.

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1 When assessing its assets for the impairment test, Repsol considers the geopolitical risks it is exposed to by estimating cash flows or calculating its discount rates.
2 Equity exposure relates to net consolidated assets exposed to own risks of the countries reported.
3 Repsol holds a loan with Cardón IV, which matures annually and that can be extended by the shareholders (Repsol and Eni), which has therefore been considered as part of the net investment of this company.
4 In October 2016 Petroquiriquire, S.A., Repsol and PDVSA signed a range of agreements to shore up the financial structure of the mixed-ownership company and enable it to implement its Business Plan. The agreements involved (i) provision by Repsol of a credit facility for up to $1,200 million, backed by a guarantee given by PDVSA, to be used to pay past dividends owed to Repsol and for Petroquiriquire's capital and operating expenditures; and (ii) a commitment given by PDVSA to pay for oil & gas production of the mixed-ownership company via transfer to Petroquiriquire, S.A. of payments arising from crude oil sale contracts to *offtakers* or through outright cash payments in an amount sufficient for the mixed-ownership to meet its capital and operating expenditures to the extent not covered by the financing from Repsol, and to pay Repsol's dividends generated in each financial year and its debt service obligations with Repsol. The financing granted by Repsol and the commitments assumed by PDVSA are governed by the Laws of the State of New York, and any disputes that should arise shall be submitted to arbitration in Paris in accordance with the rules of the International Chamber of Commerce. Drawdowns under the credit facility are subject to compliance by Petroquiriquire and PDVSA of certain conditions precedent, and the terms and conditions include the *covenants*, breach clauses and acceleration or early termination clauses that are customary in such transactions. Breach by PDVSA of its obligations under the guarantee, if there is a default by Petroquiriquire, could enable PDVSA's creditors and bondholders to declare *default and acceleration* of the rest of its financial debt. In addition, the agreement includes other elements such as a mechanism for offsetting of reciprocal debts between Petroquiriquire, S.A. and PDVSA. At December 31, 2018, drawdowns for this credit facility amounted to $800 million.
5 Renewable for an additional 15 years.
6 The investment in Quiriquire Gas is nil, so any effect derived from the translation from Bolivar to euro is not significant.

The oil and gas industry is very important to the Venezuelan economy, accounting for 25% of GDP and 95% of exports.[1] Operations in this sector in Venezuela are carried out in a framework of collaboration between the public sector and foreign companies.

Venezuela has a regulated currency exchange system, an economy in recession with high levels of inflation, which has undergone strong devaluations during the last few years, and an oil sector with a high degree of public sector intervention and participation.

- Political and economic situation: the State of Economic Emergency has been extended during the period and the situation of political instability and economic recession continues (GDP[2] has dropped by 18% in 2018), together with inflation[3] (1,698,488%[4] in 2018 and 10,000,000% is anticipated for 2019[2]). Oil production has significantly decreased in recent years.

  In December 2017, as a result of the country's failure to pay interest on certain bonds, *Standard & Poors* placed the Venezuelan and PDVSA bonds in *Selective Default*, a rating also granted by the other agencies throughout 2018. On the other hand, the International Swaps and Derivatives Association (ISDA) declared in November 2017 that Venezuela was in default, making it possible to file for payment of credit default swaps (CDS). The Government of Venezuela has stated its intention to refinance and restructure Venezuela's foreign debt in order to honor its payment obligations to creditors. Venezuela's main source of external financing throughout 2018 has been through bilateral agreements with third countries.

  Certain Venezuelan government officials have been subject to international sanctions by the U.S., the European Union and Canada, which include freezing their assets as well as travel restrictions. In addition, the U.S. and Canada have issued financial sanctions against the Government of Venezuela, which may affect the financial and commercial capabilities of the public sector. On January 28, 2019, the U.S. extended sanctions against PDVSA, prohibiting "*US Persons*" from operating with PDVSA and/or any of its controlled companies (≥ 50%) and ordering them to block those assets of PDVSA or its controlled companies that come into their hands and/or are in U.S. territory. Although the US has granted certain time limits to facilitate the orderly termination of operations through the granting of several general licenses, these new measures have aggravated the situation of instability.

  Presidential elections were held in May 2018, in which Nicolás Maduro was re-elected for the period 2019-2025, which began on January 10, 2019. On January 23, 2019, the president of the National Assembly Juan Guaidó, was sworn in as interim president of Venezuela.

- Public regulation and stake in the oil & gas sector: Repsol operates through mixed-ownership companies, whose incorporation and conditions for carrying out primary activities needed to first be approved by the National Assembly. As for the other companies, such as Cardón IV and Quiriquire Gas, their Licenses are granted by the Ministry of Popular Power over Oil and Mining. See Appendix III for more information on the legal framework for mixed-ownership companies and the regulatory framework in force in Venezuela.

- Monetary system: during 2018, economic measures have been adopted that modify the exchange rate regime (see Annex III), including: (a) monetary reconversion (the new currency, called "bolívares soberanos", is equivalent to 100,000 of the previous "bolívares fuertes"); (b) partial liberalization of the exchange system to make the purchase and sale of currencies more flexible; and (c) launch of the "*Petro*" cryptocurrency, which is expected to function as an exchange currency and convertible currency.[5] Despite these measures, during 2018 there was a very significant devaluation of the Venezuelan currency against the US dollar (2,182,304%)[6]. All these changes have not had a significant impact on the Group's financial statements.

- Tax regime: On January 7, 2019, Presidential Decree No. 35 was published, establishing that taxpayers who carry out operations in foreign currency must determine and pay their taxes in foreign currency (or cryptocurrency), pending regulatory development. The regulation enters into force on January 1, 2019 and would affect the determination and payment of all national taxes. The main impact in 2018 is the cancellation of deferred tax assets in companies

[1] Estimate. Source: Organization of the Petroleum Exporting Countries (www.opec.org/opec).
[2] Source: Estimate from the International Monetary Fund
[3] The Central Bank of Venezuela has not officially released a cumulative inflation figure since 2016.
[4] National Price Index of the National Assembly (INPCAN)
[5] Petro = 38.290,8 BsS.
[6] SIMECA exchange rate (previously DICOM) at December 31, 2018: 730 €/BsS.

accounted for using the equity method. Thereafter, the Decree could simplify the determination of income tax and eliminate the negative impact arising from future devaluations in this tax.

The Group has evaluated the recoverability of its investments, as well as the credit risk on PDVSA's accounts receivable. As a result, the Group or its investees recognized provisions for reversible risks or impairment of -€1,159 million. Of this amount, €316 million has been recorded in reserves as a result of the provision for credit risk arising from the first application of IFRS 9 (see Note 2.2.2). In addition, -€843 million were recorded in the income statement as the result of mainly:

- The evolution of the situation of the oil sector in Venezuela, the increase in the discount rate (37.6%; compared to 30% in 2017) and the changes in the operating plans of the assets, recognized over the productive assets of the entities in Venezuela (-€205 million) [1].

- The delay in the collection of sales and the increase in credit risk, affecting the value of financing instruments and accounts receivable from PDVSA (-€630 million) [2].

In 2017, impairment losses amounting to -€716 million were recorded.

Libya

Repsol's equity exposure in Libya as of December 31, 2018 amounts to about €348 million, (including primarily property, plant and equipment at that date).

Repsol operates in Libya since the 1970s when it started exploring in the Sirte Basin. As of December 31, 2018, Repsol has acreage on two contractual areas (with exploration, development and production activities) and proved reserves amount to 84 million barrels of oil equivalent.

As a consequence of the security conditions, during 2018 there have been intermittent shutdowns of our production in Libya, the most relevant being that produced during the month of December. Repsol's net crude oil production in 2018 amounted to 35.7 thousand barrels of oil per day (vs. 25.4 thousand barrels of oil per day during the same period in 2017).

Uncertainty about Libya's political future and the diminished security situation continue to affect the prospects of its oil industry. Currently, the country has recovered oil production and exports, but the proliferation of armed militias and the rivalry between the main actors in the Libyan political dialogue could lead to new confrontations and blockades of oilfields and export terminals.

Algeria

Equity exposure amounts to about €837 million, (including primarily property, plant and equipment at that date).

Repsol has an exploration block in Algeria (S.E. *Illizi*) and 3 production/development blocks (*Reggane Nord*, Block 405a (with the MLN, EMK and *Ourhoud* licences) and *Tin Fouyé Tabankort* (TFT)).

In 2018, net average production in Algeria came to 21.4 thousand barrels of oil equivalent/day (12.2 kboe in 2017) from blocks *Reggane Nord*, 405 a and *Tin Fouyé Tabankort* (TFT).

As of December 31, 2018, net proved reserves amount to 45.4 million barrels of oil equivalent. Around 34% of the net proved reserves refer to the gas production project in Reggane, which includes six fields (*Reggane, Kahlouche, Kahlouche Sud, Sali, Tiouliline and Azrafil Sudest*), located in the Algerian Sahara in the *Reggane* basin. Repsol holds a 29.25% stake in the consortium that is to develop the project, alongside the Algerian state-owned company Sonatrach (40%), Germany's RWE Dea AG (19.5%), and Italy's Edison (11.25%). The production of the *Reggane* project in 2018 amounted to 7.3 thousand barrels of oil equivalent per day.

There are still certain security risks due to the activity of Islamist groups in the south of the country, although they have

[1] Recognized under "Results of Investments Accounted for Using the Equity Method" in the income statement.
[2] Recognized under "Impairment loss provisions recognized and losses on disposal of assets”" (see Note 19.7) and "Impairment of Financial Instruments" (see Note 21) in the income statement.

been gradually reduced due to the presence of security forces.

Vietnam

Repsol owns mining rights in Vietnam on thirteen blocks, distributed in six production-sharing contracts (PSC): one in production over a net area of 152 km^2, (*Thang Long JOC)*, one under development over 1,236 km^2 (*Ca Rong Do*) and four in exploration, over a net surface area of 72,248 km^2 (among them Blocks 135-136/03). Net average production in 2018 came to 6,500 barrels of oil equivalent/day (5,200 barrels of oil equivalent/day in the first nine months of 2017). As of December 31, 2018, net proved reserves amount to 26.4 million barrels of oil equivalent. The carrying amount of assets at December 31, 2018 came to €990 million and there are additional commitments relating to the investment in these areas.

Over this period, Repsol has received instructions from *PetroVietnam* to refrain from performing the programmed activities as part of the *Ca Rong Do* development project in Block 07/03, located in the South China Sea. On the other hand, in July 2017, the *PetroVietnam* instructed Repsol to stop CKN-1X drilling activities in exploratory blocks 135-136/03, also located in the South China Sea. The scope of the suspension of activities has yet to be determined and the Group is working with PetroVietnam to find frameworks for action that satisfy the interests of both parties and to reach an amicable solution to this conflict. In any case, Repsol believes that it has a solid legal basis to claim compensation for the damages that may arise from these circumstances, in addition to strong perspectives of success, both in the claim and the recovery of damages.

BREXIT

In the referendum held on June 23, 2016, the United Kingdom supported its exit from the European Union. After the United Kingdom Parliament rejected the ratification of the exit agreement reached between its government and that of the European Union on January 15, 2019, both are currently immersed in a new negotiating process for the terms of this exit. The consequences derived from this, for any resulting scenario, are still uncertain both in the transition period and in the final exit, affecting, among other factors, the value of the pound against the euro and against the dollar, access to the European Single Market, both for the circulation of people and goods, as well as services and capital, or the valuation of investments made in the country. However, as to the extraction, transportation and marketing of oil and gas, no material change is expected, because the UK Government has maintained sovereignty and control over key aspects with an industry-wide impact, such as the licensing process of acreage and the tax framework within which oil companies do business in the country. In this sense, messages passed on to the sector from the beginning of the process include a commitment to regulatory stability.

The Group's exposure is limited to its stake in Repsol Sinopec Resources UK Limited (RSRUK), which operates a mature business and whose functional currency is the dollar. For more information, see Note 13.

(21) FINANCIAL RESULT

The breakdown of finance income and expenses in 2018 and 2017 is as follows:

	€ Million	
	2018	2017
Finance income [1]	177	159
Finance costs	(407)	(447)
Net interest	**(230)**	**(288)**
By interest rate	40	(14)
By exchange rate	87	30
Other positions	73	18
Change in fair value of financial instruments [2]	**200**	**34**
Exchange gains (losses) [3]	**467**	**151**
Impairment of financial instruments [4]	**(370)**	**(1)**
Financial update of provisions	(94)	(126)
Interim interest [5]	72	120
Finance leases	(133)	(141)
Gains (losses) on disposal of financial instruments [6]	(10)	(13)
Others	(75)	(48)
Other finance income and expenses	**(240)**	**(208)**
FINANCIAL RESULT	**(173)**	**(312)**

(1) Includes interest income from financial instruments valued at amortized cost in the amount of €177 Million.
(2) Includes results from the valuation and settlement of derivative financial instruments. (see Note 9). "Other positions" includes the results from the settlement of derivatives on treasury shares (see Note 7.2).
(3) Includes the results from exchange differences generated by the valuation and settlement of monetary items in foreign currency. The improvement compared to 2017 is explained by exchange differences arising from the impact of the evolution of the exchange rate of the dollar in the period on financing instruments.
(4) In 2018 this includes mainly impairment losses on financing granted to entities accounted for using the equity method in Venezuela and other related accounts receivable (see Note 20.3).
(5) Capitalized interest is recognized in the consolidated income statement under "Finance expenses" and capitalized under assets (in 2018: 54 million in property, plant and equipment and 18 million euros in intangible assets).
(6) In 2018 and 2017 the losses generated by the repurchase of ROGCI bonds amounting to -€10 million are included (see Note 8.2).

(22) INCOME INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

The breakdown of the income investments accounted for using the equity method, net of taxes, is:

	Income [1]	
€ Million	2018	2017 [2]
Joint ventures	985	693
Associates	68	(63)
TOTAL	1,053	630

(1) Corresponding to the results of the period of continued operations. It does not include "Other comprehensive income" of €234 million in 2018 (€230 million for joint ventures and €4 million for associates) and -€944 million in 2017 (-€753 million for joint ventures and -€191 million for associates), mainly due to translation differences.
(2) Includes the necessary amendments to the 2017 consolidated annual accounts (see Note 2 "Basis of presentation") in relation to the sale of the shareholding in Naturgy.

In 2018, the joint ventures in the United Kingdom (Repsol Sinopec Resources UK Ltd) and Brazil (Repsol Sinopec Brazil), which contributed €678 million and €272 million, respectively, should be particularly mentioned. For further information see Note 13.

(23) TAXES

23.1) Income tax

In the area of taxation and, particularly, of profits taxation, Repsol Group is subject to the legislation of several tax jurisdictions due to the broad geographic mix and the relevant international nature of the business activities carried out by the Group companies it comprises.

For this reason, the Repsol Group's effective tax rate is shaped by the breakdown of earnings obtained in each of the countries where it operates and, on occasion, by the taxation of said profits in more than one country (double taxation).

a) In Spain

Most of the entities resident in Spain for tax purposes are subject to taxation in Spain under Spain's consolidated tax regime. Under this regime, the companies comprising the tax group jointly determine the Group's taxable profit and tax liability, which is then allocated to these companies following the criteria established by the ICAC (acronym in Spanish for the Audit and Accounting Institute) in relation to the recognition and determination of individual corporate tax liabilities.

Repsol, S.A. is the parent of Consolidated Tax Group 6/80, which comprises all of the companies resident in Spain that are at least 75%-owned, directly or indirectly, by the parent and that meet certain prerequisites. 56 companies make up the aforementioned Consolidated Tax Group in 2018, the most significant of which are: Repsol, S.A. itself, Repsol Petróleo, S.A., Repsol Trading, S.A., Repsol Química, S.A., Repsol Butano, S.A., Repsol Exploración, S.A. and Repsol Comercial de Productos Petrolíferos, S.A.

Following the acquisition of the non-regulated businesses of Viesgo and Valdesolar Hive, S.L., 4 new companies are incorporated to the Repsol Group, which will be included in the Tax Group with effect from 1 January 2019.

Elsewhere, Petróleos del Norte, S.A. (Petronor) is the parent of Consolidated Tax Group 02/01/B, to which the special regional tax regulations of Vizcaya for corporate income tax purposes is applied.

Finally, the rest of the companies resident in Spain for tax purposes that are not included in either of the above tax groups determine their income tax individually.

The Spanish companies are taxed at the general rate of 25% in 2018, regardless of whether they pay tax as part of a tax group or individually. Exceptionally, Repsol Investigaciones Petrolíferas, S.A., which files its taxes on an individual basis under the Special Hydrocarbon Regime, is taxed at 30%, and the Petronor group, which applies the special regional regime of Vizcaya, is taxed at 28%.

b) Other countries

The rest of the Group companies are subject to taxation in each of the countries in which they do business, applying the prevailing income tax rate under applicable local tax regulations. Group companies in some countries are also subject to a levy on minimum presumptive income in addition to income tax.

In turn, the Group companies resident in Spain that conduct some of their business in other countries are also subject to prevailing income tax in those countries in respect of the profits generated outside Spain. This is the case, for example, of the permanent establishments of the Spanish companies that carry out oil and gas exploration and production activities in other countries (including Libya, Algeria, Peru and Ecuador).

Below is a list of the statutory income tax rates applicable in the Group's main tax jurisdictions:

Country	Tax Rate
Algeria (1)	38%
Australia	30%
Bolivia	25%
Canada (2)	27%
Colombia	37%
Ecuador	22%
United States (3)	21%
Indonesia	32,5% - 48%
Libya	65%
Malaysia	38%
Norway	78%
The Netherlands	25%
Papua New Guinea	30%
Peru	29,5%
Portugal	22,5% - 31,5%
United Kingdom	40%
Singapore	17%
Trinidad and Tobago	55% - 57,2%
Venezuela	34% (Gas) and 50% (Oil)
Vietnam	32% - 50%

(1) Plus tax on exceptional profits (TPE) by its acronym in Spanish.
(2) Federal and provincial rate.
(3) The federal rate applicable for 2018 (does not include state taxes).

In December 2017, a significant income tax reform was approved in the US, and enters into effect on January 1, 2018, in which the federal tax rate was reduced from 35% to 21%. The reform has had a positive net impact on the Group, improving the value of its assets. However, it meant the revaluation at the end of 2017 of the tax credits and net deferred tax assets according to the new tax rate (negative impact of €406 million).

During 2018, Colombia has approved a tax reform that foresees a progressive reduction of IS tax rates (to 37% in 2018 and 33% in 2019). The positive impact of the revaluation of tax credits and net deferred tax assets at the new tax rate in 2018 amounts to €8 million.

23.2) Accrued income tax expense

The table below shows how the income tax expense accrued for accounting purposes in 2018 and 2017 was calculated:

	€ Million	
	2018	2017
Current tax for the year	(1,028)	(657)
Adjustments to current tax (1)	(178)	33
Current Income tax (a)	**(1,206)**	**(624)**
Deferred tax for the year	(135)	180
Adjustments to deferred tax (2)	(45)	(776)
Deferred income tax (b)	**(180)**	**(596)**
(Income)/Expense on income tax (a+b)	**(1,386)**	**(1,220)**

(1) Corresponds mainly to adjustments from previous years and movements in provisions.
(2) In 2017 corresponds mainly to the impact of tax reform in the US as rates have been lowered, resulting in a devaluation of tax credits pending application and net deferred tax assets.

The reconciliation of "*Income tax expense*" registered and the expense that would result from the application of the nominal tax rate existing in the country of the parent company (Spain) to the net profit before taxes and participated entities is as follows:

	€ Million	
	2018	2017
Net income before tax	**3,333**	**3,107**
Net income from investments accounted for using the equity method - net of taxes	1,053	630
Profit (loss) before tax and before considering the profit (loss) of entities accounted for using the equity method	**2,280**	**2,477**
General nominal income tax rate in Spain	25%	25%
(Expense)/Income on the nominal income tax rate	**(570)**	**(619)**
Income taxed at different nominal rates than the general Spanish rate	(543)	(258)
Mechanisms to avoid double taxation [(1)]	78	36
Non-deductible costs[(2)]	(173)	(14)
Tax deductions [(3)]	38	140
Tax losses for which no deferred tax asset for has been recognized	(33)	(89)
Revaluation deferred taxes [(4)]	112	(129)
Tax risk provisions	(214)	(276)
Other items	(81)	(11)
(Expense)/Income on the income tax rate	**(1,386)**	**(1,220)**

(1) Includes mechanisms to prevent international and internal double taxation, whether in the form of exemptions, credits or deduction

(2) Corresponds mainly to provisions that are not tax deductible (in 2018 the most noteworthy are those for credit risk of financing instruments and accounts receivable from PDVSA, see Note 20.3)

(3) Mainly relates to deductions in Spain for capitalization, R&D and other

(4) Includes revaluation of deferred taxes due to modifications in the tax rate (-€406 Million in 2017) exchange rate (-€16 million in 2018 and +€23 million in 2017) and new expectations of future use of tax credits, mainly on losses carried over from prior years (+€128 million in 2018 and +€254 million in 2017).

23.3) Deferred taxes

The Group presents deferred tax assets and liabilities on a net basis in the same taxable entity. The breakdown of the deferred tax assets and deferred tax liabilities by underlying concept recognized in the accompanying balance sheet is shown below:

€ Million	2018	2017
For losses, deductions and similar	3,671	3,809
Amortization differences	(2,688)	(2,585)
Provisions for decommissioning fields	712	836
Staff provisions and others	593	416
Other deferred taxes	575	530
Total deferred tax	**2,863**	**3,006**

Below is a breakdown of changes in deferred tax:

€ Million	2018	2017
Opening balance for the year	**3,006**	**3,367**
Impact of the new standards (Note 2.2.2)	91	-
Adjusted opening balance	**3,097**	**3,367**
Charge (payment) statement of profit or loss	(190)	(403)
Charge (payment) in equity	20	(1)
Translation differences of balances in foreign currency	39	(99)
Other items	(103)	142
Balance at year end	**2,863**	**3,006**

The Repsol Group only recognizes deferred tax assets insofar as it is deemed probable that the entities (individually or on a consolidated basis) that have generated them will have sufficient taxable income in the future against which they can be utilized.

At each closing date, the recognized deferred tax assets are reassessed to verify that they still qualify for recognition and they make the appropriate adjustments on the basis of the outcome of the analysis performed. These analysis are based on: (i) the construction of hypotheses to analyze the existence or otherwise of sufficient earnings for tax purposes that might offset such tax losses based on the approach used to ascertain the presence of indications of impairment in its assets (see Note 3); (ii) the assessment of earnings estimates for each entity or tax group in accordance with their individual business plans and the Group's overall strategic plan; and (iii) the statute of limitations period and other utilization limits imposed under prevailing legislation in each country for the recovery of the tax credits.

The deferred tax assets corresponding to offsetable tax losses and tax credits pending application amount to €3,671 million and correspond mainly to:

Country	€ Million	Legal Expiry	Estimated recoverability
Spain	1,399	No time limit	In less than 10 years
United States	1.401	20 years	Mostly in 10 years.
Canada	507	20 years	In less than 10 years
Norway	40	No time limit	Mostly in 10 years.
Other	324	-	-
Total	3,671		

The Group has deferred tax assets not recognized of €3,390 million and €3,550 million at 2018 and 2017 respectively.

The Group has deferred tax liabilities not recognized of €94 million and €108 million at year-end 2018 and 2017 respectively. This mainly relates to taxable temporary differences associated with investments in subsidiaries, associates and permanent establishments that qualify for the exemption provided for under IFRS.

23.4) Government and legal proceedings with tax implications

In accordance with prevailing tax legislation, tax returns cannot be considered final until they have been inspected by the tax authorities or until the inspection period in each tax jurisdiction has prescribed.

The years for which the Group companies have their tax returns open to inspection in respect of the main applicable taxes are as follows:

Country (Years open to inspection)	Years
Algeria	2014 – 2018
Australia	2014 – 2018
Bolivia	2013 – 2018
Canada	2013 – 2018
Colombia	2013 – 2018
Ecuador	2015 – 2018
Spain	2015 – 2018
United States	2015 – 2018
Indonesia	2013 – 2018
Libya	2011 – 2018
Malaysia	2014 – 2018
Norway	2016 – 2018
The Netherlands	2017 – 2018
Papua New Guinea	2015 – 2018
Peru	2014 – 2018
Portugal	2015 – 2018
United Kingdom	2012 – 2018
Singapore	2014 – 2018
Trinidad and Tobago	2014 – 2018
Venezuela	2012 – 2018

Whenever discrepancies arise between Repsol and the tax authorities with respect to the tax treatment applicable to certain operations, the Group acts with the authorities in a transparent and cooperative manner in order to resolve the resulting controversy, using the legal avenues at its disposition with a view to reaching non-litigious solutions. However, in this fiscal year, as in prior years, there are administrative and legal proceedings with tax implications that might be adverse to the Group’s interest and that have given rise to litigious situations that could result in contingent tax liabilities. Repsol believes that it has acted lawfully in handling the foregoing matters and that its defense arguments are underpinned by reasonable interpretations of prevailing legislation, to which end it has lodged appeals as necessary to defend the interests of the Group and its shareholders.

It is difficult to predict when these tax proceedings will be resolved due to the extensive appeals process. Based on the advice received from in-house and external tax experts, the Company believes that the tax liabilities that may ultimately derive from these proceedings will not have a significant impact on the accompanying Financial Statements. In the Group's experience, the result of lawsuits claiming sizeable amounts have either tended to result in immaterial settlements or the courts have found in favor of the Group.

The Group's general criterion is to recognize provisions for tax-related proceedings that it deems it is likely to lose and does not recognize provisions when the risk of losing the case is considered possible or remote. The amounts to be provisioned are calculated on the basis of the best estimate (see Note 3) of the amount needed to settle the lawsuit in question, underpinned, among others, by a case-by-case analysis of the facts, the legal opinions of its in-house and external advisors and prior experience in these matters. At December 31, 2018, the Group recognized provisions to cover contingencies associated with lawsuits and other tax matters in the Group's consolidated balance statement for the sum of €1,390 million (€1,415 million at December 31, 2017), which are considered adequate to cover those contingencies (see Note 14). As for the main tax proceedings affecting the Group at December 31 noted below:

Bolivia

Repsol E&P Bolivia, S.A. has applied the regime established in the Tax Regularization Law (Law 1,105/2018) and waived the lawsuits pending resolution in application thereof, putting an end to existing disputes in tax matters, with no significant impact on the Group's financial statements.

YPFB Andina, S.A. maintains a single lawsuit against an administrative act that, fundamentally, denies the deductibility of the payments for royalties and hydrocarbon stakes in the Tax to the Profits of the Companies before the nationalization of the oil sector. This lawsuit is currently pending a judgment in the first instance. The Company believes that its position is expressly endorsed in Law 4,115 of September 26, 2009.

Brazil

Petrobras, as operator of the Albacora Leste, BMS 7, BMES 21 and BMS 9 consortia (in which Repsol has a 10%, 37%, 11% and 25% interest, respectively) received tax assessments (IRRF, CIDE and PIS/COFINS) and for the years 2008 to 2012, in connection with payments to foreign companies for charter contracts for exploration platforms and related services used in the blocks. All notices have been appealed and are either in administrative tribunals (2009-2012) or are being appealed (2008).

Likewise, Repsol Sinopec Brasil received notification of minutes for the same items and taxes (2009 and 2011), in connection with payments to foreign companies for contracts for chartering exploration vessels and related services used in blocks BMS 48, BMS 55, BMES 29 and BMC 33, in which Repsol Sinopec Brasil is the operator. All notices have been appealed in federal administrative bodies. The Company considers that its actions are in accordance with the law and are in line with the general practice of the sector.

In relation to these lawsuits, the company has reduced the amount in litigation in relation to the IRRF, by 97%, by taking advantage of a program enabled by Law 13,586/17, which made this reduction possible through the retroactive application of the percentages of price determination (*split*) included in Law 13,043/2014 and through the abandonment of litigation in progress, without sanctions being applicable.

Canada

The Canadian Revenue Agency (CRA) periodically reviews the tax situation of Repsol Oil&Gas Canadá Inc. companies (formerly Talisman Group, acquired by Repsol in 2015) resident in Canada. The inspection activities for the years 2010 to 2012, have been completed in conformity, without relevant impacts on the Group's financial statements. Corporate income tax for 2013-2015 is currently being inspected.

Ecuador

Repsol Ecuador, S.A. Branch in Ecuador, holder of 35% of the stake in Consorcio Petrolero Block 16, and the company Oleoducto de Crudos Pesados, S.A. (OCP), an entity in which Repsol OCP de Ecuador, S.A. holds a 29.66% stake, have applied the remission regime established in the Organic Law for Productive Promotion, Investment Attraction, Employment Generation and Fiscal Stability and Equilibrium (Official letter No.: OCP). SAN-2018-1358) and withdrawing all lawsuits that are pending, putting an end to existing disputes in tax matters (see Note 14).

Spain

Proceedings relating to the following corporate income tax years are still open.

- Financial years 2006 to 2009. The matters discussed relate mainly to transfer prices, deduction of losses for investments abroad and deductions for investments, the majority of them as a result in changes in the criteria maintained by the Administration in previous and subsequent actions. In relation to the transfer price adjustments, the settlements have been annulled as a consequence of a resolution of a dispute by the Arbitration Board of the Economic Agreement with the Basque Country and the resolution of an amicable procedure with the US, which is why the Inspection must issue new settlements applying the criteria already accepted in subsequent years by the Administration and the taxpayer. In relation to the other matters, the Central Economic Administrative Court partially upheld the company's appeal and has appealed to the National High Court for the aspects that were not upheld.

- Financial years 2010-2013. The actions were concluded in 2017 without any sanctions being imposed and, for the large part, by means of declarations of conformity or agreements from which no significant liabilities have arisen for the Group. However, with regards to two issues (deductibility of interest for the late payment of taxes and the calculation of losses on overseas business,) the administrative decision has been subject to appeal, as the Company believes it has acted within the law.

- Financial years 2014-2016. The inspection started in August 2017 and is still ongoing.

The Company understands that all its actions have been in accordance with the law and does not expect any liabilities to arise that could have a material impact on the Group's results as a result of the foregoing procedures.

Indonesia

Indonesian Corporate Tax Authorities have been questioning various aspects of the taxation of permanent establishments that Talisman Group has in the country. These proceedings are pending a court hearing or administrative appeal.

Malaysia

Repsol Oil & Gas Malaysia Ltd. and Repsol Oil & Gas Malaysia (PM3) Ltd., the Group's operating subsidiaries in Malaysia, have received notifications from the *Inland Revenue Board* (IRB) in respect of the years 2007, 2008 and 2011 questioning the deductibility of certain costs. The aforementioned actions have resulted in a reconciliation agreement ratified by the tax court, under which Repsol subsidiaries will receive a refund of the taxes initially retained by the IRB.

(24) INCOME FROM DISCONTINUED OPERATIONS

"*Income from discontinued operations*", net of taxes includes the income from the transfer of the stake in Naturgy for (€344 million), as well as the income generated for this stake up to February 22, 2018, the date it was reclassified as held for sale, for an amount of €68 million (€274 million in 2017).

(25) EARNINGS PER SHARE

The earnings per share at December 31, 2018 and 2017 are detailed below:

Earnings per share	2018	2017
Income attributed to the parent company [(1)] (€ million)	2,341	2,121
Adjustment to interest expense on subordinated perpetual bonds (million euros)	(29)	(29)
Weighted average number of shares outstanding (millions of shares) [(2)]	1,593	1,622
Basic and diluted earnings per share (euros/share)	**1.45**	**1.29**

(1) In 2018 and 2017 includes the result attributed to the parent company corresponding to interrupted operations amounting to €412 million and €274 million, equivalent to an EPS of 0.26 and 0.17 euros per share, respectively.

(2) The outstanding share capital at December 31, 2017, came to 1,527,396,053 shares, although the average weighted number of shares outstanding for the purposes of calculating earnings per share on said date includes the effect of capital increases undertaken as part of the "*Repsol Flexible Dividend*" shareholder payment system, as per the applicable accounts regulations (see Note 2.2.3).

CASH FLOWS

(26) CASH FLOWS[1]

26.1) Cash flow from operating activities

During 2018 the net cash flow from operating activities amounted to €4,579 Million, which represents a decrease of 10% with respect to 2017. The breakdown of *"Cash Flows from Operating Activities"* in the consolidated statement of cash flows is as follows:

		€ Million	
	Notes	2018	2017
Net income before tax		**3,333**	**3,107**
Adjusted result:		**2,360**	**2,146**
Amortisation of non-current assets	3,11 and 12	2,140	2,399
Net operating provisions	14 and 20	1,235	160
Earnings arising from the disposal of non-commercial assets	4 and 20	(62)	(41)
Financial result	21	173	312
Share of results of companies accounted for using the equity method, net of taxes	13	(1,053)	(630)
Other adjustments (net)		(73)	(54)
Changes in working capital:		**(389)**	**(110)**
Increase/Decrease Accounts receivable	17	119	(665)
Increase/Decrease Inventories	16	(531)	(332)
Increase/Decrease Accounts payable	18	23	887
Other cash flows from / (used in) operating activities:		**(725)**	**(30)**
Dividends received		472	511
Income tax receivable / (payable)[(1)]		(762)	(320)
Other receipts / (payments) of operating activities[(2)]		(435)	(221)
Cash Flows from Operating Activities		**4,579**	**5,113**

[(1)] In 2017 this includes the cash flows from discontinued operations due to dividends received from the investment in Naturgy amounting to €201 million.
[(2)] In 2018, tax payments in Spain (payments in instalments for tax group 6/80), Libya, Indonesia and Ecuador (see Note 14) should be highlighted. The total amount of taxes paid in 2018, including that attributed to the divestment in Naturgy (under "Payments/Collections for Investments in Group and Associated Companies") amounted to €1,226 million. For more information on the Group's tax contribution, see section 6.6 of the 2018 Consolidated Management Report.
[(3)] Includes mainly payments for the application of provisions (see Note 14).

26.2) Cash flows from investment activities

During 2018, the net cash flow from investing activities resulted in the net payment of -€1,359 million.

"Payments/collections for investments in Group and associated companies" amount to +€2,565 million and relate mainly to the collection of €3,816[2] million for the divestment of Naturgy, net of the tax payment for profits (€3,352 million) declared in the second instalment payment of tax group 6/80, and the payment for the investment in the unregulated electricity generation businesses of Viesgo amounting to €732 million.

Payments/receipts on investments in property, plant and equipment, intangible assets and property investments" came to €-2,542 million and primarily corresponds to investments in the *Upstream* segment in North America, Norway and in Exploration and in the *Downstream* in the industrial complexes of the Refining and Chemical businesses.

[1] In accordance with the presentation options allowed in IAS 7 *Statement of cash flows*, the Group uses the so-called *"indirect method"* to disclose its operating cash flows. Under this method, the statement of cash flows starts with *"Net income before tax"* for the year, as per the income statement; this figure is then adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.
[2] From 2018, Repsol discloses the cash flow from discontinued operations in the Notes to the Financial Statements.

The "*payments/receipts on investments in other financial assets*", came to €-1,450 million, corresponding to the constitution of deposits and the variation of loans extended to joint ventures.

26.3) Cash flows from financing activities

During 2018, the net cash flow from financing activities resulted in the net payment of €3,032 million, which represents an increase of 28% on 2017.

A breakdown of the changes to liabilities linked to financing activities can be found below:

	€ Million					
	2017	2018				
			Other cash flows			
	Opening balance [1]	Cash flows	Exchange rate effect	Changes in FV	Others [3]	Closing balance [1]
Bank borrowings	1,552	393	57	-	(90)	1,912
Bonds and other securities	9,729	(1,916)	38	-	247	8,098
Derivatives (liabilities)	96	(454)	3	453	8	106
Loans [2]	2,858	359	145	-	87	3,449
Other financial liabilities	51	55	4	-	6	116
Lease agreements liabilities	1,541	(199)	66	-	216	1,624
Remunerations to shareholders and perpetual bonds	1,183	(297)	-	-	318	1,204
Treasury shares and own equity	(45)	(1,595)	-	-	1,290	(350)
Total liabilities perpetual activities	16,965	(3,654)	313	453	2,082	16,159
Derivatives (asset)	(18)	609	-	(668)	-	(77)
Other receipts/payments of financing activities [4]	-	13	-	-	-	-
Total other assets and liabilities	(18)	622	-	(668)	-	(77)
Total	16,947	(3,032)	313	(215)	2,082	16,082

[1] Corresponds to the current and non-current balance of the income statement.
[2] Includes loans to Group companies that have not been eliminated from the consolidation process.
[3] This mainly includes the capital reduction carried out during the year through the amortization of treasury shares amounting to €1,125 million (see Note 7.1) and the accrual of interest and dividends.
[4] Includes mainly payments/receipts of short-term financing granted in the amount of €24 million.

OTHER DISCLOSURES

(27) COMMITMENTS AND GUARANTEES

27.1) Contractual commitments

At December 31, 2018, the Group has contractually committed to the following purchases, investment and other expenditures:

€ Million	2019	2020	2021	2022	2023	Subsequent years	Total
Purchase commitments	**4.280**	**1.202**	**922**	**852**	**893**	**12.658**	**20.807**
Crude and others [1] [3]	3.318	318	266	274	283	3.099	7.558
Natural gas [2] [3]	962	884	656	578	610	9.559	13.249
Investment commitments [4]	1.112	513	297	86	69	166	**2.243**
Service provisions [5]	482	363	286	191	135	992	**2.449**
Transport commitments [6]	208	215	186	170	168	391	**1.338**
TOTAL	**6.082**	**2.293**	**1.691**	**1.299**	**1.265**	**14.207**	**26.837**

Note: Commitments consist of future unconditional obligations (non-cancellable, or cancellable only under certain circumstances), as a result of commercial agreements in which fixed total amounts are not stipulated. These commitments were quantified using Repsol's best estimates, and, in case fixed total amounts were not stipulated, price estimates and other variables for calculating the recoverable amount of the assets (see Notes 3 and 20). For operating lease commitments, see Note 19.8.

(1) Mainly includes the commitments for the purchase of products needed to operate the Group's refineries in Spain and the commitments assumed under crude oil purchase contracts with the Pemex Group (open-ended), with the Saudi Arabian Oil Company (renewed annually) and with the Repsol Sinopec Brasil Group (expires 2020) and with Overseas Petroleum and Investment Corporation (expires in 2019),

(2) Primarily includes commitments to purchase liquefied natural gas in North America, acquired under two contracts signed in 2013. All these contracts qualify for accounting purposes as own use.

(3) Committed crude oil and gas volumes are as follows:

Purchase commitments	Unit of measurement	2019	2020	2021	2022	2023	Subsequent years	Total
Crude oil	Mb	42,237	209	202	190	190	909	43,937
Natural Gas:								
Natural Gas	Tbtu	73	54	53	45	45	66	336
Liquefied natural gas	Tbtu	81	82	59	42	45	1,052	1,361

It does not include the contract for the supply of approximately one million tons per year of liquefied natural gas (LNG) reached with the US company Venture Global LNG (see Note 32).

(4) Includes mainly investment commitments in Algeria, Vietnam, Norway, Algeria, Bolivia, Spain, Malaysia and Indonesia for the amount of €462 million, 454 million, 389 million, 188 million, 161 million and 108 million, respectively.

(5) Primarily includes services for processing gas in Canada amounting to €922 million, and associated with oil and gas exploration and productions activities in Upstream totaling €670 million.

(6) It includes, primarily, oil and gas transportation commitments in North America, Peru and Colombia amounting to approximately €1,190 million.

27.2) Guarantees

At December 31, 2018, the most significant guarantees to third parties or companies whose assets, liabilities and earnings are not presented in the consolidated financial statements (joint ventures and associates) are as follows:

- For the rental of three floating production platforms for the development of the BMS 9 field in Brazil:
  - A guarantee for $554 million corresponding to 100% of RSB's interest (see Note 13) in Guara B.V., for which Repsol holds a counter guarantee from China Petrochemical Corporation in respect of the latter's 40% interest in RSB,
  - and two additional guarantees of $457 million and $489 million, corresponding to the 15% interest held indirectly by the Group in Guará B.V.

  The guaranteed amounts are reduced annually during the contracts' term of 20 years.
- For 51% of the guarantees for the decommissioning of RSRUK in the North Sea, for £631 million.

- To cover the risk of confiscation, expropriation, nationalization, or any measure designed to restrict use of the drilling unit introduced by the Venezuelan government or acts of insurgency or terrorism, for $90 million, granted for the 50% interest in Cardón IV[1].

- To cover the construction, abandonment, environmental and operating risks of a pipeline in Ecuador in the amount of $30 million, granted for the 29.66% interest in Oleoducto de Crudos Pesados de Ecuador, S.A.

In addition, in line with general industry practice, the Group grants guarantees and commitments to compensate for obligations arising in the course of ordinary activities, and for any liabilities of its activities, including environmental liabilities[2] and for the sale of assets[3].

The aforementioned guarantees cannot be considered a definite outflow of resources to third parties, as for the large part, they will mature without any payment obligation arising. At the date of issue of these consolidated financial statements, the probability of a breach that would trigger liability for these commitments to any material extent is remote.

(28) INFORMATION ON RELATED PARTY TRANSACTIONS

Repsol carries out transactions with related parties on an arm's length basis. The transactions performed by Repsol, S.A. with its Group companies and those performed by the Group companies among themselves form part of the Company's ordinary course of business in terms of their purpose and conditions.

For the purposes of presenting this information, the following are considered to be related parties:

a. Significant shareholders: at December 31, the Company's significant shareholders that are deemed related parties are:

Significant shareholders	% total on share capital December 31, 2018 (1)
Sacyr, S.A. (2)	8.03
Temasek Holdings (Private) Limited (3)	2.43

Note: Data available to the Company at December 31, 2018 based on the most recent information furnished by Spain's central counterparty clearing house (Iberclear for its acronym in Spanish) and the information submitted by the shareholders to the Company and to the National Securities Market Commission (CNMV for its abbreviation in Spanish).
(1) Data prior to the close of the scrip issue detailed in section 7.1 Share capital.
(2) Sacyr, S.A. holds its investment through Sacyr Securities, S.A.U, Sacyr Investments S.A.U. and Sacyr Investments II, S.A.U.
(3) Temasek holds its investment through its subsidiary Chembra Investment PTE, Ltd.

b. Directors and executives: includes members of the Board of Directors as well as members of the Executive Committee whose members are considered as *"executive personnel"* for purposes of this section (see Note 30.4).

c. People, companies or entities within the Group: includes transactions with Group companies or entities for the part not eliminated in the consolidation process, corresponding mainly to transactions undertaken with companies consolidated using the equity method (see Note 13).

Income, expenses and other transactions and balances recorded at December 31 with related party transactions are as follows:

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1 Also in Venezuela, Repsol has issued an indeterminate guarantee in favor of Cardón IV to cover gas supply commitments undertaken with Petróleos de Venezuela, S.A. through to 2036. (PDVSA). In the opposite direction, PDVSA has granted a guarantee to Cardón IV to cover receivables on supply commitments. The Group has also granted a guarantee in favor of the Republic of Venezuela to cover the obligations contracted in the development of gas assets in the country.
2 Guarantees granted in the ordinary course of business correspond to a limited number of guarantees totaling €24 Million. Environmental guarantees are formalized in the normal course of oil and gas exploration and production activity, where the probability of occurrence of the collateralized contingencies is remote, and the related amounts are unascertainable.
3 Outstanding guarantees for asset sales, granted in accordance with general industry practice, are immaterial. Of recent note are those granted in the sale of LNG assets to Shell in 2015.

€ Million	2018				2017			
EXPENSES AND REVENUE	Significant shareholders	Directors and executives [1]	People, companies or entities within the Group	Total	Significant shareholders	Directors and executives [1]	People, companies or entities within the Group	Total
Finance costs	7	-	90	97	7	-	75	82
Leasing	1	-	1	2	1	-	1	2
Service receptions	20	-	87	107	19	-	138	157
Purchase of goods [2]	-	-	1,453	1,453	-	-	1,389	1,389
Other expenses [3]	7	-	739	746	13	-	512	525
TOTAL EXPENSES	35	-	2,370	2,405	40	-	2,115	2,155
Finance income	4	-	162	166	8	-	156	164
Service provisions	6	-	1	7	8	-	1	9
Sale of goods [4]	180	-	575	755	156	-	685	841
Other revenue	1	-	66	67	1	-	64	65
TOTAL REVENUE	191	-	804	995	173	-	906	1,079

€ Million	2018				2017			
OTHER TRANSACTIONS	Significant shareholders	Directors and executives [1]	People, companies or entities within the Group	Total	Significant shareholders	Directors and executives [1]	People, companies or entities within the Group	Total
Funding agreements: credit and contributions of capital (creditor)	-	-	302	302	-	-	296	296
Funding agreements: loans and contributions of capital (borrower) [5]	-	-	1,082	1,082	-	-	724	724
Guarantees and sureties given [6]	44	-	669	713	8	-	668	676
Guarantees and sureties received	7	-	-	7	-	-	-	-
Commitments assumed [7]	30	-	-	30	-	-	-	-
Dividends and other profits distributed [8]	92	-	-	92	174	-	-	174
Other operations [9]	135	-	1,906	2,041	1,334	-	1,541	2,875

€ Million	2018				2017			
CLOSING BALANCES	Significant shareholders	Directors and executives [1]	People, companies or entities within the Group	Total	Significant shareholders	Directors and executives [1]	People, companies or entities within the Group	Total
Customers and trade receivables	2	-	181	183	1		358	359
Loans and credits granted	-	-	1,096	1,096	-		1,871	1,871
Other receivables	-	-	1	1	-		-	-
TOTAL RECEIVABLE BALANCES	2	-	1,278	1,280	1	-	2,229	2,230
Suppliers and trade payables	9	-	93	102	8		336	344
Loans and credits received	-	-	3,442	3,442	-		2,860	2,860
Other payment obligations [10]	47	-	1	48	82		1	83
TOTAL PAYABLE BALANCES	56	-	3,536	3,592	90	-	3,197	3,287

Note: The tables for 2017 include the necessary modifications to the 2017 consolidated annual accounts to adapt them to the models of CNMV Circular 3/2018. In 2018 the tables for Expenses and Income and Other Transactions include transactions with the Naturgy Group until 22 February 2018, the date on which it was reclassified as held for sale (see Note 1.3) and with Caixabank until September 20, the date of the announcement of the resolution adopted by its Board of Directors to sell its shareholding in Repsol and the resignation of its proprietary directors.

(1) Includes transactions performed with executives and directors not included in Note 30 on the remuneration received by executives and directors, and would correspond to the outstanding balance at the reporting date of the loans granted to members of senior management and the corresponding accrued interest, as well as dividend and other remuneration received as a result of holding shares of the Company.

(2) As of December 31, the column headed *"People, companies or entities within the Group"* primarily includes products purchased with Repsol Sinopec Brasil (RSB), and from BPRY Caribbean Ventures LLC (BPRY), for the amount of €875 million, €395 million in 2018 and €822 Million and €166 Million in 2017, respectively.

(3) Includes mainly supplies and provisions for credit risks of accounts receivable and financial instruments (see Note 10.3 and 20.3). Excludes impacts of first application of IFRS 9 in joint ventures in Venezuela, which are recognized in "*Equity*." (see Note 2.2.2)

(4) In 2018 and 2017 the column "Significant shareholders" includes mainly the sales of crude oil to the Temasek group. In 2018 and 2017 the column "Persons, companies or entities of the Group" includes mainly sales of products to Iberian Lube Base Oil, S.A. (ILBOC) and Dynasol Group for €252 million and €119 million in 2018 and €187 million and €148 million in 2017, respectively, as well as sales to the Naturgy Group.

(5) Includes loans granted and new provisions for credit facilities in the period, as well as capital contributions to Group companies with companies accounted for using the equity method.

(6) Includes primarily guarantees granted to joint ventures in the United Kingdom, issued in the ordinary course of business to cover obligations to dismantle offshore platforms in the North Sea.

(7) Corresponds to purchase, investment or expense commitments acquired in the period (see Note 27).

(8) They include the amounts allocated as dividends and other profits distributed include sums corresponding to the sale to Repsol, of bonus share rights as part of the bonus share issue closed in January and July 2018 (in the 2017 table: January and July 2017) as part of the *"Repsol Flexible Dividend"* shareholder remuneration program (see Note 7.3).

(9) In 2017 "*Significant Shareholders*" included mainly interest-bearing accounts and deposits amounting to €852 million with Caixabank. In 2018 and 2017 "Individuals, Companies or Group Entities" includes mainly cancellations of guarantees granted to joint ventures in the United Kingdom, and the, financing agreements.

(10) In 2018 and 2017 "*Significant Shareholders*" includes the amounts corresponding to the sale to Repsol, at the guaranteed fixed price, of the free allocation rights arising from bonus capital increase closed in January 2019 and 2018. Duties are recorded as accounts payable at 31 December.

(29) PERSONNEL OBLIGATIONS

29.1) Defined contribution pension plans

Repsol has defined mixed modality plans for certain employees in Spain, which conform to current legislation. Specifically, this refers to pension plans with defined contributions for retirement and defined contributions for permanent disability and death. For contingencies of permanent disability and death, pension plans have life insurance policies with an external entity. Additionally, outside Spain, certain Group subsidiaries have a defined contribution pension plans for their employees.

The annual cost charged to "*Personnel expenses*" in the income statement in relation to the defined contribution pension plans detailed above has risen to €56 million in 2018 and €54 million in 2017.

Executives of the Repsol Group in Spain are beneficiaries of an executive pension plan that complements the standard pension plan denominated "*Plan de previsión de Directivos*" (Management remuneration plan) which covers the participant retirement, disability and death. Repsol makes defined contributions based on a percentage of participants' salaries. The plan guarantees a fixed return equivalent to 125% the prior year National Consumer Price Index. The plan is instrumented through collective insurances that cover pension obligations, subscribed with an insurance entity. Premiums paid under these policies finance and externalize the Group's commitments in respect of contributions, as well as the fixed return mentioned above.

The cost of this plan recognized under "*Personnel expenses*" in the income statement in 2018 and 2017 was €12.00 and €13.5 million, respectively.

29.2) Defined benefit pension plans

Repsol has arranged defined benefit pension plans for certain groups of employees. The amount charged to the Group's income statement in 2018 and 2017 was €5 million and €2 million respectively, while the related balance sheet provision at year-end 2018 and 2017 stood at €64 million and €70 million, respectively (see Note 14).

29.3) Long-term variable remuneration

The Company has implemented a loyalty building program aimed at senior executives and other persons occupying positions of responsibility in the Group, consisting of long-term incentives as part of their benefit package. The purpose of this program is to strengthen the identification of executives and managers with shareholders' interests, based on the Company's medium and long-term earnings sustainability as well as the compliance with the Strategic Plan, while at the same time facilitating the retention by the Group of key personnel.

At year end, the 2015-2018, 2016-2019, 2017-2020 and 2018-2021 long-term incentive programs were in force. The 2014-2017 plan was closed, as originally stipulated, on December 31, 2017 and its beneficiaries perceived their bonuses during 2018.

The four long-term incentive programs in effect are independent of each other but their main characteristics are the same. Fulfillment of the respective objectives tied to each program entitles the beneficiaries of each plan to receive an incentive in the first four months of the year following the last year of the plan. However, receipt of this incentive payment is tied to the beneficiary remaining in the Group's employ until December 31 of the last year of the plan, except in the special cases envisaged in the terms and conditions of the related plan.

If the incentive is to be received, the amount determined at the time the long-term incentive is applied a first variable coefficient on the basis of the extent to which the objectives set are achieved, and then a second variable coefficient linked to the arithmetic mean of the individual performance evaluation obtained by the beneficiary in the years included in the measurement period of each incentive program, calculated as the percentage of individual variable annual remuneration obtained with respect to 100% of the established target.

None of the plans involve the delivery of shares or options to beneficiaries, with the exception of Executive Directors to whom, as per the agreement approved by the shareholder annual meeting on May 19, 2017, under Agenda item 19, a payment shall be made partially in shares (30%); the amount corresponding to the Long-Term Incentive Programs for 2014-2017, 2015-2018, 2016-2019, 2017-2020 and 2018-2021. The 2016-2019, 2017-2020 and 2018-2021 Programs involve targets pegged to Repsol's stock price performance.

The amount corresponding to the 2015-2018 Long-term Incentive Plan will be paid to the Executive Directors in a proportion of 70% in cash and the remaining 30% in Company shares, so that Mr. Josu Jon Imaz will receive € 1,098,339 in cash and 14,330 Company shares, equivalent to an amount of €217,041 and Mr. Luis Suárez de Lezo Mantilla will receive €706,197 in cash and 9,214 Company shares, equivalent to an amount of €139,554.

As resolved by the General Shareholders' meeting on May 19, 2017, the final number of shares to be delivered to the Executive Directors is calculated taking into account: (i) the amount that is effectively payable to each Director following application of the corresponding taxes (or withholdings) ; and (ii) the weighted average for the daily volume of average weighted Repsol share prices in the fifteen trading sessions before the Friday of the week preceding the date on which the Board of Directors agrees payment of the Long-Term Incentive for Executive Directors in each of the Plans.

To reflect the commitments assumed under these incentive plans, the Group recognized a provision charge of €31 and €23 million in the 2018 and 2017 income statement, respectively. At December 31, 2018 and 2017, the Group had recognized provisions totaling €70 million and €57 Million, respectively, to meet its obligations under all the aforementioned plans, to fulfill all the plans described above.

29.4) Share purchase plans for beneficiaries of long-term incentive programs and share acquisition plans

i.) *"Share Purchase Plan for Beneficiaries of the Long-Term Incentive Programs"*

This Plan allows its beneficiaries to invest in Repsol, S.A. shares of up to 50% of the gross amount of the long-term incentive received and its purpose is to encourage its beneficiaries (including Executive Directors and members of the Executive Committee) to align themselves with the long-term interests of the Company and its shareholders. Its aim is to promote the alignment of beneficiaries (including Executive Directors and Corporate Executive Committee members) with the long-terms interests of both the Company and its shareholders.

If the beneficiaries continue to hold the shares so acquired for three years after they are purchased and the rest of the Plan terms and conditions are met, the Company will provide them with one additional share for every three initially acquired. The beneficiaries qualifying as Senior Management, defined to this end as the Executive Directors and the other Members of the Executive Committee, are subject to an additional performance requirement in order to qualify for receipt of these additional shares, namely overall satisfaction of at least 75% of the targets set in the long-term incentive program closed in the year immediately preceding that of delivery of the shares.

At the date of preparation of the accompanying consolidated financial statements for issue, the sixth, seventh and eighth cycles of this Plan were in force (2016-2019, 2017-2020 and 2018-2021); key data for these cycles are provided below:

	No. shares	Total initial investment (No. shares)	Average price (EUR/share)	Commitment Max delivery of shares
Sixth cycle (2016-2019)	132	160,963	11.378	53,604
Seventh cycle (2017-2020)	153	135,047	14.9955	44,964
Eighth cycle (2018-2021)(1)	158	150,476	16.3021	50,160

(1) This amount includes the shares delivered to the Executive Directors as a partial payment of the ILP 2014-2017 Program, amounting to 21,003. In accordance with the provisions of the Directors' Remuneration Policy, the shares, if any, delivered to the Executive Directors under each long-term variable remuneration plan may be computed for the purposes of the investment in shares referred to in the Share Purchase Plan by the Beneficiaries of the Multi-Year Variable Remuneration Programs.

During this eighth cycle, the current members of the Corporate Executive Committee and other Executive Directors have acquired a total of 63,606 shares.

As a result of this Plan, at December 31, 2018 and 2017, the Group had recognized an expense under "*Personnel expenses*" with a counterbalancing entry under "*Other reserves*" in equity of €0.5 million.

In addition, the fifth cycle of the Plan vested on May 29, 2018. As a result, the rights of 166 beneficiaries to 37,570 shares vested (receiving a total of 28,523 shares net of payment on account of the personal income tax to be made by the Company). Specifically, the rights of the members of the Executive Committee and the rest of the Executive Directors to 13,328 shares also vested (net of the withholding retained by the Company, these individuals received a total of 9,222 shares).

ii.) *"Share Acquisition Plans*"

Since 2011 the Company has set up different Share Acquisition Plans, which were approved at the Annual General Meetings of April 15, 2011 (the 2011-2012 Share Acquisition Plan), May 31, 2012 (the 2013-2015 Share Acquisition Plan), April 30, 2015 (the 2016-2018 Share Acquisition Plan) and 11 May 2018 (Share Acquisition Plan 2019-2021).

These Plans are targeted at employees of the Repsol Group in Spain and are designed to enable those so wishing to receive a portion of their remuneration in Repsol, S.A. shares up to an annual limit of €12,000. The shares to be delivered will be valued at Repsol, S.A.'s closing share price on the continuous Spanish stock market on each date of delivery to the beneficiaries.

In 2018 the Group purchased 518,228 shares of Repsol, S.A. for €8.2 million for delivery to employees. Under the scope of the 2017 Plan, the Group acquired 539,430 shares from Repsol, S.A. for a total of €7.8 million (see Note 7).

The members of the Executive Committee acquired a total of 5,274 shares in accordance with the plan terms and conditions in 2018.

The shares to be delivered under both schemes i) and ii) may be sourced from Repsol's directly or indirectly held treasury shares, new-issued shares or from third party entities with whom the Group has entered into agreements to guarantee coverage of the commitments assumed.

(30) REMUNERATION OF THE MEMBERS OF THE BOARD OF DIRECTORS AND EXECUTIVES

30.1) Remuneration of the members of the Board of Directors

a) Due to membership of the Board of Directors

In accordance with Article 45 of the Articles of Association, the Directors, in their capacity as members of the Board and in exchange for discharging the supervisory and decision-making duties intrinsic to Board membership, are entitled to receive a fixed annual payment that may not exceed the ceiling established to this end at the Annual General Meeting or on the Director Remuneration Policy; it is up to the Board of Directors to determine the precise amount payable within that limit and its distribution among the various Directors, factoring in the positions and duties performed by each within the Board and its Committees, the membership of the Committees, the positions held by each one of them on the Board and any other objective circumstance considered as relevant.

The upper limit established in the Director Remuneration Policy approved at the Annual General Meeting held on April 30, 2015, under item nineteen of the corresponding agenda, is €8.5 million.

The amount of remuneration accrued in 2018 by the members of the Board of Directors in their capacity as Board members against the aforesaid assignment amounted to €7.058 million, the detail being as follows:

Board of Directors	Board	Delegate Com.	Audit Com.	Appoints. Com.	Renum. Com.	Sustain. Com.	**Total**
	Remuneration of Board members relating to their position *(euros)*						
Antonio Brufau Niubó [(1)]	(1)	(1)	-	-	-	-	2,500,000
Josu Jon Imaz San Miguel	176,594	176,594	-	-	-	-	353,188
Gonzalo Gortázar Rotaeche [(2)]	117,729	117,729	-	-	14,716	-	250,174
Jordi Gual Solé [(3)]	117,729	-	-	14,716	-	29,432	161,877
Henri Philippe Reichstul [(4)]	29,432	29,432	-	-	-	-	58,864
Mª del Carmen Ganyet i Cirera [(5)]	117,729	-	58,865	14,716	-	-	191,310
Ignacio Martín San Vicente [(6)]	117,729	117,729	-	-	14,716	-	250,174
Artur Carulla Font [(7)]	73,581	73,581	-	9,198	9,198	-	165,558
Mario Fernández Pelaz [(8)]	29,432	-	14,716	3,679	3,679	-	51,506
María Teresa Ballester Fornés [(9)]	176,594	-	88,297	-	14,716	-	279,607
Ángel Durández Adeva [(10)]	176,594	-	88,297	14,716	22,074	-	301,681
Manuel Manrique Cecilia	176,594	176,594	-	-	-	-	353,188
Luis Carlos Croissier Batista	176,594	-	88,297	-	-	44,148	309,039
Rene Dahan	176,594	176,594	-	-	-	-	353,188
José Manuel Loureda Mantiñán	176,594	-	-	22,074	22,074	44,148	264,890
Mariano Marzo Carpio	176,594	-	-	22,074	-	44,148	242,816
Isabel Torremocha Ferrezuelo	176,594	-	88,297	-	-	-	264,891
J. Robinson West	176,594	176,594	-	-	-	-	353,188
Luis Suárez de Lezo Mantilla	176,594	176,594	-	-	-	-	353,188

Note: In accordance with the scheme adopted by the Board of Directors, and at the proposal of the Remuneration Committee, the amount due annually in 2018 came to: (i) €176,594 for membership of the Board of Directors; (ii) €176,594 for membership of the Delegate Committee; (iii) €88,297 for membership of the Audit and Control Committee; (iv) €44,148 for membership of the Sustainability Committee; (v) €22,074 for Membership of the Nomination Committee; and (vi) €22,074 for Membership of the Remuneration Committee.

(1) On April 30, 2015, Mr. Brufau stepped down from his executive duties, and on the same date the General Shareholders' Meeting approved his re-election as non-executive Chairman of the Board of Directors and his new remuneration conditions, applicable from May 1, 2015, consisting of a fixed remuneration of 2,500 thousand euros gross per year. In addition, remuneration in kind and payments on account/withholdings linked to remuneration in kind totaled 0.605 million euros.

(2) Mr. Gortázar resigned from his post as Director and member of the Executive Committee and of the Remuneration Committee on September 20, 2018 after Caixabank, S.A. announced that it would sell its entire shareholding in Repsol, S.A.

(3) Mr. Gual resigned from his post as Director and member of the Appointments Committee and the Sustainability Committee on September 20, 2018 after Caixabank, S.A. announced that it was selling its entire stake in Repsol, S.A.

(4) Mr. Reichstul was appointed as Director via co-option and member of the Executive Committee on October 30, 2018.

(5) Ms Ganyet was appointed Director and member of the Audit and Control Committee and the Appointments Committee on May 11, 2018.

(6) Mr. Martín San Vicente was appointed Director and member of the Executive Committee and of the Remuneration Committee on May 11, 2018.

(7) Mr. Carulla ended his term as Director and as Chairman of the Remuneration Committee and member of the Executive Committee and of the Appointments Committee on May 11, 2018.

(8) Mr. Fernández resigned as Director, Chairman of the Appointments Committee and member of the Audit and Control Committee and of the Remuneration Committee on February 20, 2018.

(9) Ms Ballester was appointed member of the Remuneration Committee on May 11, 2018.

(10) Mr. Durández was appointed member of the Appointments Committee and the Remuneration Committee on May 11, 2018, being appointed Chairman of both Committees on June 27 and July 25, 2018, respectively.

Additionally, it should also be noted that:

- The members of the Board of Directors of the parent company have not been granted any loans or advances by any Group company, joint arrangement or associate.
- The non-executive Directors only receive the fixed remuneration indicated in the table above and are excluded from the schemes financed by the Company to provide coverage in the event of termination, death or other developments and from the Company's short and long term performance-based bonus schemes. As regards the Chairman of the Board of Directors, see Note 1 of the table of remuneration for being part of the Administration Bodies, in this section.
- No Group company, joint arrangement or associated company has pension or life insurance obligations to any former or current member of the Board of Directors of the parent company, except in the case of the Chairman of the Board, the Chief Executive Officer and the General Counsel Secretary, whose remuneration are subject to the commitments set forth in their respective contracts for services, as described further on.

b) Due to the holding of executive positions and performing executive duties

In 2018, compensation to Directors for the performance of executive duties was as follows:

€ Million	Mr. Josu Jon Imaz San Miguel	Mr. Luis Suárez de Lezo Mantilla
Fixed monetary remuneration	1.200	0,983
Variable remuneration and in kind [1]	2.475	1.841

[1] Includes, among other items, life and disability insurance and health insurance, as well as variable annual and multi-annual remuneration, as well as additional shares corresponding to the settlement of the fifth cycle of the Share Acquisition Plan by the beneficiaries of the long-term incentive programs, as detailed in section 30.1) e).

The above amounts do not include the amounts detailed in section c) and d) below.

c) Due to membership of the Boards of Directors of subsidiaries

The remuneration earned in 2018 by the members of the parent's Board of Directors in their capacity as directors of other Group companies, joint arrangements and associates amounted to €0.138 million, according to the following detail:

€ Million	Naturgy
Josu Jon Imaz San Miguel	0,046
Luis Suárez de Lezo Mantilla	0,092

d) Due to contributions to pension plans, long-service bonuses and welfare plans

The cost in 2018 of the contributions made to pension plans, long-service bonuses and welfare plans for the members of the Executive Directors discharging executive duties in the Group amounted to:

	€ Million
Josu Jon Imaz San Miguel	0,254
Luis Suárez de Lezo Mantilla	0,197

e) Share Purchase Plan for beneficiaries of the multi-year variable remuneration programs

On May 29, 2018, the vesting period concluded for the fifth cycle of the share purchase program for beneficiaries of long-term incentive programs (see Note 29.4.i). Upon vesting, Josu Jon Imaz became entitled to the receipt of 2,201 (before withholdings), valued at a unit price of €16.91 per share. Luis Suárez de Lezo Mantilla became entitled to receive 957 shares at the same valuation.

30.2) Indemnity payments to Board Members

None of the Directors received any indemnity payment from Repsol in 2018.

30.3) Other transactions with directors

During 2018, Repsol's Directors did not conclude any material transaction with the Company or any of the Group companies outside the ordinary course of business or on terms other than those afforded to customers or other than on an arm's length basis.

The Chief Executive Officer signed up for the 2016-2019, 2017-2020 and 2018-2021 cycles of the Share Purchase Plan for beneficiaries of the long-term incentive programs, as detailed in Note 29. The General Counsel Secretary has signed up for the 2017-2020 and 2018-2021 cycles of this Plan.

In 2018, the Board of Directors has not been made aware of any situation of direct or indirect conflict of interest. Nevertheless, in accordance with article 229 of the Companies Act, in that fiscal year resolutions of the Board and of the Nomination Committee regarding related-party transactions, ratification, re-election and continuity of Directors and on appointment to positions within the Board were adopted in the absence of the Director and its committees affected by the relevant proposed resolution.

In addition, the Executive Directors did not participate in the approval of the Board of Directors resolutions regarding their compensation for the performance of executive duties at the Company.

30.4) Remuneration of key management personnel

a) Scope

For reporting purposes in this section, Repsol considers *"key management personnel"* to be the members of the Executive Committee. In 2018, a total of 10 persons formed the Executive Committee. The term "key management personnel'', made purely for reporting purposes, neither substitutes nor comprises a benchmark for interpreting other senior management pay concepts applicable to the Company under prevailing legislation (e.g. Royal Decree 1382/1985), nor does it have the effect of creating, recognizing, amending or extinguishing any existing legal or contractual rights or obligations.

This section itemizes the remuneration accrued in 2018 by the people who, at some juncture during the period and during the time they occupied such positions, were members of the Board of Directors. Unless indicated otherwise, the compensation figures provided for *"key management personnel"* do not include the compensation accrued by people who are also directors of Repsol, S.A.; the director compensation disclosures for these individuals are included in section 1 of this note.

b) Wages and salaries, executive welfare plan, pension fund and insurance premiums.

The total remuneration earned in 2018 by executive officers who formed part of the Executive Committee is as follows:

	€ Million
Wages	5.314
Allowances	0,090
Variable remuneration (1)	5.425
Remuneration in kind (2)	0,700
Executive welfare plan	1.103

(1) This consists of an annual bonus, and a multi-annual bonus, calculated both as a given percentage of the fixed remuneration earned on the basis of the degree to which certain targets are met.
(2) Includes, inter alia, vested entitlement to 10,170 additional shares (before withholdings) at the end of the vesting period for the fifth cycle of the share purchase plan for beneficiaries of the long-term incentive programs, valued at €16.91 per share, representing an equivalent amount of €171,946 gross. It also includes contributions to pension plans for executives (see Note 29), and the amount of premiums paid for life and disability insurance, amounting to €0.332 million.

c) Advances and loans granted

At December 31, 2018, the Company had granted loans to members of its management amounting to €0.367 Million, having accrued an average interest rate of 2.1% during the current financial year.

30.5) Indemnity payments to key management personnel

Key management personnel are entitled under their contracts to severance pay if their employment is terminated for any reason other than breach of executive duties, retirement, disability or their own free will without reference to any of the indemnifiable events specified in the contracts.

The Group has arranged a collected insurance agreement to assure such benefits for Executive Committee members with the title General Manager, and for Directors that have performed executive duties.

In 2018, the compensation received by the Group's key management personnel in the form of termination benefits and compensation for non-compete clauses totaled €14.78 Million.

30.6) Other transactions with key management personnel

Notwithstanding the foregoing, during 2018, Repsol's key management personnel did not conclude any material transaction with the Company or any of the Group companies outside the ordinary course of business or on terms other than those afforded to customers or other than on an arm's length basis.

Additionally, executive personnel signed up for the 2016-2019, 2017-2020 and 2018-2021 cycles of the Share Purchase Plan for beneficiaries of the long-term incentive programs, as detailed in Note 29.

30.7) Civil liability insurance

During the financial year 2018, the Repsol Group subscribed a civil liability policy for Board members, the executive officers referred to in Note 30.4.a), and the rest of officers and people executing such functions, for a total premium of €1.8 million. The policy also covers different Group companies under certain circumstances and conditions.

(31) ENVIRONMENTAL INFORMATION

In relation to the risks and management of climate change, as well as the Group's environmental management, see sections 6.1 "*Climate change*" and 6.3 "*Environment*" of the Consolidated Management Report.

31.1) Environmental investment, expenses and provisions[1]

Environmental investments in 2018 amounted to € 241 million (€ 199 million classified as 'work in progress' at 31 December). Of note are those aimed at improving environmental quality of oil products, managing and optimizing water consumption, minimizing emissions into the atmosphere, increasing energy saving and efficiency and improving contingency systems and spill prevention systems and managing and optimizing water consumption. Of particular note in 2018 is the completion of the project to adapt the new quality specifications at the La Pampilla refinery in Peru, with the start-up of the gasoline production units for an accumulated investment of €245 million (€ 29 million invested in 2018).

Environmental expenses, which are recorded under the headings "*Supplies*" and "*Other Operating Expenses*", amounted to €195 million and €162 million in 2018 and 2017, respectively, and include the expenses for the rights necessary to cover CO_2 emissions (see next section). In 2018, the actions carried out for the protection of the atmosphere in the *downstream* industrial facilities amounting to €27 million (€31 million in 2017); water management amounting to €17 million (€19 million in 2017); waste management amounting to €18 million (€16 million in 2017), and soil remediation and abandonment amounting to €8 million (€12 million in 2017) stand out.

In addition, €33.7 million were invested in energy efficiency projects in 2018, including a €5 million investment in the Coruña refinery to reduce emissions by replacing turbines in the fluid catalytic cracking unit (FCC), and a €5.9 million euro investment in Petronor for efficiency actions in furnaces and heat exchangers.

Provisions for environmental actions[2] at 31 December 2018 amount to €53 million (€79 million in 2017). No significant provisions were recorded during the year. Additionally, the Group has registered field dismantling provisions (see Note 14).

The insurance policies cover, subject to terms and conditions, civil liability for pollution on land and at sea and certain liabilities via-a-vis the authorities pursuant to the Environmental Liability Act, all of which derived from accidental, sudden and identifiable events, in keeping with habitual industry practice and applicable legislation.

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[1] Items identified as an environmental nature, are understood as those the purpose of which is to minimize environmental impact and to protect and improve the environment. The criteria for their assessment are based on the Group's technical criteria established in the "Repsol Safety and Environmental Costs Guide" based on the guidelines issued by the American Petroleum Institute (API).

[2] Repsol recognizes the provisions required to cover the measures aimed at preventing and repairing environmental impact. These provisions are presented under "*Current and non-current provisions*" on the balance sheet and under the "*Other provisions*" column in the table reconciling the movement in provisions in Note 14.

31.2) Carbon emission allowances

Accounting policies –Carbon emission allowances

Emission allowances are recognized as an intangible asset and are initially recognized at acquisition cost. Those received free of charge under the emissions trading system for the period 2013-2020, are initially recognized at the market price prevailing at the beginning of the year in which they are issued, against deferred income as a grant. As the corresponding tons of CO_2 are issued, the deferred income is reclassified to profit or loss.

They are not amortized as their carrying amount matches their residual value and are subject to an impairment test based on their recoverable amount, (measured with reference to the price of the benchmark contract in the futures market provided by the ECX-European Climate Exchange).

The Group records an expense under "Other operating expenses" in the income statement for the Carbon emissions released during the year, recognizing a provision calculated based on the tons of CO_2 emitted, measured at: (i) their carrying amount in the case of the allowances of which the Group is in possession at year end; and (ii) the closing list price in the case of allowances of which it is not in possession at year end.

When the emissions allowances for the CO_2 tons emitted are delivered to the authorities, the intangible assets as well as their corresponding provision are derecognized from the balance sheet without any effect on the income statement.

When carbon emission allowances are actively managed to take advantage of market trading opportunities, the trading allowances portfolio is classified as trading inventories (see Note 16).

In Europe, the regulation concerning the carbon allowances market, the EU Emissions Trading System Directive (EU-ETS) entered Phase III on January 1, 2013. This phase, which ends in 2020, marks the end of the generic allocation of carbon emission allowances, where some emissions, such as those related to electricity generation, will no longer benefit from free allocations, while others will be significantly reduced. The 2014 update to the EU-ETS Directive confirmed that refining activity in Europe was one of the sectors exposed to "*Carbon Leakage*" and would therefore continue to benefit from the free allocation of carbon allowances, partially covering its deficits.

The provisions movements recognized in respect of carbon emission allowances used in 2018 and 2017 is as follows:

	€ Million	
	2018	2017
Opening balance for the year	**69**	**72**
Contributions charged to results [1]	114	69
Reclassifications and other movements [2]	(70)	(72)
Balance at year end	**113**	**69**

[1] Corresponds to the expense incurred to acquire the allowances needed to cover the Group's carbon emissions.
[2] In 2018 and 2017, corresponds to the derecognition of allowances used to cover emissions made in 2017 and 2016, respectively (see Note 11).

During 2018 and 2017, the companies comprising the consolidation scope recognized emission allowances allocated free of charge under the Spanish National Allocation plan equivalent to 8 million tons of CO_2, initially measured at €63 and €51 million, respectively (see Note 11).

The net cost of carbon management amounted to 44 million euros in 2018 and 17 million euros in 2017.

(32) FURTHER BREAKDOWNS

32.1) Staff[1]

Repsol Group employed a total of 24,506 people at December 31, 2018, geographically distributed as follows: Spain (16,740 employees), North America (1,339 employees), South America (3,927 employees), Europe, Africa and Brazil (1,754 employees), Asia and Russia (745 employees) and Oceania (1 employee). Average headcount in 2018 was 24,691 employees (24,675 employees in 2017).

[1] For further information on the workforce and human resource management policies, see section 6.2 of the Consolidated Management Report.

Below is a breakdown of the Group's total staff[1] distributed by professional categories and genders at year-end 2018 and 2017:

	2018		2017	
	Men	Women	Men	Women
Executives	217	56	212	50
Technical Managers	1,752	746	1,648	685
Technicians	7,051	4,621	7,123	4,382
Manual workers junior personnel	6,405	3,658	6,613	3,513
Total (1)	**15,425**	**9,081**	**15,596**	**8,630**

The Repsol Group employed a total of 567 people of differing abilities at December 31, 2018 (2.31% of its workforce).

In Spain in 2018, using the computation criteria stipulated in Spanish law on the rights of people with disability and their integration, the Group surpassed the legally required percentage threshold: its differently-abled workforce accounted for 2.52% of the total in Spain, namely 485 direct hires.

32.2) Fees paid to auditors

The approved fees for audit services, professional services related to the audit and other non-audit services provided during the year to Repsol Group companies by PriceWaterhouseCoopers Auditores, S.L and the companies in its network(PwC)[2], as well as the fees for those provided by other audit firms, are shown below:

	Main auditor		Other auditors (1)	
€ Million	2018	2017	2018	2017
Audit and related services:	**7.3**	**7.0**	**-**	**1.9**
Audit services	6.6	6.2	-	1.9
Other related services	0.7	0.8	-	-
Tax services	**0.0**	**0.3**	**-**	**0.7**
Other services	**0.2**	**0.3**	**-**	**-**
Total (2)(3)(4)	**7.5**	**7.6**	**0.0**	**2.6**

(1) In 2017 this mainly includes fees due to EY, S.L. for audit work and other services provided to Repsol Oil&Gas Canada, Inc. and its subsidiaries.

(2) The 2017 information has been modified for comparative purposes to conform to the 2018 presentation criteria

(3) The fees approved in 2018 by PriceWaterhouseCoopers Auditores, S.L. for audit and related services amounted to €4.1 million and €0.5 million, respectively.

(4) The fees received by the auditor for services other than the auditing of accounts do not exceed 70% of the amount of the audit fees, thus complying with the provisions of Law 22/2015, of 20 July, on the Auditing of Accounts in Spain, and with the requirement of Article 4.2 on audit fees of Regulation (EU) No. 537/2014, of April 16 of the European Parliament and of the Council.

The "*Audit Services*" heading includes the fees relating to the audit of the individual and consolidated annual accounts of Repsol, S.A. and of the companies forming part of its Group, the limited reviews of the Group's interim consolidated financial statements, whose work allows evidence to be obtained for the audit, and the review of the information relating to the Group's Internal Financial Reporting Control System (IFRS).

The "*Other Related Services*" caption includes, mainly, verifications and certifications for partners and official bodies, reports for the issuance of bonds and other negotiable securities (*Comfort letters*), as well as the verification of the non-financial information of the consolidated management report.

The "*Tax Services*" caption includes mainly tax advisory services and assistance in connection with tax inspections.

The heading "*Other Services*" in 2018 includes consultancy work in the area of information technology.

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[1] Pursuant to the provisions of Organic Law 3/2007, of March 22, which promotes true equality between men and women, published in the Official State Gazette of March 23, 2007.

[2] Repsol's Annual Shareholders' Meeting held on May 19, 2017 approved the appointment of PwC as the auditor of Repsol, S.A. and the Group for 2018, 2019 and 2020. In 2017 the main auditor was Deloitte.

The directors of the Parent Company obtained confirmation from the Group auditor of the Group's compliance with the applicable independence requirements in accordance with the aforementioned Law and Regulations.

32.3) Research and development

Research costs incurred are recognized as expenses for the year and development costs are capitalized only if all the conditions stipulated in the applicable accounting standard are met.

The expense recognized in the income statement in connection with research and development activities amounted to €75 million in 2018 and €65 million in 2018 and 2017 respectively. The capitalized expenses corresponding to development activities amounted to €22 million in 2018.

32.4) Relevant agreements for the year

Repsol has signed an agreement with US firm Venture Global LNG to supply approximately one million tons per year of liquefied natural gas (LNG) for 20 years from the *Calcasieu Pass* export plant that Venture Global LNG is developing in *Cameron Parish*, Louisiana. Repsol will purchase LNG from the commissioning of the plant in 2022, which will be employed both to supply gas to industrial complexes in Spain and to be sold worldwide. 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*).

The price of this supply contract is indexed to the Henry Hub price.

(33) SUBSEQUENT EVENTS

On February 19, 2019, a major gas discovery was announced in Indonesia with the Kaliberau Dalam-2X (KBD-2X) exploratory well in the Sakakemang onshore block, located in the south of the island of Sumatra, where Repsol is the operating company with a 45% stake.

Preliminary estimates of recoverable resources are around 2 billion cubic feet of gas (TCF), making it one of the world's leading hydrocarbon discoveries in the last twelve months and the largest gas discovery in Indonesia in the last 18 years.

(34) EXPLANATION ADDED FOR TRANSLATION TO ENGLISH

These consolidated financial statements are prepared on the basis of IFRSs, as endorsed by the European Union, and Article 12 of Royal Decree 1362/2007. Consequently, certain accounting practices applied by the Group may not conform to other generally accepted accounting principles in other countries.

APPENDIX I: GROUP'S CORPORATE STRUCTURE

APPENDIX IA: MAIN COMPANIES COMPRISING THE REPSOL GROUP AT DECEMBER 31, 2018

					December 2018			
					%		Millions of Euros	
Name	Parent company	Country	Corporate purpose	Method of consolidation (1)	Dism. Control (2)	Dism. Total Group	Equity (3)	Share Capital(3)
UPSTREAM								
Agri Development, B.V. (28)	Repsol Sinopec Brasil, B.V.	The Netherlands	Platform for production of crude oil and natural gas	EM (NC)	10.00	6.00	0	0
Akakus Oil Operations, B.V.	Repsol Exploración Murzuq, S.A.	The Netherlands	Oil and gas exploration and production	EM	49.00	49.00	0	0
ASB Geo (5)	Repsol Exploración, S.A.	Russia	Oil and gas exploration and production	EM (NC)	50.01	50.01	0	0
BP Trinidad & Tobago, Llc. (28)	BPRY Caribbean Ventures, Llc.	Estados Unidos	Exploración y producción de hidrocarburos	EM (NC)	100.00	30.00	0	0
BPRY Caribbean Ventures, Llc. (27)	Repsol Exploración S.A.	Estados Unidos	Exploración y producción de hidrocarburos	EM (NC)	30.00	30.00	2,202	2,725
Cardón IV, S.A.	Repsol Exploración, S.A.	Venezuela	Exploración y producción de hidrocarburos	EM (NC)	50.00	50.00	(960)	3
CSJC Eurotek - Yugra	Repsol Exploración Karabashsky, B.V.	Russia	Oil and gas exploration and production	EM (NC)	71.51	71.51	66	0
Dubai Marine Areas Ltd.	Repsol Exploración, S.A.	United Kingdom	Oil and gas exploration and production (11) (12)	EM (NC)	50.00	50.00	2	0
Equion Energia Ltd.	Talisman Colombia Holdco Ltd.	United Kingdom	Oil and gas exploration and production	EM (NC)	49.00	49.00	535	0
FEHI Holding S.ar.l.	TE Holding S.a.r.l.	Luxembourg	Portfolio company	FC	100.00	100.00	2,802	195
Foreland Oil Ltd. (9)	Rift Oil, Ltd.	British Virgin Islands	Oil and gas exploration and production	FC	100.00	100.00	32	250
Fortuna Resources (Sunda) Ltd. (9)	Talisman UK (South East Sumatra) Ltd.	British Virgin Islands	Oil and gas exploration and production (11)	FC	100.00	100.00	51	0
Guará, B.V. (28)	Repsol Sinopec Brasil, B.V.	Países Bajos	Platform for production of crude oil and natural gas	EM	25.00	15.00	0	0
MC Alrep, Llc.	AR Oil & Gaz, B.V.	Rusia	Servicios de gestión de empresas del JV	EM (NC)	100.00	49.00	0	0
Lapa Oil & Gas, B.V. (28)	Repsol Sinopec Brasil, B.V. (20)	Países Bajos	Platform for production of crude oil and natural gas	EM	25.00	15.00	0	0
Occidental de Colombia LLC	Repsol International Finance, B.V.	United States	Portfolio company	EM (NC)	25.00	25.00	141	92
Paladin Resources Ltd.	TE Holding S.a.r.l.	United Kingdom	Portfolio company	FC	100.00	100.00	481	292
Pan Pacific Petroleum (Vietnam) Pty, Ltd.	Repsol Exploración, S.A.	Australia	Oil and gas exploration and production	FC	100.00	100.00	14	0
Petrocarabobo, S.A.	Repsol Exploración, S.A.	Venezuela	Oil and gas exploration and production	EM (NC)	11.00	11.00	482	542
Petroquiriquire, S.A. Joint Venture	Repsol Exploración, S.A.	Venezuela	Oil and gas exploration and production.	EM (NC)	40.00	40.00	(1,000)	228
Quiriquire Gas, S.A. Joint Venture	Repsol Venezuela, S.A.	Venezuela	Oil and gas exploration and production.	EM (NC)	60.00	60.00	0	0
Repsol Alberta Shale Partnership	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	1,216	1,412
Repsol Angola 22, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	36	341
Repsol Angola 35, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	1	119
Repsol Angola 37, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	5	252
Repsol Angostura, Ltd.	Repsol Exploración, S.A.	Trinidad and Tobago	Oil and gas exploration and production	FC	100.00	100.00	1	33
Repsol Aruba, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	17	17
Repsol Bulgaria, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	21	111
Repsol Bulgaria Khan Kubrat, S.A. (5)	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Canada Energy Partnership	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	5,384	1,335
Repsol Ductos Colombia, S.A.S.	Talisman Colombia Holdco Ltd.	Colombia	Oil and gas exploration and production	FC	100.00	100.00	59	3
Repsol E&P Bolivia, S.A.	Repsol Bolivia, S.A.	Bolivia	Oil and gas exploration and production	FC	100.00	100.00	689	133
Repsol E&P Canada Ltd.	Repsol Exploración, S.A.	Canada	Oil and gas exploration and production	FC	100.00	100.00	3	91
Repsol E&P Eurasia, LLc.	Repsol Exploración, S.A.	Russia	Oil and gas exploration and production	FC	99.99	99.99	3	5
Repsol E&P USA, Inc.	Repsol USA Holdings Corporation	United States	Oil and gas exploration and production	FC	100.00	100.00	2,726	2,869
Repsol E&P USA Holdings, Inc.	Repsol Oil & Gas Holdings USA, Inc.	United States	Oil and gas exploration and production	FC	100.00	100.00	2,438	1,652
Repsol Ecuador, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	(375)	5
Repsol Energy North America Corporation	Repsol USA Holdings Corporation	United States	Marketing of LNG	FC	100.00	100.00	(472)	250
Repsol Exploración 17, B.V. (14)	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Exploración Aitoloakarnania, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	3	0
Repsol Exploración Argelia, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	457	5
Repsol Exploración Atlas, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Exploración Boughezoul, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Exploración Caribe, S.L.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production (11)	FC	100.00	100.00	0	0
Repsol Exploración Cendrawasih I, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	(1)	27
Repsol Exploración Cendrawasih II, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	0	13
Repsol Exploración Cendrawasih III, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	0	4
Repsol Exploración Cendrawasih IV, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	0	6
Repsol Exploración Colombia, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	95	2
Repsol Exploración East Bula, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	0	4

					December 2018			
					%		Millions of Euros	
Name	Parent company	Country	Corporate purpose	Method of consolidation (1)	Dism. Control (2)	Dism. Total Group	Equity (3)	Share Capital(3)
Repsol Exploración Gharb, S.A. (14)	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	22	0
Repsol Exploración Guinea, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production (11)	FC	100.00	100.00	0	0
Repsol Exploración Guyana, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	15	0
Repsol Exploración Ioannina, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	25	0
Repsol Exploración Irlanda, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	16	0
Repsol Exploración Jamaica, S.A. (5)	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Exploración Karabashsky, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	136	131
Repsol Exploración Kazakhstan, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production (11)	FC	100.00	100.00	7	0
Repsol Exploración Liberia, B.V. (6)	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	3	57
Repsol Exploración México, S.A. de C.V.	Repsol Exploración, S.A.	Mexico	Oil and gas exploration and production	FC	100.00	100.00	108	109
Repsol Exploración Murzuq, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	316	9
Repsol Exploración Perú, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	197	11
Repsol Exploración Seram, B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	0	7
Repsol Exploración South East Jambi B.V. (19)	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	1	0
Repsol Exploración Tanfit, S.L. (16)	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production (11)	FC	100.00	100.00	8	3
Repsol Exploración Tobago, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	15	0
Repsol Exploración, S.A.	Repsol S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	13,483	26
Repsol Exploration Australia, Pty, Ltd.	Repsol Exploración, S.A.	Australia	Oil and gas exploration and production	FC	100.00	100.00	0	22
Repsol Exploration Namibia Pty, Ltd.	Repsol Exploración, S.A.	Namibia	Oil and gas exploration and production (11)	FC	100.00	100.00	(12)	0
Repsol Exploraçao Brasil, Ltda.	Repsol Exploración, S.A.	Brazil	Oil and gas exploration and production	FC	100.00	100.00	34	35
Repsol Groundbirch Partnership	Repsol Oil & Gas Canada Inc.	Canadá	Exploración y producción de hidrocarburos	I.G.	100.00	100.00	3	227
Repsol Investigaciones Petrolíferas, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	489	208
Repsol Jambi Merang, S.L. (5)	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Libreville, S.A. avec A.G.	Repsol Exploración, S.A.	Gabon	Oil and gas exploration and production	FC	100.00	100.00	(10)	66
Repsol LNG Holdings, S.A.	Repsol Exploración, S.A.	Spain	Hydrocarbon marketing	FC	100.00	100.00	9	2
Repsol Louisiana Corporation (12)	Repsol USA Holdings Corporation	United States	Oil and gas exploration and production	FC	100.00	100.00	24	90
Repsol Norge, AS	Repsol Exploración, S.A.	Norway	Oil and gas exploration and production	FC	100.00	100.00	132	0
Repsol OCP de Ecuador, S.A.	Repsol Ecuador, S.A.	Spain	Operation of an oil pipeline for the transport of hydrocarbons	FC	100.00	99.99	52	0
Repsol Offshore E & P USA, Inc.	Repsol USA Holdings Corporation	United States	Oil and gas exploration and production	FC	100.00	100.00	11	29
Repsol Oil & Gas Australia (JPDA 06-105) Pty Ltd.	Paladin Resources Ltd.	Australia	Oil and gas exploration and production	FC	100.00	100.00	(24)	143
Repsol Oil & Gas Australasia Pty Ltd.	Talisman International Holdings, B.V.	Australia	Shared services company	FC	100.00	100.00	1	65
Repsol Oil & Gas Canada, Inc. (10)	Repsol Energy Resources Canada Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	5,445	6,002
Repsol Oil & Gas Holdings USA Inc.	FEHI Holding S.a.r.l.	United States	Oil and gas exploration and production	FC	100.00	100.00	4,286	1,877
Repsol Oil & Gas Malaysia (PM3) Ltd.	Repsol Oil & Gas Malaysia Holdings Ltd.	Barbados	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Oil & Gas Malaysia Ltd.	Repsol Oil & Gas Malaysia Holdings Ltd.	Barbados	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Oil & Gas Niugini Kimu Alpha Pty Ltd.	Repsol Oil & Gas Niugini Ltd.	Australia	Oil and gas exploration and production	FC	100.00	100.00	0	6
Repsol Oil & Gas Niugini Kimu Beta Ltd.	Repsol Oil & Gas Niugini Ltd.	Papua Nueva Guinea	Oil and gas exploration and production	FC	100.00	100.00	0	14
Repsol Oil & Gas Niugini Ltd.	Repsol Oil & Gas Papua Pty, Ltd.	Papua Nueva Guinea	Oil and gas exploration and production	FC	100.00	100.00	71	329
Repsol Oil & Gas Niugini Pty Ltd.	Talisman International Holdings, B.V.	Australia	Oil and gas exploration and production	FC	100.00	100.00	339	592
Repsol Oil & Gas Papua Pty Ltd.	Repsol Oil & Gas Niugini Pty Ltd.	Australia	Oil and gas exploration and production	FC	100.00	100.00	310	311
Repsol Oil & Gas USA LLC.	Repsol E&P USA Holdings Inc.	United States	Oil and gas exploration and production	FC	100.00	100.00	1,855	1,767
Repsol Oil & Gas Vietnam 07/03 Pty Ltd	Repsol Exploración, S.A.	Australia	Exploración y producción de hidrocarburos	I.G.	100.00	100.00	14	0
Repsol Oriente Medio, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production (11)	FC	100.00	100.00	43	0
Repsol Services México, S.A. de C.V. (17)	Repsol Downstream Internacional, S.A. (26)	Mexico	Oil and gas exploration and production	FC	100.00	100.00	0	0
Repsol Servicios Colombia, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	5	0
Repsol Sinopec Brasil, S.A. (27)	Repsol S.A.	Brasil	Hydrocarbon operations and marketing	EM (NC)	60.01	60.01	7,248	7,050
Repsol Sinopec Resources UK Ltd. (15)	Talisman Colombia Holdco Ltd.	Reino Unido	Hydrocarbon operations and marketing	EM (NC)	51.00	51.00	1,419	4,309
Repsol Suroriente Ecuador, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	FC	100.00	100.00	1	2
Repsol U.K., Ltd.	Repsol Exploración, S.A.	United Kingdom	Oil and gas exploration and production	FC	100.00	100.00	(7)	1
Repsol USA Holdings Corporation	Repsol Exploración, S.A.	United States	Oil and gas exploration and production	FC	100.00	100.00	3,024	3,055
Repsol Venezuela, S.A.	Repsol Exploración Venezuela, B.V.	Venezuela	Oil and gas exploration and production	FC	100.00	100.00	148	700
Saneco	AR Oil & Gaz, B.V.	Russia	Oil and gas exploration and production	EM (NC)	100.00	49.00	31	0
SC Repsol Baicoi, S.R.L.	Repsol Exploración, S.A.	Romania	Oil and gas exploration and production	FC	100.00	100.00	9	53

					December 2018			
					%		Millions of Euros	
Name	Parent company	Country	Corporate purpose	Method of consolidation (1)	Dism. Control (2)	Dism. Total Group	Equity (3)	Share Capital(3)
SC Repsol Pitesti, S.R.L.	Repsol Exploración, S.A.	Romania	Oil and gas exploration and production	FC	100.00	100.00	0	8
SC Repsol Targoviste, S.R.L.	Repsol Exploración, S.A.	Romania	Oil and gas exploration and production	FC	100.00	100.00	4	47
SC Repsol Targu Jiu, S.R.L.	Repsol Exploración, S.A.	Romania	Oil and gas exploration and production	FC	100.00	100.00	1	5
Talisman (Algeria) B.V.	Repsol Exploración, S.A (24)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	177	0
Talisman (Asia) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	(142)	3
Talisman (Block K 39) B.V.	Repsol Exploración, S.A (24)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	(2)	0
Talisman (Block K 44) B.V.	Repsol Exploración, S.A (24)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	0	0
Talisman (Block K 9) B.V.	Talisman Global Holdings, B.V.	The Netherlands	Oil and gas exploration and production (11) (12)	FC	100.00	100.00	0	0
Talisman (Colombia) Oil & Gas Ltd.	Repsol Exploración, S.A. (22)	Canada	Oil and gas exploration and production	FC	100.00	100.00	572	775
Talisman (Corridor) Ltd. (13)	Fortuna International (Barbados), Inc	Barbados	Oil and gas exploration and production	FC	100.00	100.00	929	41
Talisman (Jambi Merang) Ltd.	Talisman International Holdings, B.V.	United Kingdom	Oil and gas exploration and production	FC	100.00	100.00	52	71
Talisman (Pasangkayu) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production (11)	FC	100.00	100.00	(14)	45
Talisman (Sageri) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production (11)	FC	100.00	100.00	(84)	0
Talisman (Sumatra) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production (11)	FC	100.00	100.00	0	0
Talisman (Vietnam 133 &134) Ltd.	Repsol Exploración, S.A. (22)	Canada	Oil and gas exploration and production	FC	100.00	100.00	15	31
Talisman (Vietnam 15-2/01) Ltd.	Repsol Exploración, S.A. (22)	Canada	Oil and gas exploration and production	FC	100.00	100.00	235	314
Talisman (Vietnam 46/02) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production (11)	FC	100.00	100.00	53	52
Talisman Andaman B.V.	Talisman International Holdings, B.V.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	59	0
Talisman Colombia Holdco Ltd.	Repsol Exploración, S.A. (23)	United Kingdom	Portfolio company	FC	100.00	100.00	426	4,133
Talisman Banyumas B.V.	Repsol Exploración, S.A. (21)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	0	0
Talisman East Jabung B.V.	Talisman International Holdings, B.V.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	5	0
Talisman Energy Investments Norge AS	Talisman Perpetual (Norway) Ltd.	Norway	Oil and gas exploration and production (11) (12)	FC	100.00	100.00	0	1
Talisman Java B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	0	0
Talisman Resources (Bahamas) Ltd. (8)	Paladin Resources Ltd.	Bahamas	Oil and gas exploration and production (11)	FC	100.00	100.00	7	0
Talisman Resources (North West Java) Ltd.	Talisman UK (South East Sumatra) Ltd.	United Kingdom	Oil and gas exploration and production (11)	FC	100.00	100.00	33	0
Talisman Sadang B.V.	Talisman International Holdings, B.V.	The Netherlands	Oil and gas exploration and production (11) (12)	FC	100.00	100.00	0	0
Talisman Sakakemang B.V.	Talisman International Holdings, B.V.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	91	0
Talisman South Mandar B.V.	Talisman International Holdings, B.V.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	0	0
Talisman South Sageri B.V.	Talisman International Holdings, B.V.	The Netherlands	Oil and gas exploration and production (11)	FC	100.00	100.00	0	0
Talisman Transgasindo Ltd. (13)	Fortuna International (Barbados), Inc.	Barbados	Portfolio company	FC	100.00	100.00	(17)	25
Talisman UK (South East Sumatra) Ltd.	Paladin Resources, Ltd.	United Kingdom	Oil and gas exploration and production (11)	FC	100.00	100.00	50	0
Talisman Vietnam Ltd.	Talisman Oil, Ltd.	Barbados	Oil and gas exploration and production	FC	100.00	100.00	15	0
Talisman Vietnam 07/03 B.V.	Repsol Canada Inversiones, S.A. (24)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	233	0
Talisman Vietnam 07/03-CRD Corporation LLC	Talisman International Holdings, B.V.	United States	Oil and gas exploration and production	FC	100.00	100.00	198	45
Talisman Vietnam 135-136 B.V.	Repsol Canada Inversiones, S.A. (24)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	296	0
Talisman Vietnam 146-147 B.V.	Repsol Canada Inversiones, S.A. (24)	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	24	0
TNO (Tafnefteotdacha)	AR Oil & Gaz, B.V.	Russia	Oil and gas exploration and production	EM (NC)	99.57	48.79	183	0
Transportadora Sulbrasileira de Gas, S.A.	Tucunaré Empreendimentos e Participaçoes, Ltda.	Brazil	Gas pipeline construction and operation	EM (NC)	25.00	25.00	0	15
Transworld Petroleum (U.K.)	Repsol Sinopec North Sea Ltd.	United Kingdom	Oil and gas exploration and production	EM (NC)	100.00	51.00		
Triad Oil Manitoba Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production (11)	FC	100.00	100.00	5	0
YPFB Andina, S.A. (27)	Repsol Bolivia, S.A.	Bolivia	Exploración y producción de hidrocarburos	EM (NC)	48.33	48.33	956	154
YPFB Transierra, S.A. (28)	YPFB Andina, S.A.	Bolivia	Transporte de hidrocaburos por gasoducto y oleoducto	EM	44.50	21.51	0	0
504744 Alberta Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production (11)	FC	100.00	100.00	(7)	0
7308051 Canada Ltd	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	44	267
8441251 Canada Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	12	14
8787352 Canada Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production	FC	100.00	100.00	2	2
Vung May 156-159 Vietnam B.V.	Repsol Exploración, S.A.	The Netherlands	Oil and gas exploration and production	FC	100.00	100.00	2	0

Name	Parent company	Country	Corporate purpose	Method of consolidation (1)	December 2018 % Dism. Control (2)	Dism. Total Group	Millions of Euros Equity (3)	Share Capital(3)
DOWNSTREAM								
Abastecimentos e Serviços de Aviaçao, Lda.	Repsol Portuguesa, S.A.	Portugal	Marketing of oil products	EM	50.00	50.00	0	0
Air Miles España, S.A. (14)	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Travel Club Program. Loyalty Service	EM	26.67	25.78	11	0
Arteche y García, S.L. (14)	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	FC	100.00	96.68	0	0
Asfaltos Españoles, S.A.	Repsol Petróleo, S.A.	Spain	Asphalts	(4)	50.00	49.99	35	9
Bardahl de México, S.A. de C.V. (5)	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	EM (NC)	40.00	40.00	56	0
Benzirep-Vall, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	FC	100.00	96.68	0	0
Caiageste - Gestao de Areas de Serviço, Lda.	GESPOST	Portugal	Operation and management of gas stations	EM	50.00	50.00	0	0
Campsa Estaciones de Servicio, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Operation and management of gas stations	FC	100.00	96.68	184	8
Carburants i Derivats, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Andorra	Distribution of oil derivative products	EM	33.25	32.15	2	0
CI Repsol Aviación Colombia, S.A.S. (5)	Repsol Downstream Internacional, S.A.	Colombia	Distribution and marketing of oil products	FC	100.00	100.00	0	0
Cogeneración Gequisa, S.A. (14)	General Chemicals	Spain	Production of electricity and steam	EM	39.00	19.50	7	2
Compañía Anónima de Revisiones y Servicios, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	FC	95.00	91.85	3	1
Compañía Auxiliar de Remolcadores y Buques Especiales, S.A.	Repsol Petróleo, S.A.	Spain	Provision of maritime services	FC	100.00	99.19	7	0
Distribuidora Andalucía Oriental, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Fuel marketing	EM (NC)	50.00	48.34	2	1
Distribuidora de Petróleos, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Fuel marketing	FC	85.00	82.18	0	0
Dynasol Altamira, S.A. de C.V. (14)	Dynasol Elastómeros, S.A. de C.V.	Mexico	Service provisions	EM (NC)	100.00	50.00	2	0
Dynasol China, S.A. de C.V. (14)	Dynasol Gestión Mexico, S.A.P.I. de C.V.	Mexico	Service provisions	EM (NC)	99.99	49.99	17	5
Dynasol Elastómeros, S.A. de C.V. (14)	Dynasol Gestión Mexico, S.A.P.I. de C.V.	Mexico	Production and marketing of chemical products	EM (NC)	100.00	50.00	89	27
Dynasol Elastómeros, S.A.U. (14)	Dynasol Gestión, S.L.	Spain	Production and marketing of chemical products	EM (NC)	100.00	50.00	50	17
Dynasol Gestión Mexico, S.A.P.I. de C.V. (14)	Repsol Química, S.A.	Mexico	Portfolio and shared services company	EM	50.00	50.00	258	187
Dynasol Gestión, S.L.	Repsol Química, S.A.	Spain	Portfolio and shared services company	EM	50.00	50.00	234	42
Dynasol, Llc. (14)	Dynasol Gestión, S.L.	United States	Marketing of petrochemical products	EM (NC)	100.00	50.00	0	0
Endomexicana Renta y Servicios, S.A. de C.V. (5)	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	EM (NC)	40.00	40.00	0	0
Energy Express S.L.U. (14)	Societat Catalana de Petrolis, S.A.	Spain	Operation and management of gas stations	FC	100.00	91.89	4	1
Estación de Servicio Barajas, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	FC	96.00	92.81	3	1
Estaciones de Servicio El Robledo, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations (11)	FC	100.00	96.68	0	0
Estación de Servicio Montsia, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	España	Instalación y explotación de estaciones de servicio	P.E.(N.C.)	50.00	48.34	0	0
Ezzing Renewable Energies S.L. (5)	Repsol Energy Ventures, S.A.	Spain	Development of solar power projects	EM	22.22	22.22	0	0
Gas Natural West África S.L.	Repsol LNG Holding, S.A.	Spain	Oil and gas exploration and production.	EM (NC)	100.00	72.06	(1)	0
Gastream México, S.A. de C.V.	Repsol S.A.	Mexico	Other activities (11) (12)	FC	100.00	100.00	0	27
General Química, S.A.U. (14)	Dynasol Gestión, S.L.	Spain	Manufacture and sale of petrochemical products	EM (NC)	100.00	50.00	44	6
Gestâo e Admin. de Postos de Abastecimento, Unipessoal, Lda. GESPOST	Repsol Portuguesa, S.A.	Portugal	Marketing of oil products	FC	100.00	100.00	6	2
Gestión de Puntos de Venta GESPEVESA, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Gas station management	EM (NC)	50.00	48.34	55	39
Grupo Repsol YPF del Perú, S.A.C.	Repsol Perú B.V.	Peru	Shared services company	FC	100.00	100.00	2	0
Iberian Lube Base Oil Company, S.A.	Repsol Petróleo, S.A.	Spain	Development and production of lubricant base oils	(4)	30.00	29.99	218	180
Ibil, Gestor de Carga de Vehículo Eléctrico, S.A.	Repsol Nuevas Energías, S.A.	Spain	Operation of electric vehicle charging points	EM (NC)	50.00	50.00	3	13
Industrias Negromex, S.A. de C.V. (14)	Dynasol Gestión Mexico, S.A.P.I. de C.V.	Mexico	Production of synthetic oilcloths	EM	99.99	49.99	0	0
Insa Altamira, S.A. de C.V. (14)	Dynasol Gestión Mexico, S.A.P.I. de C.V.	Mexico	Supply of permanent staff	EM (NC)	99.99	49.99	2	0
Insa Gpro (Nanjing), Synthetic Rubber Co., Ltd. (14)	Dynasol China, S.A. de C.V.	China	Production, search and development, sale of synthetic rubber.	EM (NC)	50.00	24.99	5	1
Insa, Llc. (14)	Dynasol Gestión, S.L.	United States	Marketing of rubber NBR products	EM (NC)	100.00	50.00	8	10
Klikin Deals Spain, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Customer and oil product marketing management.	EM	70.00	67.67	5	1
Liaoning North Dynasol Synthetic Rubber Co., Ltd. (14)	Dynasol Gestión, S.L.	China	Production, search and development, sale of synthetic rubber.	EM (NC)	50.00	25.00	38	96
Nanogap Sub n-m Powder S.A. (5)	Repsol Energy Ventures, S.A.	Spain	Development of nanoparticles and nanofibers for use in materials, energy and biomedical applications.	EM	8.78	8.78	0	0
North Dynasol Shanghai Business Consulting Co Ltd.	Dynasol Gestión, S.L.	China	Marketing of rubber products	EM (NC)	50.00	25.00	0	0
OGCI Climate Investments, Llp.	Repsol Energy Ventures, S.A.	United Kingdom	Technology Development	EM	9.09	9.09	68	81
Petróleos del Norte, S.A.	Repsol S.A.	Spain	Construction and operation of an oil refinery.	FC	85.98	85.98	1,257	121
Petronor Innovación, S.L.	Petróleos del Norte, S.A.	Spain	Research activities	FC	100.00	85.98	0	0
Polidux, S.A.	Repsol Química, S.A.	Spain	Manufacture and sale of petrochemical products	FC	100.00	100.00	17	17
Principle Power (Europe), Ltd. (14)	Prinicple Power, Inc.	United Kingdom	Electricity production	EM (NC)	100.00	22.98	17	0
Principle Power Portugal Unipessoal, Lda. (14)	Prinicple Power, Inc.	Portugal	Electricity production	EM (NC)	100.00	22.98	17	0
Principle Power, Inc.	Repsol Energy Ventures, S.A.	United States	Holding company	EM	22.98	22.98	15	36

Name	Parent company	Country	Corporate purpose	Method of consolidation [1]	December 2018 % Dism. Control [2]	Dism. Total Group	Millions of Euros Equity [3]	Share Capital(3)
Puma Energy Perú, S.A.C. (5)	Repsol Comercial, S.A.C.	Peru	Sale of solid, liquid and gaseous fuels and related products	FC	100.00	82.38	10	11
Recreus Industries S.L. (5)	Repsol Energy Ventures, S.A.	Spain	Distribution of oil derivative products	EM	16.67	16.67	0	0
Refinería La Pampilla, S.A.A.	Repsol Perú B.V.	Peru	Hydrocarbon refining and marketing.	FC	82.39	82.39	384	465
Repsol Butano, S.A.	Repsol S.A.	Spain	Marketing of LPG	FC	100.00	100.00	1,315	59
Repsol Canada, Ltd. General Partner	Repsol Exploración, S.A.	Canada	Regasification of LNG	FC	100.00	100.00	5	5
Repsol Chemie Deutschland, GmbH	Repsol Química, S.A.	Germany	Marketing of chemical products	FC	100.00	100.00	2	0
Repsol Chile, S.A.	Repsol S.A.	Chile	Portfolio company (11)	FC	100.00	100.00	2	2
Repsol Comercial de Productos Petrolíferos, S.A.	Repsol Petróleo, S.A.	Spain	Marketing of oil products	FC	99.79	96.68	1,128	335
Repsol Comercial, S.A.C.	Refinería La Pampilla S.A.A.	Peru	Fuel marketing	FC	100.00	82.38	83	73
Repsol Directo, Lda.	Repsol Portuguesa, S.A.	Portugal	Distribution and marketing of oil products	FC	100.00	100.00	2	2
Repsol Directo, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Distribution and marketing of oil products	FC	100.00	96.68	3	0
Repsol Downstream México, S.A. de C.V	Repsol Downstream Internacional, S.A. (25)	Mexico	Production and distribution of lubricants	FC	100.00	99.97	21	43
Repsol Eléctrica de Distribución, S.L.	Repsol Petróleo, S.A.	Spain	Distribution and supply of electricity	FC	100.00	99.97	9	0
Repsol Energy Canada, Ltd.	Repsol Exploración, S.A.	Canada	Marketing of LNG	FC	100.00	100.00	(1,436)	79
Repsol Energy Ventures, S.A.	Repsol Nuevas Energías, S.A.	Spain	Development of new energy source projects	FC	100.00	100.00	35	2
Repsol Exploration Advanced Services, AG	Repsol Exploración, S.A.	Switzerland	Human resource service provider	FC	100.00	100.00	1	0
Repsol Gas Portugal, S.A.	Repsol Butano, S.A.	Portugal	Marketing of LPG	FC	100.00	100.00	64	3
Repsol Italia, SpA	Repsol S.A.	Italy	Marketing of oil products	FC	100.00	100.00	24	2
Repsol Lubricantes y Especialidades, S.A.	Repsol Petróleo, S.A.	Spain	Production and marketing of oil derivatives	FC	100.00	99.97	70	5
Repsol Lubrificantes e Especialidades Brasil Participaçoes, Ltda.	Repsol Lubricantes y Especialidades, S.A.	Brazil	Production and marketing of lubricants	FC	100.00	100.00	1	3
Repsol Marketing, S.A.C.	Repsol Perú B.V.	Peru	Fuel and special product marketing	FC	100.00	100.00	11	3
Repsol Marketing France, S.A.S.U. (5)	Repsol Downstream Internacional, S.A.	France	Marketing of oil products.	FC	100.00	100.00	0	0
Repsol Maroc, S.A.	Repsol Butano, S.A.	Morocco	Marketing of LPG (11)	EM	99.96	99.96	0	1
Repsol Nuevas Energías, S.A.	Repsol S.A.	Spain	Production, distribution and sale of biofuels	FC	100.00	100.00	783	1
Repsol Perú, B.V.	Repsol S.A.	The Netherlands	Portfolio company	FC	100.00	100.00	212	167
Repsol Petróleo, S.A.	Repsol S.A.	Spain	Import of products and operation of refineries	FC	99.97	99.97	4,703	218
Repsol Polímeros, S.A.	Repsol Química, S.A.	Portugal	Manufacture and sale of petrochemical products	FC	100.00	100.00	263	62
Repsol Portuguesa, S.A.	Repsol S.A.	Portugal	Distribution and marketing of oil products	FC	100.00	100.00	219	59
Repsol Química, S.A.	Repsol S.A.	Spain	Manufacture and sale of petrochemical products	FC	100.00	100.00	1,614	60
Repsol St. John LNG, S.L.	Repsol LNG Holding, S.A.	Spain	Sector studies	FC	100.00	100.00	0	0
Repsol Trading Perú, S.A.C.	Repsol Trading, S.A.	Peru	Trading and transport	FC	100.00	100.00	1	3
Repsol Trading Singapore Pte., Ltd.	Repsol Trading, S.A.	Singapore	Trading and transport	FC	100.00	100.00	(37)	0
Repsol Trading USA Corporation	Repsol USA Holdings Corporation	United States	Trading and transport	FC	100.00	100.00	(107)	0
Repsol Trading, S.A.	Repsol S.A.	Spain	Supply, Marketing, Trading and Transport	FC	100.00	100.00	591	0
Rocsole OY	Repsol Energy Ventures, S.A.	Finland	Technology Development	EM	12.50	12.50	2	5
Saint John Gas Marketing Companuy	Repsol St. John LNG, S.L.	United States	Liquefaction plant investment project in Canada	FC	100.00	100.00	0	2
Saint John LNG Development Company, Ltd.	Repsol St. John LNG, S.L.	Canada	Liquefaction plant investment project in Canada	FC	100.00	100.00	0	3
Servicios de Seguridad Mancomunados, S.A.	Repsol Petróleo, S.A.	Spain	Safety	FC	100.00	99.98	1	0
Servicios Logisticos Combustibles de Aviacion, S.L.	Repsol Lubricantes y Especialidades, S.A.	Spain	Transport of aviation oil products	EM (NC)	50.00	49.29	26	4
Sociedade Abastecedora de Aeronaves, Lda.	Repsol Portuguesa, S.A.	Portugal	Marketing of oil products	EM	25.00	25.00	0	0
Societat Catalana de Petrolis, S.A. (PETROCAT)	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Distribution and marketing of oil products	FC	94.94	91.89	(4)	6
Solgas Distribuidora de Gas, S.L.	Repsol Butano, S.A.	Spain	Marketing of LPG	FC	100.00	100.00	1	1
Solred, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Management of payment methods at gas stations	FC	100.00	96.68	48	25
Sorbwater Technology, A.S.	Repsol Energy Ventures, S.A.	Norway	Water and water treatment technology management in e&p.	EM	11.29	11.29	1	9
Terminales Canarios, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Supply and distribution of oil products	EM (NC)	50.00	48.34	26	20
The Repsol Company of Portugal, Ltd.	Repsol S.A.	Portugal	Leasing of logistics assets in Portugal	FC	100.00	100.00	2	1
Valdesolar Hive, S.L. (5)	Repsol Nuevas Energías, S.A.	Spain	Development of solar power projects	FC	100.00	100.00	0	0
Viesgo Generación S.L.U. (5)	Repsol Nuevas Energías, S.A.	Spain	Electricity generation	FC	100.00	100.00	621	523
Viesgo Comercializadora de Referencia S.L.U. (5)	Viesgo Generación S.L.U.	Spain	Marketing of electricity	FC	100.00	100.00	(36)	1
Viesgo Energía, S.L.U. (5)	Viesgo Generación S.L.U.	Spain	Marketing of electricity	FC	100.00	100.00	99	1
WIB Advance Mobility, S.L. (5)	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	City car sharing rentals	EM (NC)	50.00	48.34	1	0
Windplus, S.A.	Repsol Nuevas Energías, S.A.	Portugal	Technology development for wind generation	EM	20.60	19.70	2	1

Name	Parent company	Country	Corporate purpose	Method of consolidation (1)	December 2018 % Dism. Control (2)	Dism. Total Group	Millions of Euros Equity (3)	Share Capital(3)
CORPORATION								
Albatros, S.à.r.L.	Repsol S.A.	Luxembourg	Portfolio company	FC	100.00	100.00	228	0
AR Oil & Gaz, B.V.	Repsol Exploración, S.A.	The Netherlands	Portfolio company	EM (NC)	49.00	49.00	493	0
Edwards Gas Services LLC	Repsol Oil & Gas USA LLC.	United States	Portfolio company	EM	37.00	37.00	145	52
Fortuna International (Barbados) Inc. (13)	Talisman International (Luxembourg), S.a.r.l.	Barbados	Portfolio company	FC	100.00	100.00	40	67
Fortuna International Petroleum Corporation	Repsol Exploración, S.A. (22)	Barbados	Portfolio company	FC	100.00	100.00	497	395
Gaviota RE, S.A. (7)	Albatros, S.a.r.l.	Luxembourg	Insurance and reinsurance.	FC	100.00	100.00	298	14
Greenstone Assurance, Ltd.	Gaviota RE, S.A.	Bermuda	Insurance and reinsurance ("run-off" company)	FC	100.00	100.00	3	3
Oleoducto de Crudos Pesados, Ltd.	Repsol OCP de Ecuador, S.A.	Cayman Islands	Portfolio company	EM	29.66	29.66	225	88
Oleum Insurance Company Ltd.	Repsol Oil & Gas Canada Inc.	Barbados	Insurance and reinsurance ("run-off" company)	FC	100.00	100.00	365	3
Repsol Bolivia, S.A.	Repsol S.A.	Bolivia	Service provisions	FC	100.00	100.00	481	233
Repsol Downstream Internacional, S.A. (18)	Repsol S.A.	Spain	Portfolio company	FC	100.00	100.00	148	0
Repsol Gestión de Divisa, S.L.	Repsol S.A.	Spain	Financial	FC	100.00	100.00	3,759	0
Repsol International Finance, B.V.	Repsol S.A.	The Netherlands	Financing and holding of shares	FC	100.00	100.00	894	311
Repsol Oil & Gas RTS Sdn.Bhd.	Repsol Exploración, S.A. (23)	Malaysia	Shared services company	FC	100.00	100.00	1	18
Repsol Oil & Gas SEA Pte. Ltd.	Repsol Exploración, S.A. (23)	Singapore	Shared services company	FC	100.00	100.00	7	5
Repsol Services Company	Repsol USA Holdings Corporation	United States	Service provisions	FC	100.00	100.00	43	39
Repsol Sinopec Brasil, B.V. (28)	Repsol Sinopec Brasil, S.A.	Países Bajos	Sociedad de cartera	P.E.(N.C.)	100.00	60.01	0	0
Repsol Tesorería y Gestión Financiera, S.A.	Repsol S.A.	Spain	Financial	FC	100.00	100.00	587	0
Rift Oil Ltd.	Talisman International Holdings, B.V.	United Kingdom	Portfolio company	FC	100.00	100.00	140	146
Talisman International (Luxembourg), S.a.r.l.	Repsol Oil & Gas Canada Inc.	Luxembourg	Portfolio company	FC	100.00	100.00	1,510	67
Talisman International Holdings B.V.	Repsol Canada Inversiones, S.A. (23)	The Netherlands	Portfolio company	FC	100.00	100.00	365	853
Talisman Perpetual (Norway) Ltd.	TE Holding S.a.r.l.	United Kingdom	Portfolio company (11)	FC	100.00	100.00	0	1
TE Holding S.ar.l.	Repsol Oil & Gas Canada, Inc.	Luxembourg	Portfolio and finance company	FC	100.00	100.00	3,128	4,050
TEGSI (UK) Ltd	TE Holding S.a.r.l.	United Kingdom	Portfolio company	FC	100.00	0.00	0	0
TV 05-2/10 Holding, B.V.	Talisman International Holdings, B.V.	The Netherlands	Portfolio company	FC	100.00	100.00	0	0

(1) Method of consolidation:
F.C.: Full consolidation
E.M: Equity method. Joint ventures are identified as "JV".
(2) Percentage corresponding to direct and indirect stake of the parent company immediately above the subsidiary.
(3) Corresponds to Equity and Share Capital data used in the Group's consolidation process. Companies whose functional currency is not the euro have been converted at the closing exchange rate. Amounts have been rounded (less than half a million down to zero).
(4) Interests in joint operations (see Appendix II) which are structured through a Company, this vehicle does not limit its rights to the assets or obligations for the liabilities relating to the arrangement.
(5) Companies incorporated into the Repsol Group in 2018 (see Appendix Ib).
(6) This company has a registered office in Liberia, which is currently being derecognized.
(7) This company holds a minority interest in the company Oil Insurance, Ltd (5.77%), domiciled in Bermudas.
(8) This company, legally constituted in Bahamas, is registered for tax purposes in the United Kingdom.
(9) These companies, legally constituted in the British Virgin Islands, are registered for tax purposes in the United Kingdom.
(10) This company is the parent company for Repsol Groundbirch Partnership, registered in the United States.
(11) Inactive company.
(12) Company in the process of liquidation.
(13) These companies, legally constituted in the Barbados, are registered for tax purposes in the Netherlands.
(14) Share Capital and Equity data correspond to 2017.
(15) The value of the investment in this company on consolidated financial statements is zero (refer to Note 13).
(16) This company was previously called Repsol Exploración Sierra Leona, S.L.
(17) This company was previously called Servicios Administrativos Cuenca de Burgos, S.A. de C.V.
(18) This company was previously called Carbon Black Española, S.A.
(19) This company was previously called Talisman West Bengara, B.V.
(20) This company's parent was previously Guará, B.V.
(21) This company's parent was previously Talisman International Holdings, B.V.
(22) This company's parent was previously Repsol Oil & Gas Canada, Inc.
(23) This company's parent was previously TE Holding S.a.r.l.
(24) This company's parent was previously Talisman International Holdings, B.V.
(25) This company's parent was previously Repsol Lubricantes y Especialidades, S.A.
(26) This company's parent was previously Repsol Exploración, S.A.
(27) Equity relates to the value of the consolidated subgroup.
(28) Equity value included in parent.

APPENDIX IB: MAIN CHANGES IN THE CONSOLIDATION SCOPE

For the year ended December 31, 2018

a) Business combinations, other acquisitions and acquisitions of interest in subsidiaries, joint ventures and/or associates:

Name	Country	Parent Company	Item	Date	31.12.2018 Method of consolidation (1)	% voting rights acquired	% total voting rights in entity following acquisition (2)
WIB Advance Mobility, S.L.	Spain	Repsol Comercial de Productos Petrolíferos, S.A	Constitution	March-18	EM (NC)	50.00%	50.00%
Repsol Jambi Merang, S.L.	Spain	Repsol Exploración, S.A.	Constitution	April-18	FC	100.00%	100.00%
Repsol Exploración Jamaica, S.A.	Spain	Repsol Exploración, S.A.	Constitution	July-18	FC	100.00%	100.00%
Valdesolar Hive, S.L.	Spain	Repsol Nuevas Energías, S.A.	Acquisition	July-18	FC	100.00%	100.00%
Repsol Bulgaria Khan Kubrat, S.A.	Spain	Repsol Exploración, S.A.	Constitution	September-18	FC	100.00%	100.00%
Bardahl de México, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A.	Acquisition	November-18	EM (NC)	40.00%	40.00%
Endomexicana Renta y Servicios, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A.	Acquisition	November-18	EM (NC)	40.00%	40.00%
Viesgo Generación S.L.U.	Spain	Repsol Nuevas Energías, S.A.	Acquisition	November-18	FC	100.00%	100.00%
Viesgo Comercializadora de Referencia S.L.U.	Spain	Viesgo Generación S.L.U.	Acquisition	November-18	FC	100.00%	100.00%
Viesgo Energía, S.L.U.	Spain	Viesgo Generación S.L.U.	Acquisition	November-18	FC	100.00%	100.00%
CI Repsol Aviación Colombia, S.A.S.	Colombia	Repsol Downstream Internacional, S.A.	Constitution	November-18	FC	100.00%	100.00%
Repsol Marketing France, S.A.S.U.	France	Repsol Downstream Internacional, S.A.	Constitution	November-18	FC	100.00%	100.00%
Puma Energy Perú, S.A.C.	Peru	Repsol Comercial, S.A.C.	Acquisition	November-18	FC	100.00%	100.00%
Ezzing Renewable Energies S.L.	Spain	Repsol Energy Ventures, S.A.	Acquisition	December-18	EM	22.22%	22.22%
Nanogap Sub n-m Powder S.A.	Spain	Repsol Energy Ventures, S.A.	Acquisition	December-18	EM	8.78%	8.78%
Recreus Industries S.L.	Spain	Repsol Energy Ventures, S.A.	Acquisition	December-18	EM	16.67%	16.67%
ASB Geo	Russia	Repsol Exploración, S.A.	Acquisition	December-18	EM (NC)	50.01%	50.01%

(1) Method of consolidation:
FC: Full consolidation.
EM: Equity method. Joint ventures are identified as "JV"
(2) Corresponds to the percentage of equity in the acquired company.

b) Reduction in interest in subsidiaries, joint ventures, and/or associates and other similar transactions:

Nombre	Country	Parent Company	Item	Date	31.12.2018 Method of consolidation (1)	% voting rights disposed or derecognized	% total voting rights in entity following disposal
Repsol Oil & Gas Canada Inc.	Canada	Repsol Energy Resources Canada Inc.	Amalgamation (2)	january-18	FC	100.00%	0.00%
Rocsole OY	Finland	Repsol Energy Ventures, S.A.	Decrease in stake	february-18	EM	0.66%	12.50%
Asfalnor, S.A.	Spain	Petróleos del Norte, S.A.	Liquidation	march-18	FC	100.00%	0.00%
OGCI Climate Investments, Llp.	United Kingdom	Repsol Energy Ventures, S.A.	Decrease in stake	April-18	EM	1.79%	12.50%
Repsol Venezuela Gas, S.A.	Venezuela	Repsol Venezuela, S.A.	Absorption	may-18	FC	100.00%	0.00%
Gas Natural SDG, S.A.	Spain	Repsol, S.A.	Sale	may-18	EM	20.07%	0.00%
AESA - Construcciones y Servicios, S.A. - Bolivia	Bolivia	Repsol Bolivia, S.A.	Absorption	may-18	FC	100.00%	0.00%
Repsol GLP de Bolivia, S.A.	Bolivia	Repsol Bolivia, S.A.	Absorption	may-18	FC	100.00%	0.00%
Talisman Sierra Leone, B.V.	The Netherlands	Talisman International Holdings, B.V.	Liquidation	may-18	FC	100.00%	0.00%
Talisman Vietnam 05-2/10, B.V.	The Netherlands	TV 05-2/10 Holding, B.V.	Liquidation	may-18	FC	100.00%	0.00%
CSJC Eurotek - Yugra	Russia	Repsol Exploración Karabashsky, B.V.	Decrease in stake	june-18	EM (NC)	1.28%	72.33%
Repsol Netherlands Finance, B.V.	The Netherlands	Repsol International Finance, B.V.	Liquidation	june-18	FC	100.00%	0.00%
Talisman Finance (UK) Limited	United Kingdom	TEGSI (UK) Ltd.	Liquidation	september-18	FC	100.00%	0.00%
TE Finance S.a.r.l	Luxembourg	TE Holding S.a.r.l.	Absorption	November-18	FC	100.00%	0.00%
Repsol Canada Inversiones, S.A.	Spain	Repsol Exploración, S.A.	Absorption	November-18	FC	100.00%	0.00%
Talisman Energy Tangguh, B.V.	The Netherlands	Talisman International Holdings, B.V.	Absorption	November-18	FC	100.00%	0.00%
OGCI Climate Investments, Llp.	United Kingdom	Repsol Energy Ventures, S.A.	Decrease in stake	November-18	EM	3.41%	9.09%
Principle Power, Inc.	United States	Repsol Energy Ventures, S.A.	Decrease in stake	December-18	EM	1.24%	22.98%
Repsol Exploración Venezuela, B.V.	The Netherlands	Repsol Exploración, S.A.	Liquidation	December-18	FC	100.00%	0.00%
CSJC Eurotek - Yugra	Russia	Repsol Exploración Karabashsky, B.V.	Decrease in stake	December-18	EM (NC)	0.82%	71.51%
Sociedade Açoreana de Armazenagem, S.A. (3)	Portugal	Repsol Gas Portugal, S.A.	Sale	December-18	EM	25.07%	0.00%
Spelta Produtos Petrolíferos Sociedade Unipessoal, Ltda.	Portugal	Repsol Gas Portugal, S.A.	Sale	December-18	FC	100.00%	0.00%
Servicios y Operaciones de Perú S.A.C	Peru	Repsol Perú B.V.	Liquidation	December-18	FC	100.00%	0.00%

(1) Method of consolidation:
FC: Full consolidation.
EM: Equity method. Joint ventures are identified as "JV".
(2) With effect from January 1, 2018, Repsol Oil & Gas Canada Inc. (ROGCI) and Repsol Energy Resources Canada Inc. have been involved in a corporate reorganization process known under Canadian law as "*vertical amalgamation*"; as a result, these companies have been merged into a single company which has assumed the corporate name of Repsol Oil & Gas Canada Inc.
(3) Companies sold to the Rubis Group. The result of the sale was 21 million euros.

For the year ended December 31, 2017

a) Business combinations, other acquisitions and acquisitions of interest in subsidiaries, joint ventures and/or associates:

					31.12.2017		
Registered name	Country	Parent Company	Item	Date	Method of consolidation (1)	% voting rights acquired	% total voting rights in entity following acquisition (2)
Repsol Exploración Aitoloakarnania, S.A.	Spain	Repsol Exploración, S.A.	Constitution	February-17	FC	100.00%	100.00%
Repsol Exploración Ioannina, S.A.	Spain	Repsol Exploración, S.A.	Constitution	February-17	FC	100.00%	100.00%
Air Miles España, S.A.	Spain	Repsol Comercial de Productos Petrolíferos, S.A.	Part. increase	February-17	EM	1.67%	26.67%
OGCI Climate Investments, Llp.	United Kingdom	Repsol Energy Ventures, S.A.	Constitution	April-17	EM	14.29%	14.29%
Sorbwater Technology, A.S.	Norway	Repsol Energy Ventures, S.A.	Acquisition	May-17	EM	11.29%	11.29%
Pan Pacific Petroleum (Vietnam) Pty, Ltd.	Australia	Repsol Exploración, S.A.	Acquisition	June-17	FC	100.00%	100.00%
JSC Eurotek	Russia	AR Oil & Gaz, B.V.	Constitution	August-17	EM (JV)	100.00%	100.00%
JSC Yuzhno-Khadyrykhinskoye	Russia	AR Oil & Gaz, B.V.	Constitution	August-17	EM (JV)	100.00%	100.00%
Repsol Downstream México S.A. de C.V.	Mexico	Repsol Lubricantes y Especialidades, .S.A	Constitution	September-17	FC	100.00%	100.00%
TNO (Tafnefteotdacha)	Russia	AR Oil & Gaz, B.V.	Part. increase	October-17	EM (JV)	0.03%	99.57%
Klikin Deals Spain, S.L.	Spain	Repsol Comercial de Productos Petrolíferos, S.A.	Acquisition	December-17	EM	70.00%	70.00%
Lapa Oil & Gas, B.V.	The Netherlands	Guará, B.V.	Constitution	December-17	EM	100.00%	100.00%

(1) Method of consolidation:
FC: Full consolidation.
EM: Equity method. Joint ventures are identified as *"JV"*
(2) Corresponds to the percentage of equity in the acquired company.

b) Reduction in interest in subsidiaries, joint ventures, and/or associates and other similar transactions:

					31.12.2017			
Registered name	Country	Parent Company	Item	Date	Method of consolidation (1)	% voting rights disposed or derecognized	% total voting rights in entity following disposal	Profit / (Loss) generated (in millions of euros) (2)
Talisman North Jabung, Ltd.	Canada	Talisman (Asia), Ltd.	Absorption	January-17	FC	100.00%	0.00%	-
Talisman (Ogan Komering) Ltd.	Canada	Repsol Oil & Gas Canada, Inc.	Disposal	March-17	FC	100.00%	0.00%	3
Repsol Central Alberta Partnership	Canada	Repsol Oil & Gas Canada, Inc.	Liquidation	May-17	FC	100.00%	0.00%	-
Repsol Wild River Partnership	Canada	Repsol Oil & Gas Canada, Inc.	Liquidation	May-17	FC	100.00%	0.00%	-
8787387 Canada, Ltd.	Canada	Repsol Oil & Gas Canada, Inc.	Liquidation	May-17	FC	100.00%	0.00%	-
8441316 Canada, Ltd.	Canada	Repsol Oil & Gas Canada, Inc.	Liquidation	May-17	FC	100.00%	0.00%	-
Talisman East Tanjung, B.V.	The Netherlands	Talisman International Holdings, B.V.	Liquidation	June-17	FC	100.00%	0.00%	-
Talisman Sumatra, B.V.	The Netherlands	Talisman International Holdings, B.V.	Liquidation	June-17	FC	100.00%	0.00%	-
Talisman Vietnam 45, B.V.	The Netherlands	Talisman International Holdings, B.V.	Liquidation	June-17	FC	100.00%	0.00%	-
Talisman Vietnam 46-07, B.V.	The Netherlands	Talisman International Holdings, B.V.	Liquidation	June-17	FC	100.00%	0.00%	-
Talisman International Holdings, B.V. S.C.S.	Luxembourg	Talisman Global Holdings, B.V.	Liquidation	June-17	FC	100.00%	0.00%	-
Talisman Middle East, B.V.	The Netherlands	Talisman Global Holdings, B.V.	Absorption	June-17	FC	100.00%	0.00%	-
Talisman K. Holdings, B.V.	The Netherlands	Talisman Global Holdings, B.V.	Absorption	June-17	FC	100.00%	0.00%	-
TV 135- 136 Holding, B.V.	The Netherlands	Talisman International Holdings, B.V.	Absorption	June-17	FC	100.00%	0.00%	-
Talisman Global Holdings, B.V.	The Netherlands	Talisman International Holdings, B.V.	Absorption	June-17	FC	100.00%	0.00%	-
Talisman Energy (Sahara), B.V.	The Netherlands	Talisman International Holdings, B.V.	Absorption	June-17	FC	100.00%	0.00%	-
Repsol Moray Firth, Ltd.	United Kingdom	Repsol UK Round 3, Ltd.	Liquidation	July-17	FC	100.00%	0.00%	-
Repsol UK Round 3, Ltd.	United Kingdom	Repsol Nuevas Energías, S.A.	Liquidation	July-17	FC	100.00%	0.00%	-
FEX GP, Llc. (3)	United States	Repsol Oil & Gas USA, Llc.	Absorption	July-17	FC	100.00%	0.00%	-
Rock Solid Images US Group, Inc.	United States	Repsol USA Holdings Corporation	Disposal	August-17	EM	30.00%	0.00%	(1)
OJSC Eurotek	Russia	AR Oil & Gaz, B.V.	Liquidation	August-17	EM (JV)	100.00%	0.00%	-
Repsol Oil & Gas Malaysia Holdings, Ltd.	Barbados	Talisman Oil Limited	Absorption	August-17	FC	100.00%	0.00%	-
Talisman Oil Limited	Barbados	Fortuna International Petroleum Corp(	Absorption	August-17	FC	100.00%	0.00%	-
Repsol Lusitania, S.L.	Spain	Repsol Química, S.A.	Absorption	October-17	FC	100.00%	0.00%	-
CSJC Eurotek- Yugra (4)	Russia	Repsol Exploración Karabashsky, S.A.	Decrease in stake	November-17	EM (JV)	26.39%	73.61%	8
JSC Eurotek	Russia	AR Oil & Gaz, B.V.	Disposal	December-17	EM (JV)	100.00%	0.00%	Note (5)
JSC Yuzhno-Khadyrykhinskoye	Russia	AR Oil & Gaz, B.V.	Disposal	December-17	EM (JV)	100.00%	0.00%	Note (5)
Principle Power, Inc.	United States	Repsol Energy Ventures, S.A.	Decrease in stake	December-17	EM	0.57%	24.22%	-
Talisman Colombia, B.V.	The Netherlands	TE Colombia Holding, S.a.r.l.	Liquidation	December-17	FC	100.00%	0.00%	-
Talisman Holding International, S.a.r.l.	Luxembourg	Repsol Oil & Gas Canada, Inc.	Liquidation	December-17	FC	100.00%	0.00%	-
Talisman Ocensa Pipelines Holdings, AG	Switzerland	Talisman Colombia, B.V.	Liquidation	December-17	FC	100.00%	0.00%	-
Fortuna Finance Corporation, S.a.r.l.	Luxembourg	TE Holding, S.a.r.l.	Absorption	December-17	FC	100.00%	0.00%	-
TE Capital, S.a.r.l.	Luxembourg	TE Holding, S.a.r.l.	Absorption	December-17	FC	100.00%	0.00%	-
Amulet Maritime, Ltd.	United Kingdom	TEGSI (UK), Ltd.	Liquidation	December-17	FC	100.00%	0.00%	-
Talisman Perú, B.V.	The Netherlands	Repsol Exploración Perú, S.A.	Absorption	December-17	FC	100.00%	0.00%	-

(1) Method of consolidation:
FC: Full consolidation.
EM: Equity method. Joint ventures are identified as "JV".
(2) Corresponds to net income before tax.
(3) This company is the parent of FEX LP, Llc, which is registered in the United States. It is included in the absorption of the parent.
(4) This company was consolidated under the full consolidation method prior to the sale of 25% of its interest.
(5) These companies have been sold generating a loss of -€78 million.

APPENDIX IC: JOINT OPERATIONS OF THE REPSOL GROUP AT DECEMBER 31, 2018

The Repsol Group's main Joint Operations (Note 2) are shown below (including those in which the Group is involved through a joint arrangement)[1]:

Name	Stakeholding % (1)	Operator	Activity
UPSTREAM			
Algeria			
EMK	9.10%	Groupement Berkin	Development/Production
Greater MLN	35.00%	Pertamina	Development/Production
Menzel Ledjmet Sud-Est /405a	35.00%	Pertamina	Development/Production
Ourhoud Field / 404,405,406a	2.00%	Organisation Ourhoud	Development/Production
Reggane Nord	29.25%	Groupement Reggane	Development/Production
S.E. Illizi	35.50%	Repsol	Exploration
Tin Fouyé Tabenkor (TFT)	22.62%	Groupement TFT	Development/Production
Australia			
Kitan	25.00%	ENI	Development/Production
Bolivia (2)			
Arroyo Negro	48.33%	YPF B Andina, S.A	Development/Production
Boqueron	48.33%	YPF B Andina, S.A	Development/Production
Camiri	48.33%	YPF B Andina, S.A	Development/Production
Carahuaicho 8B	24.17%	YPF B Andina, S.A	Exploration
Carahuaicho 8C	24.17%	YPF B Andina, S.A	Exploration
Carahuaicho 8D	48.33%	YPF B Andina, S.A	Exploration
Cascabel	48.33%	YPF B Andina, S.A	Development/Production
Cobra	48.33%	YPF B Andina, S.A	Development/Production
Enconada	48.33%	YPF B Andina, S.A	Development/Production
Guairuy	48.33%	YPF B Andina, S.A	Development/Production
Huacaya (Caipipendi)	37.50%	Repsol	Development/Production
Iñiguazu	37.50%	Repsol	Exploration
La Peña - Tundy	48.33%	YPF B Andina, S.A	Development/Production
Los Penocos	48.33%	YPF B Andina, S.A	Development/Production
Los Sauces	48.33%	YPF B Andina, S.A	Development/Production
Margarita (Caipipendi)	37.50%	Repsol	Development/Production
Monteagudo	39.67%	Repsol	Development/Production
Palacios	48.33%	YPF B Andina, S.A	Development/Production
Patujú	48.33%	YPF B Andina, S.A	Development/Production
Puerto Palos	48.33%	YPF B Andina, S.A	Development/Production
Rio Grande	48.33%	YPF B Andina, S.A	Development/Production
Sabalo	24.17%	Petrobras	Development/Production
San Alberto	24.17%	Petrobras	Development/Production
Sara Boomerang III	48.33%	YPF B Andina, S.A	Exploration
Sirari	48.33%	YPF B Andina, S.A	Development/Production
Víbora	48.33%	YPF B Andina, S.A	Development/Production
Yapacani	48.33%	YPF B Andina, S.A	Development/Production
Brazil			
Albacora Leste	6.00%	Petrobras	Development/Production
BM-C-33 (C-M-539)	21.00%	Statoil	Exploration
BM-ES-21 (ES-M-414)	6.66%	Petrobras	Exploration
BM-S-50 (S-M-623)	12.00%	Petrobras	Exploration
BM-S-9 - Sapinhoá	15.00%	Petrobras	Development/Production
BM-S-9 PSC Sapinhoá	15.00%	Petrobras	Development/Production
BM-S-9A - Lapa	15.00%	Total	Development/Production
C-M-821	40.00%	Repsol	Exploration
C-M-823	40.00%	Repsol	Exploration
S-M-764	40.00%	Chevron	Exploration
Bulgaria			
1_21 Han Asparuh	30.00%	Total	Exploration
1-14 Khan Kubrat	20.00%	Shell	Exploration

(1) Joint operations in the *Upstream* segment include the blocks of joint operations where the Group holds acreage for exploration, development and production of oil and gas.

Name	Stakeholding % [1]	Operator	Activity
Canada [4]			
Chauvin Alberta	63.00%	Repsol	Development/Production
Chauvin Saskatchewan	92.00%	Repsol	Development/Production
Edson	78.00%	Repsol	Development/Production
Groundbirch/Saturn- No Montney Rights	35.00%	Others	Development/Production
Misc. Alberta (*) Exploration Unconventional	53.00%	Repsol	Exploration
Misc. British Columbia	88.00%	Repsol	Exploration
Misc. Saskatchewan	71.00%	Repsol	Exploration
Northwest Territories	4.00%	Others	Exploration
Nunavut	2.00%	Others	Exploration
Quebec	80.00%	Repsol	Exploration
Wild River Region	57.00%	Repsol	Development/Production
Yukon	2.00%	Others	Exploration
Colombia [5]			
Akacias	45.00%	Ecopetrol	Development/Production
Caguan 5	50.00%	Meta Petroleun Corp.	Exploration
Caguan 6	40.00%	Meta Petroleun Corp.	Exploration
Catleya	50.00%	Repsol	Exploration
Chipirón	8.75%	Ecopetrol	Development/Production
COL-4	33.40%	Repsol	Exploration
Cosecha	17.50%	Oxycol	Development/Production
CPE-8	50.00%	Repsol	Exploration
CPO-9	45.00%	Ecopetrol	Exploration/Production
Cravo Norte	5.63%	Oxycol	Development/Production
Gua Off 1	30.00%	Repsol	Exploration
Mundo Nuevo	30.00%	Equion	Exploration
Niscota	30.00%	Equion	Exploration
Piedemonte	22.05%	Equion	Development/Production
RC-12	50.00%	Repsol	Exploration
Rio Chitamena	15.19%	Equion	Development/Production
Rondon	6.25%	Oxycol	Development/Production
Tayrona	20.00%	Petrobras	Exploration
Ecuador			
Block 16 (Wati extension)	35.00%	Repsol	Services Contract
Tivacuno	35.00%	Repsol	Services Contract
Spain			
Albatros	82.00%	Repsol	Development/Production
Angula	53.85%	Repsol	Development/Production
Bezana	44.45%	Petroleum Oil & Gas Spain	Exploration [4]
Bigüenzo	44.45%	Petroleum Oil & Gas Spain	Exploration [4]
Boquerón	61.95%	Repsol	Development/Production
Casablanca -Montanazo Unificado	68.67%	Repsol	Development/Production
Casablanca No Unit	67.35%	Repsol	Development/Production
Montanazo D	72.44%	Repsol	Development/Production
Rodaballo	65.42%	Repsol	Development/Production
United States [4]			
Alaska			
North Slope (28 blocks)	49.00%	Oil Search	Exploration
North Slope (212 blocks)	25.00%	Oil Search	Exploration
North Slope (34 blocks)	25.00%	Armstrong	Exploration
Eagle Ford			
Eagle Ford	28.97%	Equinor	Development/Production
Eagle Ford Exploration	36.98%	Equinor	Exploration
Gulf of Mexico			
Alaminos Canyon 379	8.50%	Shell	Exploration
Alaminos Canyon 380 and 381	8.50%	Equinor	Exploration
Alaminos Canyon 423 and 424	10.00%	Equinor	Exploration
Garden Banks (4 blocks)	50.00%	Repsol	Exploration
Green Canyon 487, 730 and 775	33.34%	Repsol	Exploration
Green Canyon 819	34.00%	Repsol	Exploration
Green Canyon - Shenzi (6 blocks)	28.00%	BHP	Development/Production
Green Canyon 581	40.00%	Murphy	Exploration
Keathley Canyon 642, 643, 686 and 687	60.00%	Repsol	Exploration
Keathley Canyon Buckskin (6 blocks)	22.50%	Llog	Development/Production
Walker Ridge (5 blocks)	60.00%	Repsol	Exploration

Marcellus (5)			
Marcellus New York (Expl. Unconventional)	99.81%	Repsol	Exploration
Marcellus New York	86.66%	Repsol	Development/Production
Marcellus Pennsylvania	83.76%	Repsol	Development/Production
Greece			
Aitoloakarnania	60.00%	Repsol	Exploration
Ioannina	60.00%	Repsol	Exploration
Guyana			
Kanuku	37.50%	Repsol	Exploration
Indonesia			
Corridor PSC	36.00%	Conoco	Development/Production
East Jabung	51.00%	Repsol	Exploration
Jambi Merang	25.00%	JOB Jambi Merang	Development/Production
Sakakemang	45.00%	Repsol	Exploration
South East Jambi	67.00%	Repsol	Exploration
Ireland			
FEL 3/04 (Dunquin)	33.56%	ENI	Exploration
Libya			
NC-115 (Development)	20.00%	Akakus	Development/Production
NC-115 (Exploration)	40.00%	Repsol	Exploration
NC-186 (Development)	16.00%	Akakus	Development/Production
NC-186 (Exploration)	32.00%	Repsol	Exploration
Malaysia			
Angsi South Channel (Unit.)	60.00%	Repsol	Development/Production
PM03 CAA	41.44%	Repsol	Development/Production
PM305	60.00%	Repsol	Development/Production
PM314	60.00%	Repsol	Development/Production
SB1 Kinabalu	60.00%	Repsol	Development/Production
SB309	70.00%	Repsol	Exploration
Morocco			
Gharb Offshore Sud	75.00%	Repsol	Exploration
Tanfit	37.50%	Repsol	Exploration
Mexico			
Block 10	40.00%	Repsol	Exploration
Block 11	60.00%	Repsol	Exploration
Block 14	50.00%	Repsol	Exploration
Block 29	30.00%	Repsol	Exploration
Norway			
PL 019B (Gyda)	61.00%	Repsol	Development/Production
PL 019B (Tambar East Unit)	9.76%	BP	Development/Production
PL 025 (Gudrun)	15.00%	Equinor	Development/Production
PL 038 (Varg)	65.00%	Repsol	Development/Production
PL 038C (Rev)	70.00%	Repsol	Development/Production
PL 052 (Veslefrikk)	27.00%	Equinor	Development/Production
PL 053B (Brage)	33.84%	Wintershall	Development/Production
PL 055 (Brage)	33.84%	Wintershall	Development/Production
PL 055 B (Brage)	33.84%	Wintershall	Development/Production
PL 055 D (Brage)	33.84%	Wintershall	Development/Production
PL 120	7.70%	Equinor	Development/Production
PL 120 CS	11.00%	Equinor	Development/Production
PL 185 (Brage)	33.84%	Wintershall	Development/Production
PL 187 (Gudrun)	15.00%	Equinor	Exploration
PL 316 (Yme)	60.00%	Repsol	Development/Production
PL 316B (Yme)	60.00%	Repsol	Development/Production
PL 528	6.00%	Centrica R. Norge	Exploration
PL 528 B	6.00%	Centrica R. Norge	Exploration
PL 840	20.00%	Equinor	Exploration
PL 847	20.00%	Wintershall	Exploration
PL 847B	20.00%	Wintershall	Exploration
PL 897	30.00%	Equinor	Exploration
PL 909	70.00%	Repsol	Exploration
PL 910	61.11%	Repsol	Exploration
PL 913	50.00%	OMV	Exploration

Name	Stakeholding % [1]	Operator	Activity
Papua New Guinea			
PDL 10	40.00%	Repsol	Development/Production
PPL 261	50.00%	Repsol	Exploration
PRL 8	22.29%	Oil Search	Exploration
PRL 21	35.10%	Horizon Oil	Exploration
PRL 28	37.50%	Eaglewood	Exploration
PRL 38	25.00%	Repsol	Exploration
PRL 40	60.00%	Repsol	Exploration
Peru			
Block 56	10.00%	Pluspetrol	Development/Production
Block 57	53.84%	Repsol	Development/Production
Block 88	10.00%	Pluspetrol	Development/Production
Region of Iraqi Kurdistan			
Kurdamir	40.00%	Repsol	Development/Production
Topkhana	80.00%	Repsol	Development/Production
United Kingdom [7]			
P534 (98/06a-Wareham)	2.55%	Perenco	Development/Production
P534 (98/06a-Wych Farm UOA)	2.53%	Perenco	Development/Production
PL089 (SZ/8a, SY/88b, SY/98a)	2.55%	Perenco	Development/Production
P201 (16/21a)	7.65%	Premier	Development/Production
P201 (16/21d)	7.65%	Premier	Development/Production
P344 (16/21b_F1*-Balmoral Field Area)	8.06%	Premier	Development/Production
P344 (16/21c_f1*)	7.81%	Premier	Development/Production
P344 (16/21c_f1*-Balmoral)	8.06%	Premier	Development/Production
P019 (22/17n)	30.08%	RESRUK	Development/Production
P020 (22/18n)	30.08%	RESRUK	Development/Production
P073 (30/18_E)	51.00%	RESRUK	Development/Production
P1031 (11/25a Beatrice)	51.00%	RESRUK	Development/Production
P1031 (12/21a Beatrice)	51.00%	RESRUK	Development/Production
P111 (30/3a Blane Field)	30.75%	RESRUK	Development/Production
P111 (30/3a Upper)	15.55%	RESRUK	Development/Production
P116 (30/16n)	51.00%	RESRUK	Development/Production
P185 (30/11b)_Developm.	51.00%	RESRUK	Development/Production
P219 (16/13a)	16.07%	RESRUK	Development/Production
P220 (15/17n-F2- Piper+ rest of Block)	51.00%	RESRUK	Development/Production
P237 (15/16a)	51.00%	RESRUK	Development/Production
P240 (16/22a- non Arundel Area)	18.86%	RESRUK	Development/Production
P241 (21/1c)	51.00%	RESRUK	Development/Production
P241/P244 (21/1c/21/2a- Cretaceus Area West)	51.00%	RESRUK	Development/Production
P244 (21/2a)	51.00%	RESRUK	Development/Production
P249 (14/19n - Residual -Claymore)_Develop.	51.00%	RESRUK	Development/Production
P249 (14/19n_F1- Claymore)	47.16%	RESRUK	Development/Production
P249 (14/19n_F2- Scapa/Claymore)	51.00%	RESRUK	Development/Production
P250 (14/19s- F1)	51.00%	RESRUK	Development/Production
P250 (14/19s- Rest of Block)_Develop	51.00%	RESRUK	Development/Production
P256 (30/16s)	51.00%	RESRUK	Development/Production
P263 (14/18a)	51.00%	RESRUK	Development/Production
P266 (30/17b)	51.00%	RESRUK	Development/Production
P291 (22/17s)	30.08%	RESRUK	Development/Production
P291 (22/22a)	30.08%	RESRUK	Development/Production
P291 (22/23a)	30.08%	RESRUK	Development/Production
P292 (22/18a)	30.08%	RESRUK	Development/Production
P295 (30/16a)	51.00%	RESRUK	Development/Production
P295 (30/16b)	51.00%	RESRUK	Development/Production
P295 (30/16c)	51.00%	RESRUK	Development/Production
P295 (30/16t)	51.00%	RESRUK	Development/Production
P297 (13/28a)_Devel.	35.28%	RESRUK	Development/Production
P307 (13/29a)_Devel.	35.28%	RESRUK	Development/Production
P324 (14/20b)	25.50%	RESRUK	Development/Production
P324 (14/20b-Claymore Extension)	51.00%	RESRUK	Development/Production
P324 (14/20b-f1+f2)	51.00%	RESRUK	Development/Production
P324 (15/16b)	51.00%	RESRUK	Development/Production
P324 (15/23a)_Developm.	51.00%	RESRUK	Development/Production
P344 (16/21b Rest of Block)	30.60%	RESRUK	Development/Production
P344 (16/21c*- Rest of block excluding Stirling)	30.60%	RESRUK	Development/Production
P593 (20/05c)	51.00%	RESRUK	Development/Production

Name	Stakeholding % [1]	Operator	Activity
P729 (13/29b - Blake Ext Non Skate_Devel.)	40.80%	RESRUK	Development/Production
P729 (13/29b - Ross Unitised Field UUOA interests)	35.28%	RESRUK	Development/Production
P810 (13/24b Blake Area)	34.53%	RESRUK	Development/Production
P810 (13/24b-Rest of Block)	35.28%	RESRUK	Development/Production
P973 (13/28c)	35.28%	RESRUK	Development/Production
P255 (30/14 Cawdor Sub Area)_Develop.	4.94%	Total	Development/Production
P255 (30/14 Flyndre Area)	3.83%	Total	Development/Production
P255 (30/19a Affleck)	16.98%	Total	Development/Production
P073 (30/18_W)	51.00%	RESRUK	Exploration
P079 (30/13a)	31.88%	RESRUK	Exploration
P101 (13/24a)	34.53%	RESRUK	Exploration
P185 (30/11b)	30.60%	RESRUK	Exploration
P185 (30/12b)	30.60%	RESRUK	Exploration
P250 (14/19a)	51.00%	RESRUK	Exploration
P297 (13/28a)	33.02%	RESRUK	Exploration
P307 (13/29a)	36.55%	RESRUK	Exploration
P324 (15/23a)	51.00%	RESRUK	Exploration
P593 (20/05e)	51.00%	RESRUK	Exploration
P983 (13/23b)	25.50%	RESRUK	Exploration
P534 (98/07a)	2.55%	Perenco	Exploration
P225 (16/27a - Contract Area 3)	13.50%	JX Nippon	Exploration
Russia [8]			
Alkanovskoe	49.00%	AROG	Development/Production
Avgustovskoe	49.00%	AROG	Development/Production
Bazhkovskoe	49.00%	AROG	Development/Production
Borschevskoe	49.00%	AROG	Development/Production
Karabashkiy - 78	71.51%	Eurotek Yugra	Exploration
Karabashkiy - 79	71.51%	Eurotek Yugra	Exploration
Karabashsky-1	71.51%	Eurotek Yugra	Exploration
Karabashsky-2	71.51%	Eurotek Yugra	Exploration
Karabashsky-3	71.51%	Eurotek Yugra	Exploration
Karabashsky-9	71.51%	Eurotek Yugra	Exploration
Kileyskiy	71.51%	Eurotek Yugra	Exploration
Kochevnenskoe	49.00%	AROG	Development/Production
Kovalevskoe	49.00%	AROG	Development/Production
Kulturnenskoe	49.00%	AROG	Development/Production
North Borschevskoe	49.00%	AROG	Development/Production
Novo-Kievskoe	49.00%	AROG	Development/Production
Penzenskoe	49.00%	AROG	Development/Production
Saratovskoe	49.00%	AROG	Development/Production
Solnechnoe	49.00%	AROG	Development/Production
South-Kultashikhskoe	49.00%	AROG	Development/Production
South-Solnechnoe	49.00%	AROG	Development/Production
Stepnoozerskoe	48.79%	AROG	Development/Production
West-Avgustovskoe	49.00%	AROG	Development/Production
West-Kochevnenskoe	49.00%	AROG	Development/Production
Yelginskoe	48.79%	AROG	Development/Production
Trinidad and Tobago			
5B Manakin	30.00%	BP Amoco	Development/Production
East Block	30.00%	BP Amoco	Development/Production
S.E.C.C. (IBIS)	10.50%	EOG	Development/Production
West Block	30.00%	BP Amoco	Development/Production
Venezuela [9]			
Barua Motatan	40.00%	Petroquiriquire	Development/Production
Carabobo	11.00%	Petrocarabobo	Development/Production
Cardón IV West	50.00%	Cardon IV	Development/Production
Mene Grande	40.00%	Petroquiriquire	Development/Production
Quiriquire	40.00%	Petroquiriquire	Development/Production
Quiriquire Gas	60.00%	Quiriquire Gas	Development/Production
Yucal Placer Norte	15.00%	Total	Development/Production
Yucal Placer Sur	15.00%	Total	Development/Production

Name	Stakeholding % [1]	Operator	Activity
Vietnam			
Block 07/03	51.75%	Repsol	Exploration/Development
Block 133 & 134	49.00%	Repsol	Exploration
Block 135 & 136	40.00%	Repsol	Exploration
Block 146 & 147	80.00%	Repsol	Exploration
Block 46-CN	70.00%	Repsol	Development/Production
Block 15-2/01	60.00%	Thang Long JOC	Development/Production
Block 16-1 (TGT- Unitization)	0.67%	Hoang Long JOC	Development/Production
DOWNSTREAM			
Canada			
Canaport LNG Ltd Partnership	75.00%	Repsol	Regasification LNG
Spain			
Asfaltos Españoles, S.A.	50.00%	Repsol	Asphalts
Iberian Lube Base Oils Company, S.A.	30.00%	SK Lubricants	Lubricants and specialized products

[1] Corresponds to the Group company's stake in the Joint Arrangement.
[2] Mining domain rights in Canada and the United States are articulated over a large number of *Joint Operating Agreements* (JOA). They have been grouped by geographical areas and Repsol's stake.
[3] The Pika and Horseshoe units in delineation phase on December 31, 2018.

APPENDIX II: SEGMENT REPORTING AND RECONCILIATION WITH IFRS-EU FINANCIAL STATEMENTS[1]

Income Statement figures

The reconciliation between adjusted net income (loss) and IFRS-EU net income (loss) at December 31, 2018 and 2017 is as follows:

€ Million

	Adjusted net income		ADJUSTMENTS: Reclass. Joint Arrangements		Net income on special items		Inventory effect		Total Adjustments		Net income under EU-IFRS	
Results	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Operating income	4,396	3,214	(1,204)	(610)	(633)	42	(106)	143	(1,943)	(425)	2,453	2,789
Financial result	(462)	(356)	130	126	159	(82)	-	-	289	44	(173)	(312)
Net income from equity affiliates	15	49	965	580	72	1	1	-	1,038	581	1,053	630
Net income before tax	3,949	2,907	(109)	96	(402)	(39)	(105)	143	(616)	200	3,333	3,107
Income tax	(1,569)	(738)	(109)	(96)	46	(350)	28	(36)	183	(482)	(1,386)	(1,220)
Net income from continuing operations	2,380	2,169	-	-	(356)	(389)	(77)	107	(433)	(282)	1,947	1,887
Net income attributed to minority interests	(28)	(38)	-	-	1	1	9	(3)	10	(2)	(18)	(40)
Net income from continuing operations	2,352	2,131	-	-	(355)	(388)	(68)	104	(423)	(284)	1,929	1,847
Net income from interrupted operations	-	-	-	-	412	274	-	-	412	274	412	274
TOTAL INCOME ATTRIBUTABLE TO THE PARENT COMPANY	2,352	2,131	-	-	57	(114)	(68)	104	(11)	(10)	2,341	2,121

Millions of euros

	Revenue[2]		Net income from operations		Provisions for amortization of fixed assets [3]		Impairment income/(expenses)		Net income from entities valued using the equity method		Income tax	
Segments	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Upstream	7,699	6,333	2,514	1,009	(2,068)	(2,379)	(936)	(743)	22	32	(1,113)	(735)
Downstream	47,029	39,240	2,143	2,467	(790)	(739)	(33)	(3)	(6)	20	(425)	(677)
Corporate	(2,021)	(1,635)	(261)	(262)	(78)	(62)	(1)	(80)	(1)	(3)	43	290
Adjusted Figures [1]	52,707	43,938	4,396	3,214	(2,936)	(3,180)	(970)	(826)	15	49	(1,495)	(1,122)
Adjustments:												
Upstream	(2,517)	(2,240)	(1,651)	(482)	784	777	218	643	1,004	576	96	(100)
Downstream	(317)	(29)	(204)	122	12	3	(15)	4	35	6	13	2
Corporate	-	-	(88)	(65)	-	1	-	80	(1)	(1)	-	-
EU-IFRS FIGURES	49,873	41,669	2,453	2,789	(2,140)	(2,399)	(767)	(99)	1,053	630	(1,386)	(1,220)

(1) Figures drawn up according to the Group´s reporting model described in Note 5.

(2) The revenue figure corresponds to the sum of the *"Sales"* and *"Services rendered and other income"*. The itemization by provenance (customers or inter-segment transactions) is as follows:

Millions of euros

	Customers		Inter-segment		Total	
Segments	2018	2017	2018	2017	2018	2017
Upstream	5,699	4,719	2,000	1,614	7,699	6,333
Downstream	47,007	39,218	22	22	47,029	39,240
Corporate	1	1	-	-	1	1
(-) Adjustments and eliminations of operating income between segments		-	(2,022)	(1,636)	(2,022)	(1,636)
TOTAL	**52,707**	**43,938**	**-**	**-**	**52,707**	**43,938**

(3) Including depreciation of failed dry wells. For more information, see Note 19.

(1) Some of these metrics presented in this Appendix are Alternative Performance Metrics (APMs) in accordance with *European Securities Markets Authority* (ESMA) guidelines. For further information, see Appendix I of the Consolidated Management Report.

Balance sheet figures

	Millions of euros							
	Non-current assets		Net operating investments (2)		Capital employed (3)		Investments accounted for using the equity method	
Segments	2018	2017	2018	2017	2018	2017	2018	2017
Upstream	25,514	25,636	1,973	2,089	21,515	21,612	387	303
Downstream	11,118	10,312	1,831	805	11,338	9,749	21	242
Corporate	733	3,968	70	42	1,500	1,745	18	3,229
ADJUSTED FIGURES (1)	37,365	39,916	3,874	2,936	34,353	33,106	426	3,774
Adjustments								
Upstream	(6,421)	(7,126)	(365)	(307)	2,659	(1,153)	6,425	5,450
Downstream	(205)	(22)	(41)	(2)	64	(19)	341	42
Corporate	-	(4)	-	-	-	-	2	2
EU-IFRS FIGURES	30,738	32,764	3,468	2,627	37,076	31,934	7,194	9,268

(1) Figures drawn up according to the Group´s reporting model described in Note 5.

(2) Excludes *"Non-current financial investments"*, *"Deferred tax assets"* and *"Other non-current assets"*.

(3) Includes capital employed corresponding to joint ventures, non-current non-financial assets, operating working capital and other non-financial liability headings. In 2017 does not include capital employed from discontinued operations which at 31 December amounted to € 3,224 Million.

APPENDIX III: REGULATORY FRAMEWORK

The activities of Repsol, S.A. and its subsidiaries are subject to extensive regulation, whose key aspects are described below.

Spain

Basic legislation

Spain currently has a legislation which implements a liberalization of the Oil Industry, an example of which is the Hydrocarbons Sector Law 34/1998 of October 7 ("LSH"), which has been amended by several legislative acts.

Law 2/2011, of March 4, on Sustainable Economy, modified the Hydrocarbons Sector Law, establishing binding guidelines for energy planning under criteria designed to contribute to the creation of a safe, cost-effective, economically-sustainable, and environmentally-friendly energy system.

Law 3/2013 of June 4, regarding the creation of the National Markets and Competition Commission (CNMC – "Comisión Nacional de los Mercados y la Competencia," in Spanish), created as an overseeing body, charged with the duties and tasks relating to supervision and control of regulated markets, which were previously supervised by various National Commissions, including the Energy and Competition.

Controlling concentration regime in the energy sector

The aforementioned Law 3/2013 modified the regime controlling corporate transactions in the energy sector, allocating duties to the Ministry for the Ecological Transition (MITECO). It devises a new *ex post* regime with respect to certain transactions by either requiring the buyer to notify MITECO of the execution of certain transactions or by means of the imposition of conditions on the business operations of the companies acquired, in so far as energy supply in Spain is deemed threatened.

A novelty of this new control regime is that in addition to extending to the electricity and gas sectors, it now extends to the liquid hydrocarbons sector including companies that pursue refining activities, pipeline transportation, and storage of petroleum products (related activities), or companies that hold title to said assets. Such assets acquire the condition of strategic assets.

Principal operators and dominant operators

Under Royal Decree-Law 5/2005, of March 11, the CNE - currently the CNMC - is obliged to publish not only the list of principal operators but also the dominant operators in each energy market or sector. Dominant operators are defined as those commanding a share of more than 10% of the benchmark market. On the other hand, a principal operator is considered an operator ranked among the top five players by market share. Designation as a dominant operator or principal operator implies certain regulatory restrictions.

Oil and gas exploration and production

Hydrocarbon deposits and underground storage existing on Spanish territory and in the territorial marine subsoil and ocean bottoms which are under Spanish sovereignty are considered public properties.

Exploration permits are granted by national or regional governments, depending on whether autonomous areas are affected, and exclusive investigation rights for the area in question are granted for periods lasting six years. In turn, the concession for exploiting hydrocarbon reserves grants the owners exclusive exploration rights for 30 years, renewable for two successive ten-year periods, as well as the right to continue exploration activities in these areas and obtain authorization to freely sell the hydrocarbon products they obtain.

Law 8/2015, regulating specific tax and non-tax measures related to oil and gas exploration, research and operation activities, fosters non-conventional extraction, or '*fracking*' and creates an incentive regime for regional and local governments that pursue such activities, as well as creating a scheme for land owners to share in the profits derived from the related extraction activity.

Furthermore, on November 18, 2017, Royal Decree-Law 16/2017 came into force, establishing safety provisions applicable to the hydrocarbon research and operation at sea ("RDL"), which partially transposes Directive 2013/30/EU, of June 12, 2013 on safety of offshore oil and gas operations ("*Offshore* Directive") into Spanish law.

The purpose of the RDL is to establish minimum requirements that offshore hydrocarbon research and operations must meet to prevent major accidents and to mitigate their consequences and to define action principles to ensure that offshore operations (including operations undertaken outside the EU) are performed employing a systematic risk management approach to ensure that the residual risk of serious accidents is considered acceptable.

Oil products

Law 11/2013 of July 26, regarding measures to support entrepreneurs and to stimulate growth and job creation, introduces a number of measures in the wholesale and retail markets for petroleum products intended to increase effective competition in the sector.

In the retail side of the business, it introduces changes to exclusive supply agreements for the distribution of vehicle fuel. Specifically, their term is now limited to 1 year (from 5 years previously); they can be automatically rolled over for additional one-year periods, for a maximum of three years, if and only if the distributor so desires. The new legislation also bans clauses that set, recommend or influence, directly or indirectly, the price at which fuel is sold to the public.

Additionally, it establishes limits on growth in the number of fuel supply facilities of wholesalers with provincial markets shares of over 30%. Law 8/2015 stipulates that from 2016 on, this market share shall no longer be measured in terms of points of sale but rather based on prior-year sales figures, allowing the government to revise this percentage threshold in three years' time or even remove the restriction altogether, market trends and the sector's business structure so permitting.

Finally, Law 8/2015 allows owners of oil and gas product retailers that do not belong to the distribution network of a wholesale operator (private label networks operating without exclusive supply agreements) to inform consumers of the origin of the fuel they sell by advertising the wholesaler from which they purchase the said fuel. Furthermore, oil and gas product retailers may supply products to other retailers, subject only to the requirement of first registering themselves in the special duty registry.

Minimum stock for security

Royal Decree 1766/2007, regulates the obligation to maintain a minimum inventory in the oil and natural gas sectors, the obligation to diversify the natural gas provisions and the activities of the Corporation of Strategic Reserves of Petroleum Products (CORES for its acronym in Spanish).

The obligation to maintain minimum stocks of oil and gas products for security reasons, excluding LPG, currently requires storing at all times an amount equivalent to 92 days of sales based on the sales during the previous 12 months. Repsol was obliged to maintain a stock corresponding to 50 days of sales, while the remaining inventory required to make up the difference with the above mentioned safety stock requirement are held by CORES on behalf of the various operators (strategic reserves).

Royal Decree-Law 15/2013, of December 13, introduces an amendment to the Hydrocarbon Sector Act, indicating that via regulation, administrative procedures and obligations needed to ensure, on an ongoing basis, a minimum safety buffer equivalent, at least, to the higher of the volume corresponding to 90 days of average net daily imports and 61 days of average internal daily consumption corresponding to the year of reference and measured in oil equivalent.

LPG

The prices of oil derivatives are deregulated, with the exception of LPG, which is, under certain circumstances, subject to retail price ceilings. The prices of bulk LPG and bottled LPG in cylinders with capacity of under 8 kilograms or over 20 kilograms are deregulated. Law 18/2014 of October 15 has had the effect of also deregulating the prices of containers with capacity of under 8 kilograms or over 20 kilograms with a tare weight of no more than 9 kilograms other than containers of LPG mixes intended for use for fuel purposes; this measure favors certain players over others as a function of the tare weight of the containers they market and, in practice, does not constitute full sector deregulation.

Ministerial Order IET/389/2015 of March 5, 2015 updates the system for automatically determining the maximum price at which bottled LPG can be retailed and for determining the price of piped LPG, adjusting the formulae used to calculate raw material costs in order to, as per the wording of the Order, adapt them "to the supply reality in the Spanish market in recent years''. Adaptation of these formulae does not apply to sales costs, thereby resulting in a reduction in maximum bottled LPG retail prices and piped LPG retail prices.

Additionally, Law 18/2014 consolidate users' right to home delivery of containers weighing between 8 and 20 kilograms by obliging the LPG wholesalers with the biggest market shares in the corresponding mainland and island territories to perform this home-delivery service. Failure to fulfill this obligation constitutes a very serious offense. The list of LPG wholesalers so obliged is determined by a resolution issued by the General Directorate of Energy Policy and Mining every 3 years. Every 5 years, the Spanish government is entitled to revise the terms of this obligation and has the power to remove it. The current list of mandatory home suppliers is as follows: Repsol Butano on the mainland and in the Balearics, DISA in the Canary Islands and Atlas in Ceuta and Melilla.

Natural Gas

Law 12/2007 of July 2, which amended the Hydrocarbon Sector Act incorporated measures for achieving a completely liberalized market. This legislation establishes the framework for eliminating the tariff system and creates the role of the supplier of last resort with ultimate liability for supplying customers lacking sufficient bargaining power. Moreover, these suppliers are subject to a price cap ("last resort tariff"), set by MITECO. Business operations in the natural gas sector can be classified into: i) regulated activities: transport (including storage, regasification and transport per se) and distribution of natural gas; and ii) deregulated activities: production, acquisition and marketing of natural gas. The Natural Gas System Operator, Enagás S.A. is responsible for the coordinating and ensuring that the system works properly. Law 8/2015 creates an official natural gas hub with a view to facilitating entry into the market of new suppliers and increasing competition, creating a new single hub operator, tasked with management of the gas "*hub*", the MIBGAS,(which stands for Iberian Gas Market in Spanish), which ensures that all participating entities comply with the established rules.

Electricity sector regulation in Spain

Deregulation of the Spanish electricity sector began in 1997 with the passage of Law 54/1997, of November 27, the Electricity Sector Act, which was amended by Law 17/2007, of July 4, and later by Law 24/2013, of December 26, which took effect on December 28, 2013.

Generation and supply activities continue to be deregulated, developed by competitive businesses, while transmission, distribution and the system's technical and financial management remain as regulated activities, characterized by an access that requires administrative authorization, activities normatively set their remuneration and are subject to specific obligations. Power supply, for its part, is classified as a service of general economic interest.

Royal Decree 413/2014 regulates the legal and economic regime governing the production of electric power using renewable sources, combined heat and power systems and waste and affects the Repsol Group's facilities, formerly part of the now-defunct 'special' regime and now assimilated into the 'ordinary' regime. Ministerial Order IET/1045/2014 of June 16, meanwhile, enacts the standard facility remuneration parameters applicable to certain electricity-producing facilities that use renewable energy sources, CHP systems or waste. Royal Decree 900/2015, of October 9, regulating the administrative, technical and financial conditions was passed, which governs the permitted forms of electricity distribution and generation with self-consumption. This Royal Decree 900/2015 has been substantially modified by Royal Decree-Law 15/2018, pending the new regulatory development of self-consumption in Spain.

Order ETU/130/2017, of February 17, updates the remuneration parameters of standard installations applicable to certain installations for the production of electrical energy from renewable energy sources, cogeneration and waste, for the purposes of its application to the regulatory semi-period commencing on January 1, 2017.

a. Remuneration system for the generation activity

Law 24/2013, of December 26, abandons the differentiated concepts of ordinary and special regime, without prejudice to the singular considerations that need to be established. The remuneration system for renewable energies, cogeneration and waste is based on the market share of these facilities, complementing market income with a specific regulated remuneration that allows these technologies to compete on an equal footing with the rest of the technologies on the market. This additional specific remuneration must be sufficient to achieve the minimum level necessary to cover costs which, unlike conventional technologies, cannot be recouped on the market and will enable them to obtain adequate profitability with reference to the standard facility in each applicable case. The rate of return for the activity of production from renewable energy sources, cogeneration and waste, for the first regulatory period, is established in Royal Decree-Law 9/2013 of July 12, which adopts urgent measures to ensure the financial stability of the electricity system. For the purpose of calculating the specific remuneration, the following shall be taken into account for a standard facility: the income from the sale of the generated energy valued at the production market price, the average operating costs necessary to carry out the activity and the value of the initial investment of the standard facility.

Royal Decree 359/2017, of March 31, established a call for the granting of the specific remuneration system to new facilities producing electricity from renewable energy sources in the peninsular electricity system, and Order ETU/315/2017, of April 6, regulated the procedure for assigning the specific remuneration system. In turn, and for 2016 calls only for biomass and wind through Royal Decree 947/2015 and Order IET/2212/2015, and the 2nd auction in 2017 through Royal Decree 650/2017 and Order ETU/615/2017), similar to the 1st of that year and open to all technologies.

b. Remuneration system for the marketing activity

The marketing activity is based on the principles of freedom of contract and choice of supplier by the customer. Marketing, as a liberalized activity, has a freely agreed remuneration between the parties.

Of note is Law 24/2013, subsequently developed by Royal Decree 216/2014, of March 28, which establishes the methodology for calculating voluntary prices for small electricity consumers and their legal contracting regime. These prices are defined, in line with the previously denominated last resort tariffs, as the maximum prices that reference resellers may charge to consumers who use them (consumers of less than a certain contracted power, 10 kW, who wish to use this modality as opposed to a bilateral negotiation with a free reseller). These prices will be unique in the whole Spanish territory. The term last resort tariffs is reserved for two groups of consumers: the so-called vulnerable (which also define the new categories of severely vulnerable and at risk of social exclusion) and those consumers who, without being entitled to voluntary prices for the small consumer, temporarily do not have a supply contract with a marketer. These voluntary prices for the small consumer shall include in an additive manner, by analogy with the tariff of last resort, the concepts of electricity production cost, the corresponding access tolls and charges and the corresponding marketing costs. In addition, this Royal Decree provides as an alternative that the consumer can contract a fixed price of energy for one year with the reference marketer. It also sets out the criteria for designating reference marketers and their obligations in relation to supply to certain consumer groups.

Royal Decree 469/2016, of November 18, amending Royal Decree 216/2014, establishes the methodology for calculating the marketing costs of the reference marketers to be included in the calculation of the voluntary price for small consumers. Order ETU/1948/2016, of December 22, fixed the values of the marketing costs of the reference marketers to be included in the calculation of the voluntary price for the small consumer of electricity in the period 2014-2018, which result from applying the new approved methodology.

In turn, Royal Decree-Law 7/2016 and Royal Decree 897/2017, are the current frame of reference for everything relating to the rate subsidy and the vulnerable consumer.

c. Tariff deficit

In terms of revenue, the electricity system was not self-sufficient until 2014, generating an annual deficit, which the electricity companies have had to finance. 2014 was the first year with a surplus in the electricity system after more than a decade in which significant deficits accumulated, thanks to the comprehensive reform undertaken to put an end to the emergence of tariff deficits and allow the economic-financial balance of the system, fundamentally based on the following regulations:

- Law 15/2012, of 27 December, on fiscal measures for energy sustainability introduced by the IVPEE, commonly known as the green cent, the hydroelectric canon, etc...

- Royal Decree-Law 9/2013, of July 12, which adopted urgent measures to guarantee the financial stability of the electricity system, established a new remuneration system for facilities generating renewable energy, cogeneration and waste and a series of additional remuneration principles for the transport and distribution of electricity, establishing the concept of reasonable profitability in a project profitability, which will turn, before taxes, on the average yield in the secondary market of the ten-year Government Bonds applying the appropriate differential. In addition, it contemplates other measures aimed at rebalancing the balance between income and costs of the electricity system, such as imposing the financing of the rate subsidy on vertically integrated companies or the reduction of the investment incentive in exchange for doubling the time remaining to receive this incentive. Subsequently, the obligation was transferred to the marketing companies (or their corporate parent companies), an obligation that is currently in force.

- Law 24/2013, of December 26, incorporates the guiding principle of economic and financial sustainability, whereby any regulatory measure in relation to the sector that entails an increase in cost for the electricity system or a reduction in income must incorporate an equivalent reduction in other cost items or an equivalent increase in income to ensure the system's.

- Royal Decree 1054/2014, of December 12, regulates the procedure for assigning the rights to collect the electricity system deficit for 2013 and develops the methodology for calculating the interest rate that will accrue to the rights to collect said deficit and, where appropriate, the negative temporary misalignments in the financial years after 2013.

From 2014 onwards, any temporary mismatch between income and costs of the electricity system resulting from the closing settlements in a financial year and resulting in a deficit of income, as well as the transitory deviations between income and costs in the monthly settlements on account of the closing of each financial year that may arise, shall be financed by the subjects of the settlement system in proportion to the remuneration corresponding to them for the activity they carry out. In the event of a revenue shortfall in a financial year, the amount of the shortfall may not exceed 2 per cent of the system's estimated revenue for that financial year. In addition, the accumulated debt due to misalignments from previous years may not exceed 5% of the system's estimated revenues for that year. Tolls, if any, or corresponding charges shall be revised by a total at least equal to the amount by which those limits are exceeded.]

Contributions to the national energy efficiency fund

Directive 2012/27/EU of the European Parliament and of the Council of October 25, 2012 on energy efficiency makes it binding on member states to justify a quantity of energy savings by 2020, obliging each state to establish energy efficiency obligation schemes such that energy distributors and/or retailers are obliged to achieve a cumulative quantity of energy savings by year-end 2020 means of annual savings between 2014 and 2020
equivalent to 1.5% of their annual energy sales.
Royal Decree-Law 8/2014 and Law 18/2014 transpose this EU Directive into Spanish law by establishing a National Energy Efficiency Fund (NEEF) by virtue of which gas and electricity distributors, oil product wholesalers and liquid petroleum gas wholesalers (although the latter are not considered bound parties under the Directive) are allocated an annual energy saving target at the national level called savings obligations, which is quantified in financial terms.

The successive IET/ETU ministerial orders stipulating mandatory contributions to the National Energy Efficiency Fund, are being appealed by the various companies encompassed by the aforementioned National Fund contribution obligation, including the Group entities subject to this obligation.

Energy audits

Spanish Royal Decree 56/2016, of February 12, transposing Article 8 of Directive 2012/27/EU, of the European Parliament and of the Council, of 25 October 2012, on energy efficiency, in respect of energy audits, energy service and energy audit provider accreditation and the promotion of energy efficiency, took effect in February 2016.

It has the effect of obliging all enterprises that are not SMEs (“large enterprises”) within the European Union to carry out regular energy audits with a view to analyzing whether their energy management is as good as possible and having them establish the opportune energy savings and efficiency opportunities and proposals as warranted. The Group's energy management systems, which are based on the international ISO 50001 standard, are found in the Group's main industrial companies.

Climate change and alternative fuels

Following the Paris Agreement, countries' commitments under their respective *National Determined Contributions* (NDCs) will have a significant impact on the development of new climate policies. As a signatory of the “*Paris Pledge for Action*” document, Repsol supports the agreement, and works toward being part of the climate change solution.

In this connection, the Council of Ministers approved the National Action Framework on December 9, 2016 on alternative energy sources for transport. *Climate Change and Air Quality.* Furthermore, the future Climate Change and Energy Transition Law is being discussed, with a first draft of it having been submitted to a first round of comments within the framework of the National Climate Council. This Law represents a commitment on behalf of the Prime Minister to fulfil the objectives set out in the Paris Agreement and in the framework of the European Union, which has already been assumed by Spain.

Royal Decree 639/2016, of December 9, published on December 10 lays down a framework of measures to implement an infrastructure for alternative fuels, with the aim of minimizing the dependence of the transport industry on oil, mitigating the environmental impact of transport, and setting threshold requirements for the creation of an infrastructure for alternative fuel, including charging stations for electric vehicles and natural gas and hydrogen refuelling stations.

For further information on the regulatory risks arising from climate change see section [6.1] of the 2018 Consolidated Management Report.

Bolivia

The 2009 Bolivian Constitutions establishes that state-owned company Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) is authorized to enter into service agreements with companies for the latter to undertake activities in its name and on its behalf in exchange for remuneration or payment for their services.

The Bolivian oil and gas industry is regulated by Law 3,058 of May 19, 2005 (the “Hydrocarbons Law”).

On May 1, 2006, Supreme Decree 28,701 was published, which nationalized the country’s hydrocarbons. Furthermore, the shares required to enable YPFB to control at least 50% plus one vote in different companies, among them Empresa Petrolera Andina, S.A., (currently known as YPFB Andina) were nationalized.

On December 11, 2015, Law No. 767 was passed to promote investment in oil and gas exploration and production in Bolivia. Furthermore, Law No. 817 of July 19, 2016 was enacted supplementing Article 42 of Law No. 3058, previously amended by Law No. 767, allowing YPFB to enforce addendums to Operating Contracts to extend their term.

Operating Contracts

As a result of the Hydrocarbons Law and the Nationalization Decree, Repsol E&P Bolivia S.A. and its subsidiary YPFB Andina S.A. signed the Operating Contracts with YPFB establishing the conditions for the exploration and production of hydrocarbons in Bolivia, effective as of May 2, 2007. Additionally, on May 8, 2009 the Natural Gas and Liquid Hydrocarbon Delivery Agreements establishing the terms and conditions governing the delivery of hydrocarbons by the Holder were executed at which time the Payment Procedures stipulating the Holder Remuneration payment mechanism were also executed.

On November 14, 2017, an addendum to the Operating Contract was signed for Caipipendi area, approved by Law No. 1,013 of December 27, 2017, coming into force on March 20, 2018. This addendum seeks to establish the continuation of Oil Operations in Area from May 2, 2031 onwards, subject to compliance with a new investment plan to be enforced by the Holder.

Furthermore, on June 13, 2018 YPFB Andina S.A, YPFB Chaco S.A, Repsol E&P Bolivia S.A., Shell Bolivia Corporation Sucursal Bolivia and PAE E&P Bolivia Limited (Sucursal Bolivia) entered into an Oil Services Contract for the Exploration and Operation of Reserved Areas in favor of Yacimientos Petrolíferos Fiscales Bolivianos – YPFB, corresponding to the Iñiguazu region, approved by Law No. 1081 of August 10, 2018.

Canada

In the Canadian provinces of British Columbia, Alberta and Saskatchewan where the majority of the Company's exploration and production interests in Canada lie, the provincial governments own the majority of the subsurface mineral rights to crude oil and natural gas. These governments grant rights to explore for and produce oil and natural gas from *Crown lands* under the conditions set forth in provincial legislation and regulations. In addition to Crown lands, the Company participates in leases entered into from freehold mineral owners through direct negotiation. The royalties applicable to production in Crown lands are established by government regulation and, in general, calculated as a percentage of gross production based on the productivity of the wells, geographic location, date on which the oil fields were discovered, recovery method and type of quality of oil derivative produced. Occasionally, the provincial governments may roll out incentive programs for exploration and development. Such programs seek to reduce for royalty rate fees, grace periods for fees or tax credits. Fees payable for production on privately owned land are established by means of negotiation between the owner and the company

Companies operating in the Canadian oil and natural gas industry are subject to extensive regulation and control of operations (including land ownership, exploration, development, production, refining, transportation and marketing in addition to environmental matters) as a result of legislation and policy enacted at both the federal level (by the government of Canada) and by the various provincial governments. Generally speaking, oversight of such operations is undertaken by regulatory bodies that include the *British Columbia Oil and Gas Commission*, the Alberta Energy regulatory entity, the Saskatchewan Ministry of Economy and the Saskatchewan Ministry of the Environment, as well as federal regulatory bodies such as the *Canadian Environmental Assessment Agency* and the *National Energy Board of Canada*. Environment legislation restricts and prohibits the release or emission of various substances, such as sulfur dioxide, carbon dioxide and nitrous oxide. The regulations also impose conditions or prohibitions in operating in certain environmentally sensitive areas and establish requirements that regulate the satisfactory abandonment and reclamation of well and facility sites.

Non-compliance with the legislation, regulations, orders, directives or other applicable guidelines can result in fines or other sanctions.

In November 2016, the provincial government of Alberta issued regulations regarding carbon emissions that included a carbon levy across all industry sectors. The price per ton of carbon dioxide emitted will increase to the previously announced amount of $30 CDN in 2018 and compared to $20 CDN in 2017. The fee is paid at the time that hydrocarbons are eliminated or acquired in a gas or oil pipelines. The regulation contains exemptions for the producers and processors of raw material through to 2023, with certain exceptions. The Company has applied for and received exemption certificates in all possible cases.

In addition to the provincial regulations, the Canadian Federal Government has announced, as part of the Pan-Canadian Framework on Clean Growth and Climate Change, the possibility of provinces applying further increases to the price of carbon to $50 CDN per ton by 2022.

Ecuador

In accordance with the Constitution of 2008 and the Hydrocarbons Law of Ecuador, the nation's hydrocarbon fields and the associated substances are the inalienable, imprescriptible and unattachable property of the State.

The amended legislation of the Hydrocarbons Law and the Internal Tax Regime Law, of July 27, 2010, established that all agreements for the exploration and exploitation of hydrocarbons must be modified to reflect the amended reformed services agreement model.

This model involves the contractor being obliged to provide services using its own economic resources and at its own risk. In exchange, the contractor will receive a set price per net barrel of oil produced and delivered to the state. This price, which constitutes the contractor's gross revenue, is contractually stipulated based on estimated depreciation schedules, cost/expense schedules and a reasonable profit in light of the risk incurred.

Repsol Ecuador, S.A. (Ecuador Branch), entered into the services agreement for Block 16, which came into force on January 1, 2011. In addition, on January 22, 2011, a services agreement was signed covering the Tivacuno Block.

United States

Offshore exploration and production

The two government agencies responsible for offshore exploration and production are the *Bureau of Ocean Energy Management* (BOEM) and the *Bureau of Safety and Environmental Enforcement* (BSEE) under the U.S. Department of the Interior. The BOEM is in charge of responsibly ensuring the economic and environmental development of US offshore resources. Its functions include the leasing (agreements that grant oil and gas mining rights), the revision and management of oil and gas exploration, the approval of development plans and carrying out analyses pursuant to the National Environmental Policy Act and other environmental studies. The BSEE is responsible for safety and environmental supervision of offshore oil and gas operations. Its functions include the development and application of security and environmental regulations, the authorization of offshore exploration, development and production, the performance of inspections and the response to oil spills.

Onshore exploration and production

With regard to U.S. onshore exploration and production activities, the oil and gas industry is primarily regulated by the laws of the individual States, with the exception of certain environmental matters and operations on Federal land. At present, the Company has operations in Alaska, Kansas, Louisiana, Oklahoma, Pennsylvania and Texas. In the different states, exploration and production activities are controlled by the Alaska Department of Natural Resources, the Corporate Commission of Kansas, the Louisiana Department of Natural Resources, the Corporate Commission of Oklahoma and the Railroad Commission of Texas. Each of these states has its own environmental protection agency. In Pennsylvania, the local Department of Environmental Protection is responsible for both environmental protection activities and the regulation of exploration and production activities.

Federal authorities do have exclusive jurisdiction over certain environmental aspects that affect the gas and oil sector. The United States Environmental Protection Agency The Environmental Protection Agency (EPA) applies laws and regulations such as the *Clean Air Act,* the *Clean Water Act* and the *Resource Conservation and Recovery Act*. The environmental impact of the projects is regulated by the National Environmental Policy Act (NEPA), which is managed by different Federal agencies depending on the type of project.

Transport

The Federal Energy Regulatory Commission (FERC) governs the transport of natural gas as part of inter-State trade and the transport of oil via oil pipelines within the same field. The States regulate other types of transport.

Liquefied natural gas

The Natural Gas Act grants the Federal Energy Regulatory Commission (FERC) the exclusive power to regulate plants that import and export liquefied natural gas arriving in the United States and leaving the country with the authorization of the Office of Fossil Energy at the US Department of Energy (DOE).

Trading of gas, crude oil and refined products

The FERC regulates the sale of natural gas as part of inter-State trade. A number of US regulatory bodies are empowered to regulate the oil and refined products trading market. The Federal Trade Commission (FTC) has the power to regulate crude oil trading activities. The Environmental Protection Agency (EPA) regulates refined products marketed to private consumers such as gasoline and diesel. Trading of financial derivatives is regulated by the Commodities Futures Trading Commission (CFTC).

On December 18, 2015, the 2016 Consolidated Appropriation Act was passed (Public law no. 114-113). This piece of legislation repeals Article 103 of the Energy Policy and Conservation Act (EPCA), thereby eliminating the ban on exporting crude oil produced in the US. The legislation preserves the President's power to restrict oil exports in response to a national emergency, enforce trade sanctions and remedy oil supply scarcity or the sustained distortion of oil prices significantly above world market levels.

Indonesia

Under Indonesia's 1945 Constitution, all natural resources (including oil and gas) within Indonesian territory are owned and controlled by the State. The regulation of oil and natural gas in Indonesia is based on Law No. 22 of 2001 ("Law No. 22"), which sets out broad principles for the regulation of the industry. These principles are applied by means of a series of implementing regulations promulgated under Law No. 22, as well as ministerial regulations and decrees.

Law No. 22 restructured and liberalized the State's control over the oil and gas industry. SKK Migas is the current successor to Perusahaan Pertambangan Minyak dan Gas Bumi Negara ("PERTAMINA") as the supervisory party to the *Production Sharing Contracts* (PSCs).

The Ministry of Energy and Mineral Resources ("MEMR") is responsible for approving the first Plan of Development ("POD") under production sharing contracts and overseeing the State's ownership and management of oil and gas resources. With assistance from the Directorate General of Oil and Gas ("MIGAS"), the MEMR formulates government policy, determines the blocks to be opened for bidding, is responsible for approval of transfers by contractors of their participating interest (in consultation with SKK Migas) and issues the licenses required for the conduct of refining oil and gas marketing activities, such as the production of liquified natural gas using refining and marketing structures.

The Ministry of Finance is responsible for issuing instructions concerning the basis of the Government's share derived from the exploitation of liquified natural gas and subordinated by Directorate General of Tax and Directorate General of Customs and Excise, determining the taxes, duties and excise due on LNG development activities, deciding on issues related to government guarantees and formulating, determining and implementing policies on State Owned Assets.

Pursuant to Law No. 22, companies wishing to explore for and exploit oil and gas reserves must enter into a Cooperation Contract with SKK MIGAS. The form of Cooperation Contract typically entered into in respect of exploration and production activities in Indonesia is a PSC.

Under a PSC the Government of Indonesia retains ownership of the oil and gas (prior to delivery) and the contractor bears all the risk and costs of exploration, development and production in return for an agreed percentage share of oil and/or gas production and recovery of eligible operating costs from production.

On January 16, 2017, the Government of Indonesia introduced a new form of PSC (the *"Gross Split* PSC") under Minister of Energy & Mineral Resources Regulation No. 8 of 2017 regarding Gross Split Production Sharing Contract ("Regulation 8/2017"). On December 28, 2017, the Government of Indonesia enacted Government Regulation No. 53 of 2017 on the tax treatment of the Gross Split Production Sharing Contract (Government Regulation 53/2017), governing the tax conditions applicable to Gross Split PSCs.

On June 17, 2018, following the announcement that Repsol Exploración South East Jambi BV (formerly Talisman West Bengara BV) had been successful in the 2018 tender process for South East Jambi, the company signed the South East Jambi PSC, the first Repsol PSC under the Gross Split variant.

Peru

Regulation of the hydrocarbons market in Peru is included in its Constitution. The Constitution states that the government promotes the private initiatives, recognizing the economic pluralism, and having the state a subsidiary role in terms of business concerns. The Constitution establishes that private and public business activity must be treated equally under the law, and those national and foreign investments are subject to the same conditions. In addition, the Constitution stipulates that the country's natural resources are the property of the state and that the terms and conditions of access to and use of these resources by private parties must be regulated by means of organic laws.

Natural and legal persons, whether Peruvian or foreign, who pursue oil and gas activities must expressly subject themselves to the laws of the Republic of Peru, renouncing the right to any diplomatic recourse.

The most important authorities with competence over Peruvian oil and gas matters are: the Ministry of Energy and Mining (MINEM for its acronym in Spanish), which is tasked with drafting, passing, proposing and applying sector policy and issuing complementary rules to keep sector regulations updated; the latter Ministry's Oil & Gas Department (DGH), which oversees application of and compliance with sector regulations; the Energy & Mining Investment Oversight Body (OSINERGMIN), tasked with oversight of the natural and legal persons carrying out activities related to the electricity and hydrocarbon sub-sectors and the imposition of penalties for any breaches of the legal and technical obligations issued by the MINEM and PERUPETRO. The Environmental Assessment and Taxation Body (OEFA) is the technical institution specialized in ensuring compliance with the standards, obligations and incentives laid down in prevailing environmental regulations.

Exploration and Production

The Organic Law of Hydrocarbons (OLH), regulates this natural resource. To provide legal assurance to investors, it states that contracts under its framework shall be considered Contract-Law, and therefore can only be modified by written agreement between the two parties. To achieve these goals the OLH created PERUPETRO, a state-owned Limited Company organized in accordance with the General Corporate Law, to which the state, as owner of the hydrocarbons located in its territory, grants the right of ownership over the hydrocarbons, so that PERUPETRO can negotiate, execute and monitor exploration and/or exploitation contracts, with a licensee (Contractor) by means of License Agreements, Service Agreements and other forms of contracts authorized by MINEM.

Hydrocarbon refining and marketing

The OLH stipulates that any national or foreign individuals or legal entities may install, operate, and maintain petroleum refineries, plants for processing natural gas and condensed, natural asphalt, greases, lubricants, and petrochemicals, subject to the norms specifically established by The Mines and Energy Ministry.

In Peru, the marketing of hydrocarbon derivatives is regulated by supply and demand.

Venezuela

The Constitution of the Bolivarian Republic of Venezuela stipulates that the mines and oil and gas fields, irrespective of their nature, located on national territory, under the territorial sea, in the exclusive economic zone or on the continental platform, belong to the Republic, are public-domain goods and are, therefore, inalienable and imprescriptible.

By virtue of organic law and to protect national interests, the Venezuelan State has reserved the Venezuelan oil and gas activities for itself. For reasons of economic and political sovereignty and for national strategic purposes, the State holds all of the shares of Petróleos de Venezuela, S.A. (PDVSA), or the entity that may be created for the

management of the oil industry.

Venezuela's Hydrocarbons Organic Law (LOH) regulates all matters regarding the exploration, operation, refining, industrialization, transportation, storage, sale and conservation of hydrocarbons, including related refined products and the works required to perform these activities. Pursuant to the LOH, the performance of activities involving the exploration, extraction, collection, transport and storage of hydrocarbons is reserved to the State, which may undertake them directly or through wholly-owned State companies. The State may also conduct these activities through Mixed Owned Companies whose equity interest is over 50%.

The Mixed Companies agreements referred to in the LOH do not impose restrictions on this legal form of company in terms of transferring funds in the form of cash dividends, loan repayments or the redemption of shareholder advances in foreign currency (USD).

Activities relating to the exploration, operation, collection, storage, use, industrialization, sale and transportation of non-associated natural gas and associated gas are subject to the provisions set out in the Organic Gaseous Hydrocarbons Law and its regulations.

On January 14, 2016, Decree No. 2184 was published in the Extraordinary Official Journal of the Bolivarian Republic of Venezuela No. 6,214, declaring a State of Economic Emergency throughout the entire territory of the Republic for a period of 60 days, providing the State with the power to enact exceptional and extraordinary economic, social, environmental, political and legal measures, in addition to others. This Decree has been successively extended on 17 occasions, with the most recent, Presidential Decree No. 3,736, published on January 11, 2019, in Extraordinary Official Gazette No. 6,424.

The Constituent Assembly was called by the President of the Bolivarian Republic, Nicolás Maduro, via Presidential Decree No. 2,830, published on May 1, 2017; all public authorities are subordinated under the Constituent Assembly and are obliged to comply and ensure compliance with the legal documents issued by said Assembly. The maximum term of this Assembly has been set at two years.

Official Gazette No. 41,310, of December 29, 2017 contained the publication of the Constitutional Foreign Production Investment Law, establishing the principles, policies and procedures that regulate foreign production investments in goods and services. The special legislation regulating foreign investments in specific sectors of the economy shall prevail over said law, including those addressing hydrocarbon matters, mining and telecommunications matters. To date, the relevant sectoral regulation has not been published.

On January 5, 2018, the term ended, established in Resolution No. 164 of the Ministry of the People's Power of Petroleum, published in the Official Gazette of December 6, 2017, for the review and validation of all national and international contracts signed and those that are about to be signed, by PDVSA, its subsidiaries and the Mixed Companies where PDVSA owns shares. To date, the review process continues in progress in the Mixed Companies, and the results of this process are awaited.

On August 6, 2018, the Ministry of the People's Power for Petroleum, published Resolution 102 in Official Gazette No. 41,454, providing for the creation of a Special Procurement Committee at PDVSA, in order to respond to the requirements for the acquisition of goods, execution of works and provision of services for construction, maintenance plans and implementation of crude oil flow improvers required in the Hugo Chávez Frías Orinoco Belt, in a centralized manner.

On September 4, 2018, the Ministry of the People's Power for Petroleum, published Resolution 115 in Official Gazette No. 41,474, creating a Technical Committee for the Reorganization of PDVSA and its subsidiaries. Once constituted, and in a period of no more than 30 days effective the publication of the Resolution, the Technical Committee must submit a work plan with a time line of activities subject to the company's priorities to the Chairman of PDVSA.

Monetary regime

On February 20, 2018, the launch of the "Petro" cryptocurrency was announced, backed by reserves from field 1 of the Ayacucho Block in the Hugo Chávez Frías Orinoco Oil Belt, in order to create an alternative currency to the dollar and a digital and transparent economy for the benefit of emerging countries. Such purchase may be made in convertible currencies: yuan, Turkish lira, euro and rouble. On March 19, the President of the United States of America signed an executive order prohibiting U.S. and U.S. residents from making transactions with any digital currency issued by the Venezuelan government as of January 9, 2018, which increases that country's sanctions regime on Venezuelan natural and juridical persons.

On July 25, 2018, Presidential Decree No. 3,548 was published in Official Gazette No. 41,446, establishing that from August 20, 2018, onwards, all monetary amounts expressed in national currency prior to that date, must be converted to the new monetary unit, dividing the current units by one hundred thousand (100,000).

On August 2, 2018, the Constituent Assembly, published a Decree revoking the Exchange Rate System Law in Official Gazette No. 41,452, with a view to granting both natural and legal persons, whether Venezuelan or foreign nationals, full guarantees in terms of their involvement in the country's socioeconomic development model.

On September 7, 2018, the Central Bank of Venezuela ("BCV" published in the Extraordinary Official Journal No. 6,405, the so-called Exchange Agreement No. 1[1] ("the Exchange Agreement"), the purpose of which is to establish the free convertibility of the currency nationwide. This Exchange Agreement revoked the Exchange Agreements that were in force at the time of its publication. The most relevant aspects are: i) development of the main principles of the new Exchange Market System; ii) reestablishment of the free convertibility of the currency and the lifting of restrictions on exchange transactions; iii) capacity of BCV to centralise, administer and regulate operations under the new Exchange Market System; iv) all foreign currency purchase and sale transactions will be performed at the weighted average exchange rate that the BCV publishes on its website; v) recognition of the validity of contracts entered into in foreign currency, vi) guarantee of private company participation through: (a) purchase and sale of positions in foreign currency (auctions); (b) exchange transactions at the retail price and; (c) purchase and sale of securities in national currency; (vii) regulation of exchange system applicable to the public oil sector.

[1] Pending regulation by BCV.

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[1], 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[2], 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[3]. 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. 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**

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), whichamends 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_2 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 ehighlight 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_2 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[1]
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

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[1], a **strategic update**[2] 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 *Millon euros*

	2018	2017[1]	Δ
Upstream	1,325	632	693
Downstream	1,583	1.877	(294)
Corporate and other	(556)	(378)	(178)
Adjusted net income	**2,352**	**2,131**	**221**
Inventory effect	(68)	104	(172)
Special items	57	(114)	171
Net income	**2,341**	**2,121**	**220**

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

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

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).

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[1], equivalent to €0.873 per share,[2] 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 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 increated 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

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.

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**

Sustainability and climate change

- 310 kt CO_2 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 CO2, 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.

>90M€

in digitalization

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 CO2 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).

Main figures and indicators

Financial indicators[1]	2018	2017
Results		
Results from operations	4,396	3,214
Adjusted net income	2,352	2,131
Net income	2,341	2,121
Earnings-per-share (€/share)	1.45	1.29
EBITDA	7,513	6,723
Investments	3,874	2,936
Capital employed[2]	34,353	33,106
ROACE (%)	6.7	6.4
Financial overview and cash flows		
Cash flows from operations	5,428	5,506
Free cash flow	5,056	2,560
Generated cash flow	2,706	1,391
Net Debt (ND)	3,439	6,267
ND/EBITDA (x times)	0.5	0.9
ND/Capital employed (%)	10.0	17.3
Debt interest/EBITDA (%)	3.8	5.2
Shareholder return		
Shareholder return (€/share)	0.873	0.761

Sustainability indicators	2018	2017
People		
No. of employees[3]	25,288	25,085
New employees[4]	3,810	3,157
Voluntary turnover rate (%)	6%	4%
Investment in training (€ million)	14.5	12.4
Taxes paid (million €)[5]	13,600	11,979
Safety		
Lost time injury frequency rate[6]	0.89	0.71
Total recordable incident rate[7]	1.59	1.43
Environment		
Direct CO_2 emissions (Mt)	17.80	18.38
Annual CO_2 emissions reduction (Mt)[8]	0.310	0.329
No. of hydrocarbons spills >1bbl (t)	25	17
Social		
Voluntary social investment (million €)	21.3	23.5

Performance of our businesses[1]	2018	2017
Upstream		
Net proven reserves[9] (Mboe)	2,340	2,355
Proven reserve replacement ratio (%)	94	89
Net daily liquids production (kbbl/d)	261	255
Net daily gas production (kboe/d)	454	440
Net daily hydrocarbon production (kboe/d)	715	695
Average crude oil price ($/bbl)	63.9	49.6
Average gas price ($/kscf)	3.4	2.9
EBITDA	4,801	3,507
Adjusted net income	1,325	632
Cash flows from operations	3,341	2,268
Investments	1,973	2,089
Downstream		
Refining capacity (kbbl/d)	1,013	1,013
Conversion rate in Spain (%)	63	63
Spain conversion refining use (%)	107	104
Distillation utilization Spanish refining (%)	93	94
Refining margin indicator in Spain ($/Bbl)	6.7	6.8
Service stations (no.)[10]	4,849	4,709
Sales of oil products (kt)	51,766	51,836
Sales of petrochemical products (kt)	2,610	2,855
LPG sales (kt)	1,330	1,375
Sale of gas in North America (TBtu)	520	496
EBITDA	2,859	3,386
Adjusted net income	1,583	1,877
Cash flows from operations	1,854	2,516
Investments	1,831	805

Macroeconomic environment	2018	2017
Brent ($/bbl) average	71.3	54.2
WTI ($/bbl) average	64.9	50.9
Henry Hub ($/MBtu) average	3.1	3.1
Electricity Pool - OMIE (€/MWh)	57	52
Exchange rate ($/€) average	1.18	1.13
CO_2 (€/Tn)	15.9	5.9

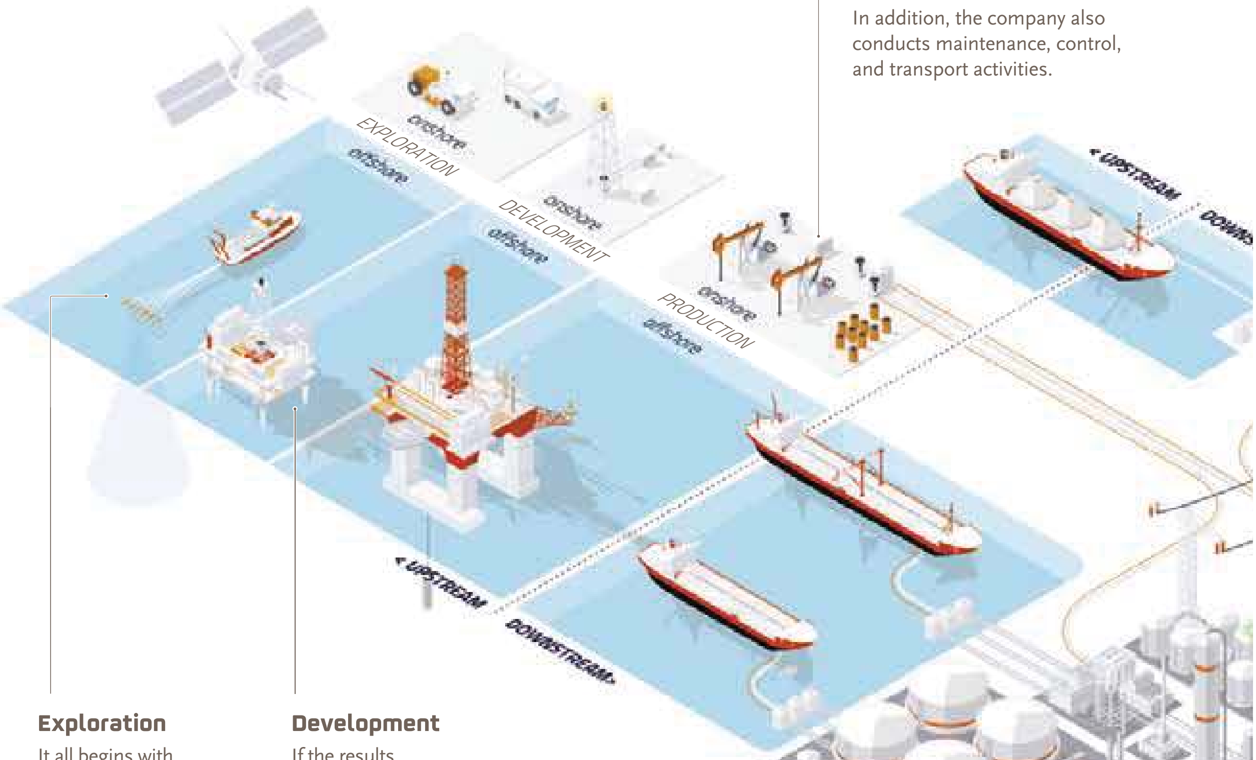
Stock market indicators	2018	2017
Share price at year-end (€/share)	14.08	14.75
Average share price (€/share)	15.78	14.57
Market capitalization at year-end (million €)	21,506	22,521

(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_2 compared with the 2010 baseline. E&P CO_2 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

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.



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.

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 km²
Net developed acreage: 5,494 km²

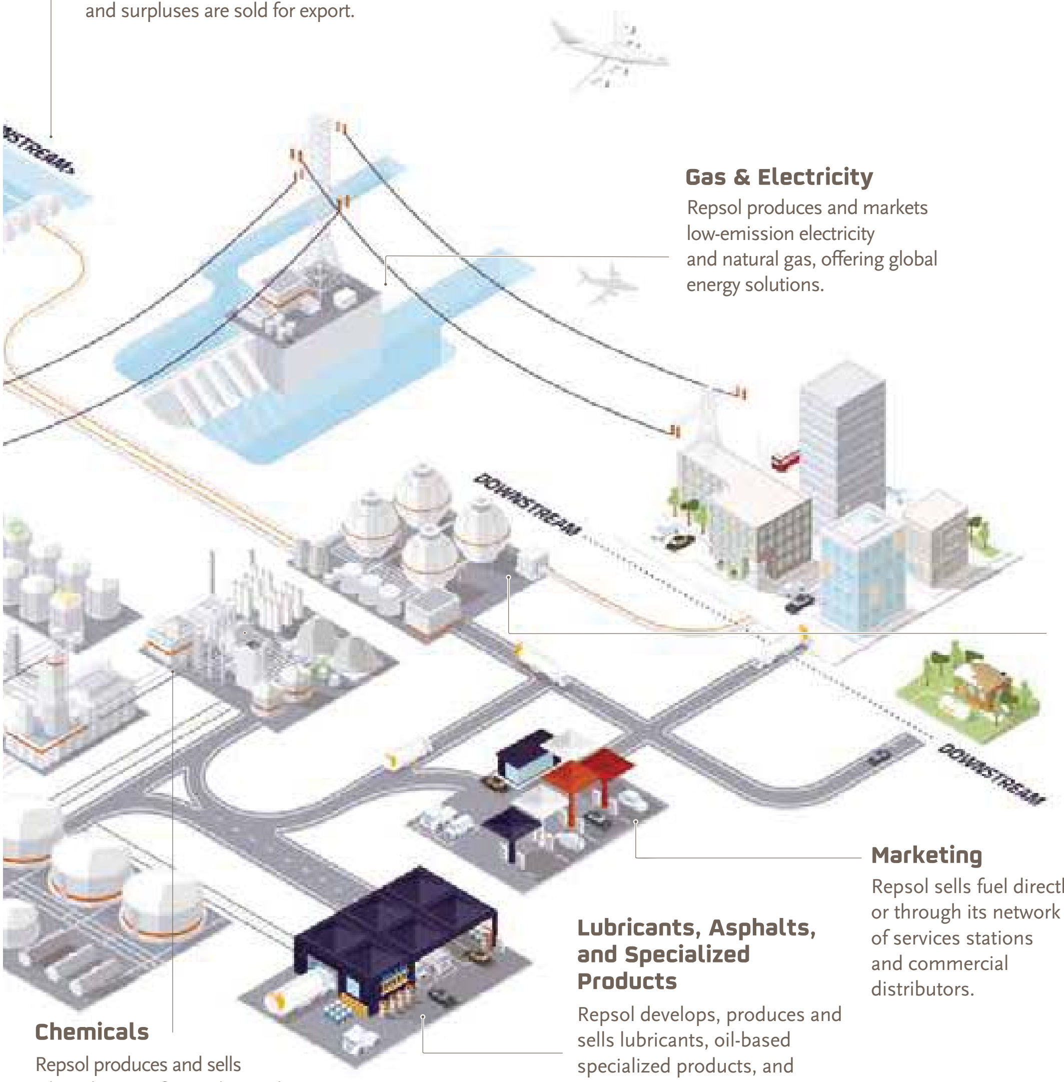
Sustainability indicators*

Number of employees: 3,948 (28.7% female)
CO_2e 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:



Trading

After the hydrocarbon is extracted, it is either transported to supply the refineries or sold on the international markets. The best supply alternatives are sought for the Downstream system, and surpluses are sold for export.

Gas & Electricity

Repsol produces and markets low-emission electricity and natural gas, offering global energy solutions.

LPG

Repsol produces and distributes liquefied petroleum gas (LPG) in various formats: bottled, in bulk, and AutoGas.

Marketing

Repsol sells fuel directly or through its network of services stations and commercial distributors.

Lubricants, Asphalts, and Specialized Products

Repsol develops, produces and sells lubricants, oil-based specialized products, and asphalts.

Chemicals

Repsol produces and sells a broad range of petrochemical products that are essential for everyday life

Downstream

Operating figures

Refining capacity: 1,013 kbbl/d
Chemical capacity:
Basic: 2,603 kt
Derived: 2,235 kt
Processed crude oil: 46,565 kt
Marketing (no. of SS):
3,350 in Spain/1,499 rest of the world
Electricity production:
Installed capacity: 2,952MW

Sustainability indicators*

Number of employees: 18,851 (35.8% female)
CO_2e emissions: 12.15 Mt (*Scope 1 + Scope 2*)
Water withdrawn: 49,487 kt
TRIR: 1.44
PSIR: 0.35
Electric charging points: 1,055
Autogas points: 732

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

2.2. Repsol around the world[1]

ANGOLA
Nº employees: 8

ALGERIA
Nº employees: 98
Exploration: 432 km²
Development/Production: 1,039

ARUBA
Nº employees: 2
Exploration: 8,074 km²

AUSTRALIA
Development/Production: 21 km²

BELGIUM
Nº employees: 3

BOLIVIA
Nº employees: 275
Exploration: 1,293 km²
Development/Production: 1,555 km²

BRAZIL
Nº employees: 128
Exploration: 1,667 km²
Development/Production: 250 km²
LAS: Commercial office

BULGARIA
Exploration: 5,584 km²

CANADA
Nº employees: 722
Exploration: 3,309 km²
Development/Production: 3,434 km²
Gas trading wholesaler

CHINA
Chemicals

COLOMBIA
Nº employees: 60
Exploration: 27,014 km²
Development/Production: 270 km²

ECUADOR
Nº employees: 430
Development/Production: 486 km²

FRANCE
Nº employees: 16
Chemicals: Commercial office
LAS: Commercial office

GABON
Nº employees: 1

GERMANY
Nº employees: 2
Chemicals: Commercial office
LAS: Commercial office

GREECE
Nº employees: 1
Exploration: 5,124 km²

GUAYANA
Nº employees: 1
Exploration: 1,937 km²

INDONESIA
Nº employees: 87
Exploration: 11,496 km²
Development/Production: 1,011 km²

IRAQ
Nº employees: 6
Development/Production: 399 km²

IRELAND
Exploration: 435 km²

ITALY
Nº employees: 41
Chemicals: Commercial office
LAS: Commercial office
Marketing: 306 SS

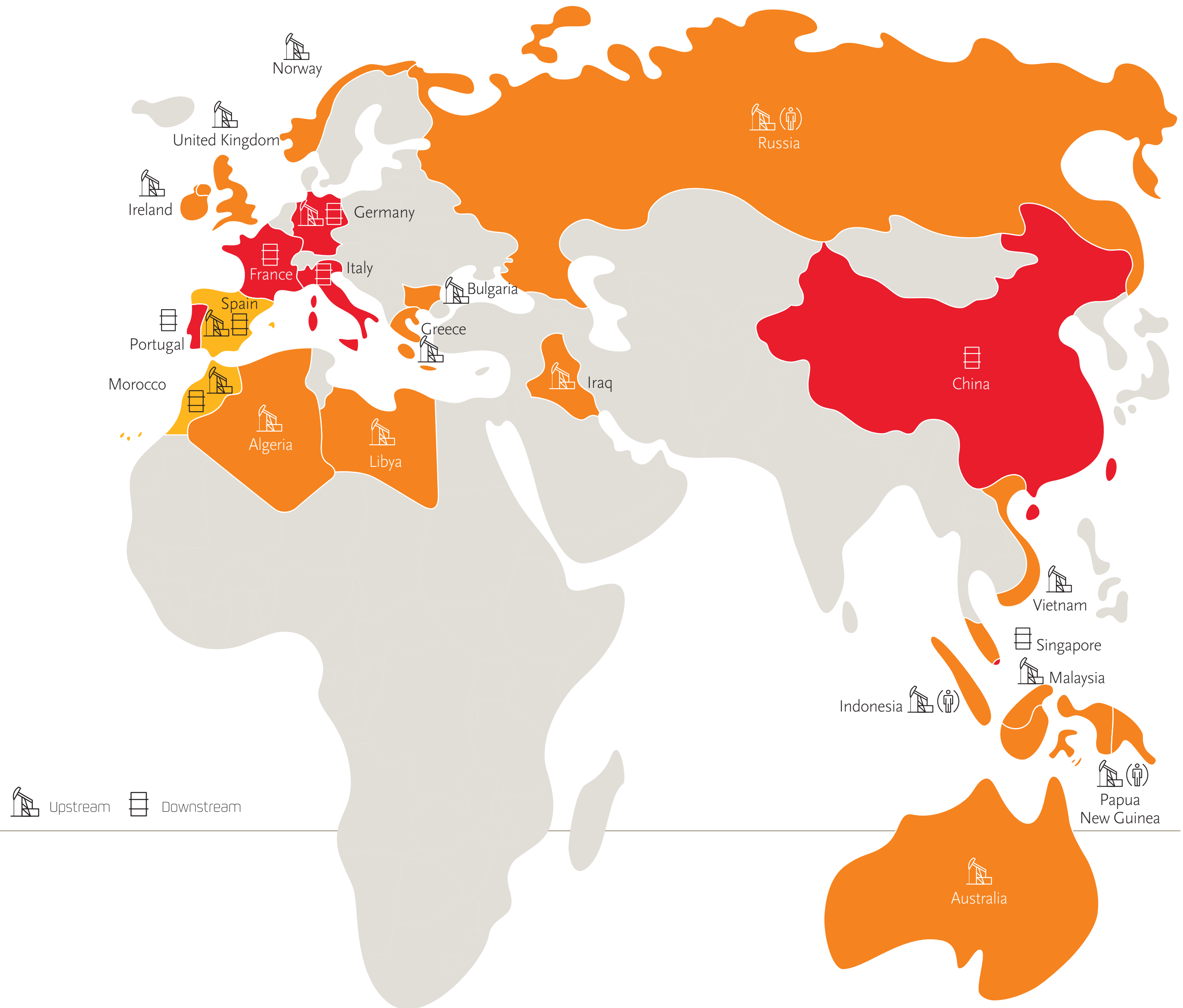
LIBYA
Nº employees: 62
Exploration: 3,132 km²
Development/Production: 1,566 km²

LUXEMBOURG
Nº employees: 4

MALAYSIA
Nº employees: 487
Exploration: 2,104 km²
Development/Production: 1,022 km²

MOROCCO
Nº employees: 1
Exploration: 7,026 km²
LAS: Commercial office
Trading

1. The data in this map reflect Repsol's worldwide presence at December 31, 2018, at activity level (incluiding 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



MEXICO
N° employees: 72
Exploration: 4,842 km^2
Chemicals
LAS
Marketing: 168 SS

NORWAY
N° employees: 248
Exploration: 717 km^2
Development/Production: 310 km^2

NETHERLANDS
N° employees: 12

PAPUA NEW GUINEA
N° employees: 1
Exploration: 9,021 km^2
Development/Production: 68 km^2

PERU
N° employees: 2991
Exploration: 50,975 km^2
Development/Production: 292 km^2
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^2
Development/Production: 480 km^2

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

RUSSIA
N° employees: 59
Exploration: 2,206 km^2
Development/Production: 169 km^2

SINGAPORE
N° employees: 45
LAS: Commercial office
Trading

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

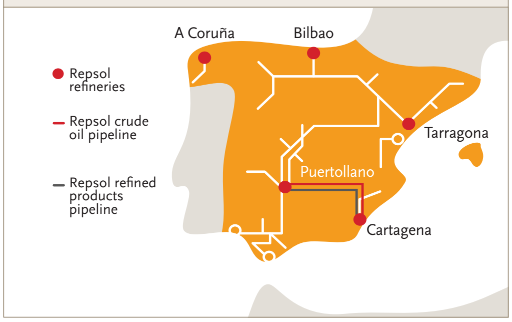
SWITZERLAND
N° employees: 1

TRINIDAD & TOBAGO
N° employees: 10
Development/Production: 1,121 km^2

VENEZUELA
N° employees: 153
Development/Production: 853 km^2

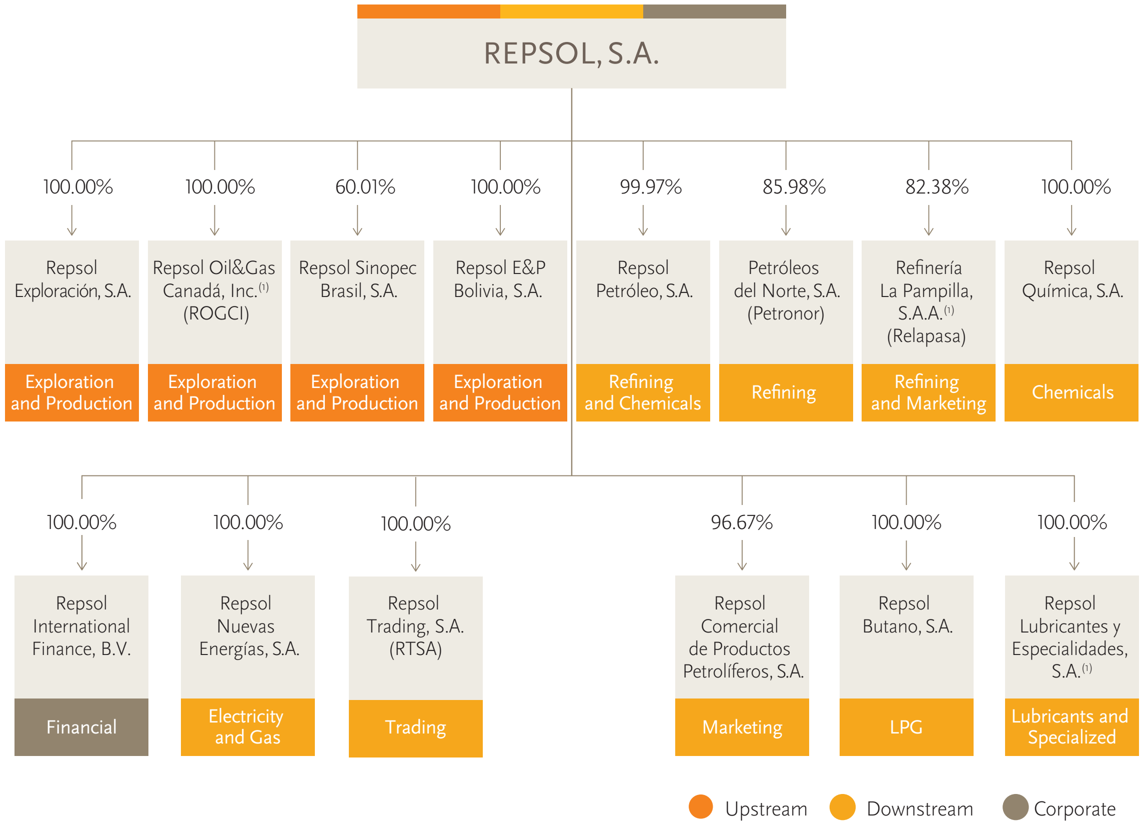
VIETNAM
N° employees: 75
Exploration: 73,325 km^2
Development/Production: 261 km^2

Repsol Refineries in Spain



2.3. Corporate structure

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



(1)Inderect 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

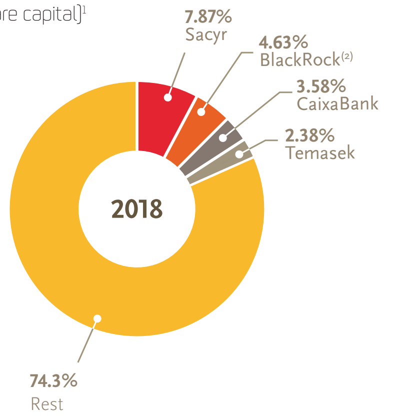
Repsol's system of corporate governance, which was established in accordance with best national and international practice and standards, guides the structure, organization, and operation of corporate bodies in the interests of the Company and of its shareholders, and is based on the principles of transparency, 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)[1]



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.

Shareholder Annual Meeting

Board of Directors

- Nomination Committee
- Compensation Committee
- Delegate Committee
- Audit and Control Committee
- Sustainability Committee

Chief Executive Officer (CEO)

Executive Committee[1]

Responsible for proposing and executing global strategy and of basic policies set by the Board of Directors.Josu Jon Imaz San Miguel (CEO), Luis Cabra Dueñas (Executive Managing Director of Technology Development, Resources and Sustainability), Begoña Elices García (Executive Managing Director of Communications and the Chairman's Office), Tomás García Blanco (Executive Managing Director of Exploration and Production), Arturo Gonzalo Aizpiri (Executive Managing Director of People and Organization), Miguel Klingenberg Calvo (Executive Managing Director of Legal Affairs), Antonio Lorenzo Sierra (Executive Managing Director Chief Financial Officer CFO), Maria Victoria Zingoni Domínguez (Executive Managing Director of Commercial Businesses and Chemicals), and Juan Antonio Carrillo Albornoz (Executive Director of Industrial Businesses and Trading). The post of General Counsel and Secretary to the Board of Directors is held by Luis Suárez de Lezo Mantilla.

1. Composition at the date of preparation of this document.

For more information, see www.repsol.com.

20%

of women on the Board of Directors

26.6%

of foreigners on the Board of Directors

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

Board of Directors[1]

Chairman
Antonio Brufau Niubó
Chairman of the Delegate Committee Latest appointment: 04/30/2015

Manuel Manrique Cecilia
Deputy Vice Chairman Member of the Delegate Committee
Latest appointment: 05/19/2017
Sacyr

Josu Jon Imaz San Miguel
Chief Executive Officer Member of the Delegate Committee
Latest appointment: 04/30/201

Mª Teresa Ballester Fornés
Member of the Audit and Control Committee Member of the Compensation Committee
Latest appointment: 05/19/2017

Luis Carlos Croissier Batista
Member of the Audit and Control Committee Member of the Sustainability Committee
Latest appointment: 04/30/2015

Rene Dahan
Member of the Delegate Committee
Latest appointment: 19/05/2017
TEMASEK

Ángel Durández Adeva
Chairman of the Audit and Control Committee Member of the Compensation Committee
Latest appointment: 04/30/2015

María del Carmen Ganyet i Cirera
Member of the Audit and Control Committee Member of the Nomination Committee
Latest appointment: 05/11/2018

José Manuel Loureda Mantiñán
Member of the Nomination Committee Member of the Compensation Committee Member of the Sustainability Committee
Latest appointment: 04/30/2015
Sacyr

Ignacio Martín San Vicente
Member of the Delegate Committee Member of the Compensation Committee
Latest appointment: 05/11/2018

Mariano Marzo Carpio
Chairman of the Sustainability Committee Member of the Nomination Committee
Latest appointment: 05/19/2017

Henri Philippe Reichstul
Member of the Delegate Committee
Latest appointment: 10/30/2018

Isabel Torremocha Ferrezuelo
Member of the Audit and Control Committee
Latest appointment: 05/19/2017

J. Robinson West
Member of the Delegate Committee
Latest appointment: 04/30/2015

Luis Suárez de Lezo Mantilla
General Secretary to the Board of DirectorsMember of the Delegate Committee
Latest appointment: 05/19/2017

- Independent
- Proprietary
- Executive
- External

1. Composition at the date of preparation of this document

GSP 2020

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**

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

2.5. Risk management

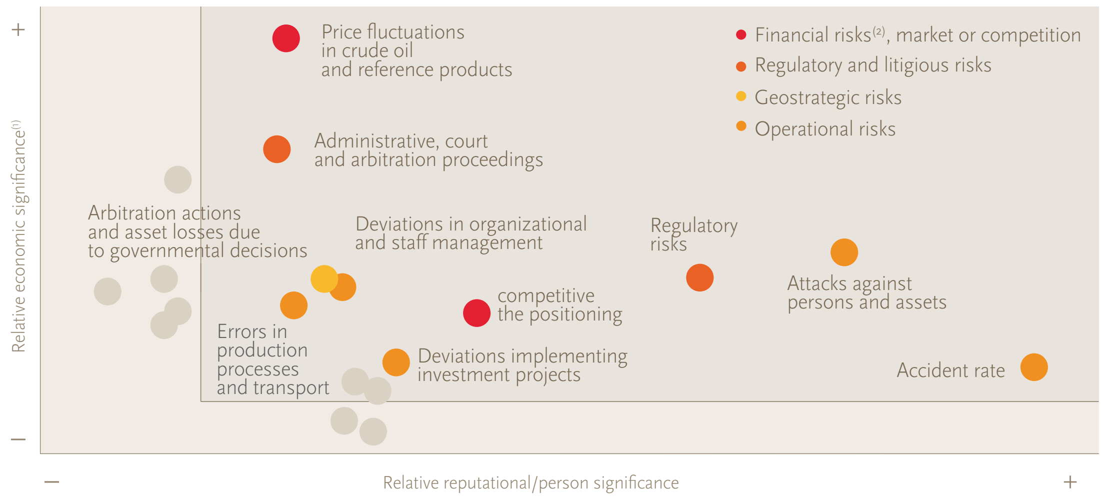
As a global and integrated energy company, Repsol is exposed to different types of risk that may affect future performance, and which must be mitigated in the most effective manner possible.

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[1] 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.

1 Increasing shareholder returns	2 Growing our portfolio profitably	3 Thriving in the energy transition
Dividend per share 8% p.a. growth with full buyback of shares Dividend target fully covered at $50/bbl The operating cash flow better covers dividend. Sustainable long term pay-out	Growth across all value-creation metrics, at any oil price Downstream activated as asset-light growth engine Upstream delivering performance improvement and portfolio upgrade Strong pipeline of attractive growth projects in both divisions	Develop long term options Leverage our competitive advantages Reduce carbon footprint Build new capabilities

Financial 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
Sustain	• Energy efficiency • IMO readiness • Digitalization and optimization • Peru desulphuration units	• Energy efficiency • Digitalization and optimization • Differentiation	• TwP[1] • Digitalization • Non-oil business growth & partnerships	• Customer-centric and digitalization • Logistic services & commercial integration	• Maintain leadership in Spain • Grow exports	• Maximize value from the system • Digitalization
Expand	• Biofuels	• Growth in current high value products	• Expand into new geographies • New mobility businesses	• Growth opportunities in hinterland	• Expand international presence (Asia, Latam)	• Develop global crude business • Incremental growth in key products

● Chemicals growth
● International expansion

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

4,200M€

***Downstream* investment**

2.1 Mtn CO_2 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 Liquified 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_2 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
Top capability	Leverage our industrial self consumption as the **largest gas consumer in Spain**	**Strong brand and ~10M clients** base with direct contact	**Technical capabilities** and experience in **managing large scale projects**
Roadmap	Create a successful **wholesale gas** business, ensuring a competitive gas supply Developing new business through gas flexibility Deliver a **competitive gas offer** for our future retail clients	To become a relevant Spanish low carbon multi-energy retailer **Progressively sophisticate** our offer including advanced energy services and solutions	Develop a strong position in **Spain achieving a low carbon integrated business** **Technological vocation oriented to solar, wind, CCGT** and **other low** carbon technologies **Diversify in emerging countries** that yield higher returns
Targets by 2025	**>15%** Market share[1]	**>5%** Market share[2] · **2.5M** Clients[3]	**~4.5 GW** 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. Sequentally, the highest growth rate was reached at the start of 2018 but then a clear deceleration started to take place.

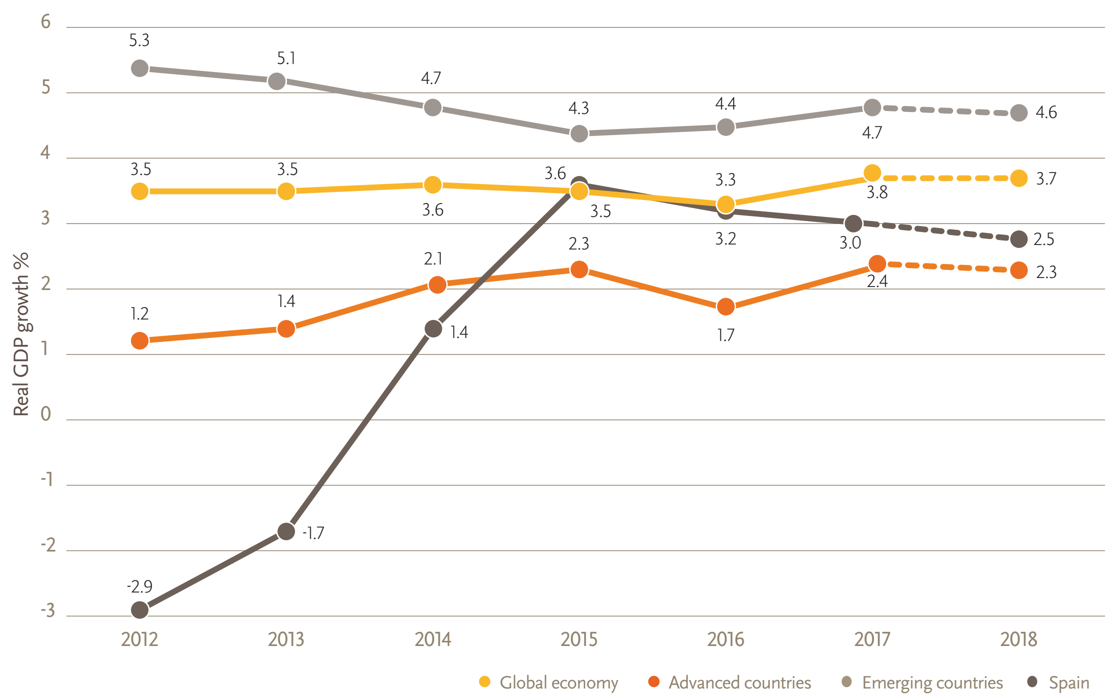
While throughout 2018 global GDP grew by around 3.7% (in line with 2017 as a whole), the dynamics at the end of the year were clearly lower. This deceleration is taking place in a context in which the higher interest rates in the United States and the appreciation of the dollar have tightened global 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 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.

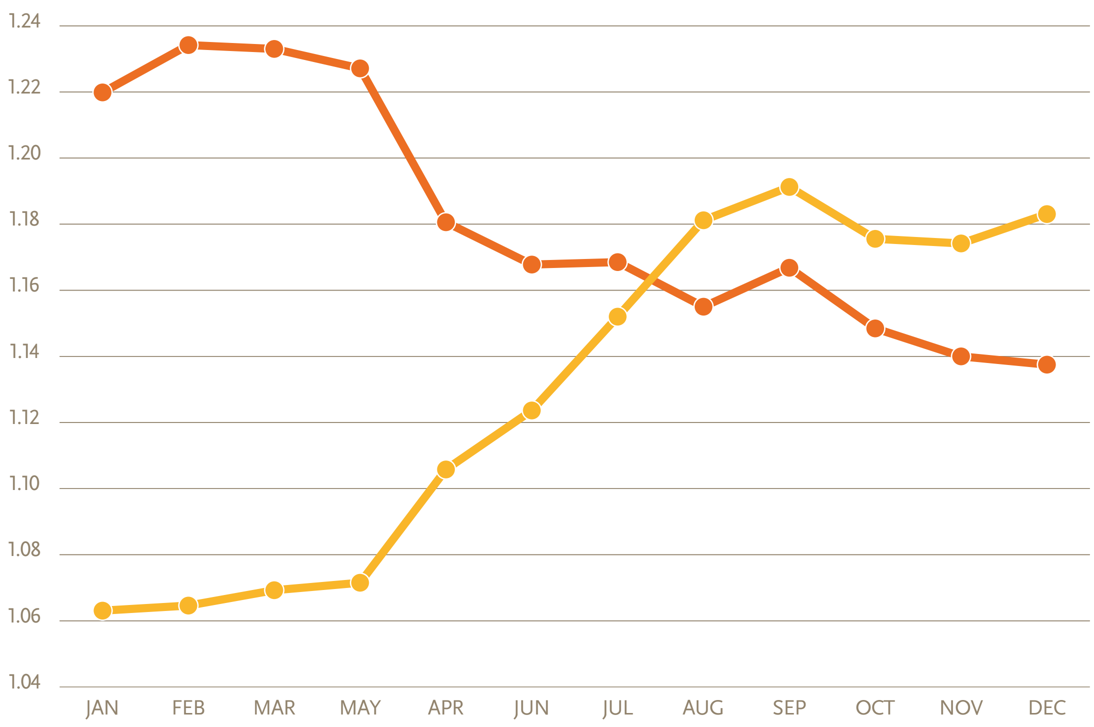
Evolution of the exchange rate

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*»[1] , 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)



Source: *Bloomberg and Repsol Research Unit*

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 enviroment

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.

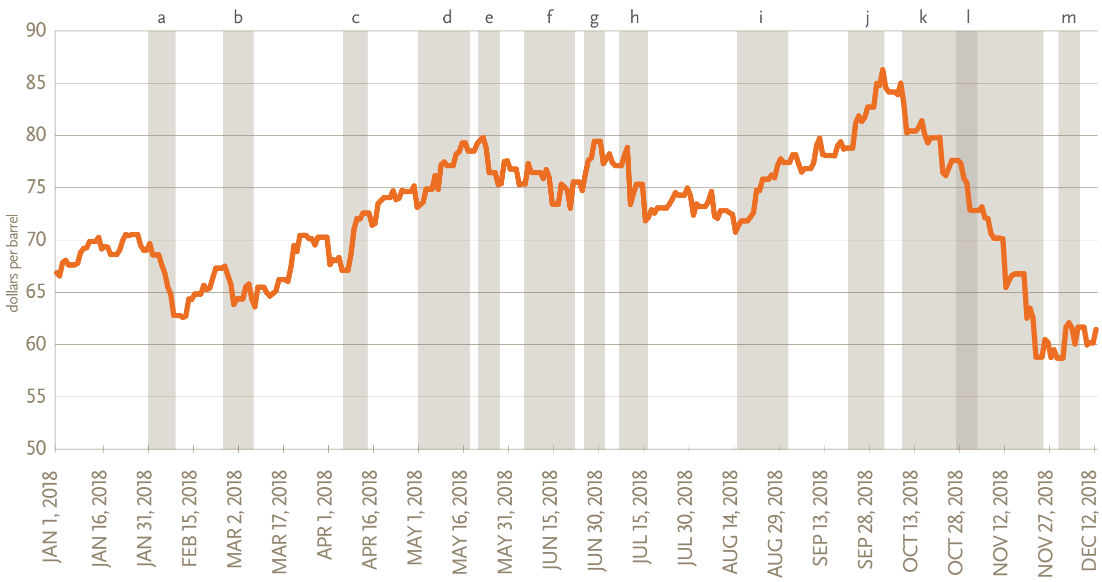
In June, the OPEC policy was completely altered after pressure was received from the United States government, particularly on Saudi Arabia, to increase production and reduce price levels from $80/barrel that had been reached at the start of that month. OPEC noted the need to adjust production by its 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 bad 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.

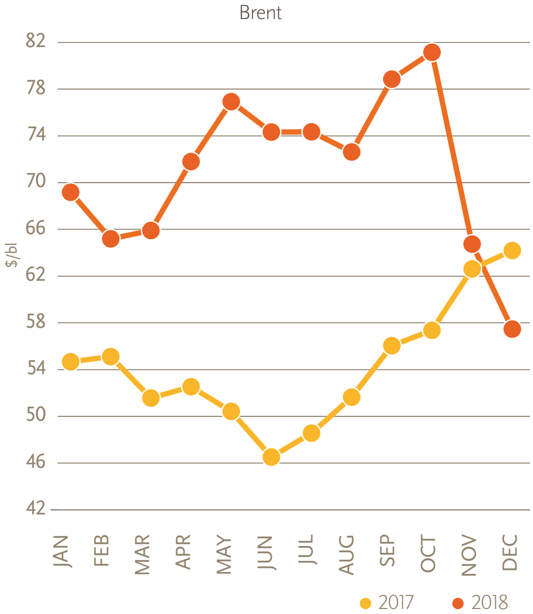
Various indicators on the demand side warned of a certain slowdown in consumption, although the outlook still points towards positive performance. The current situation is one of a market with relative oversupply, which should be understood to be transitional after the response from OPEC and its non-OPEC 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.

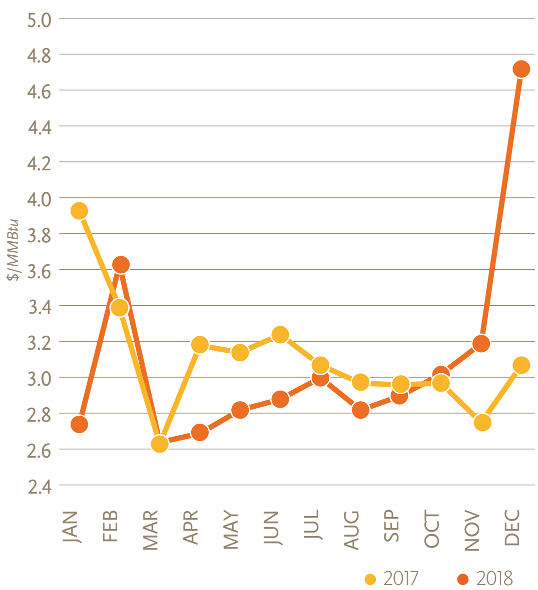
In quarter-on-quarter terms, prices remained stable until September, despite the continuous growth in production, which reached historic maximums (11% more than in 2017), but this was largely offset by the increases seen in domestic demand and LNG exports. A significant recovery of the price was observed 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[1]	Δ
Upstream	1,325	632	693
Downstream	1,583	1,877	(294)
Corporate and other	(556)	(378)	(178)
Adjusted net income	**2,352**	**2,131**	**221**
Inventory effect	(68)	104	(172)
Special items	57	(114)	171
Net income	**2,341**	**2,121**	**220**

(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 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
TOTAL	**7,513**	**6,723**	**790**

7,513M€

EBITDA

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).

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 millon 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.

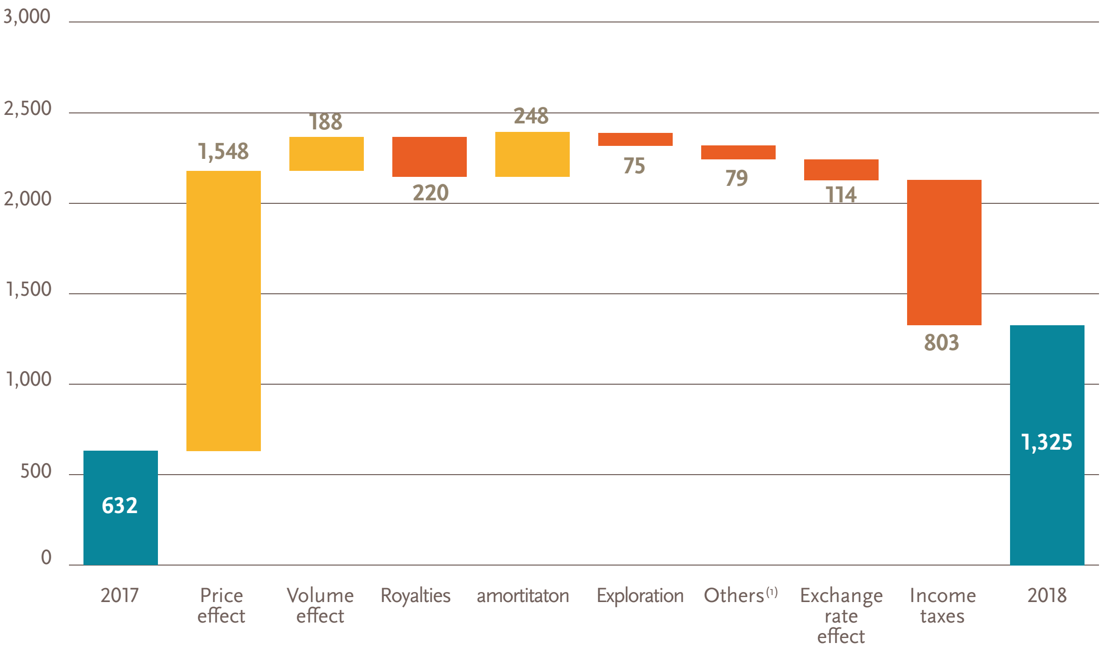
The change in results is due mainly to:

- **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.

37%
EBITDA
Upstream

***Upstream* adjusted net income variation**

Millions of euros



(1) Includes income from investees and others.

- **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.

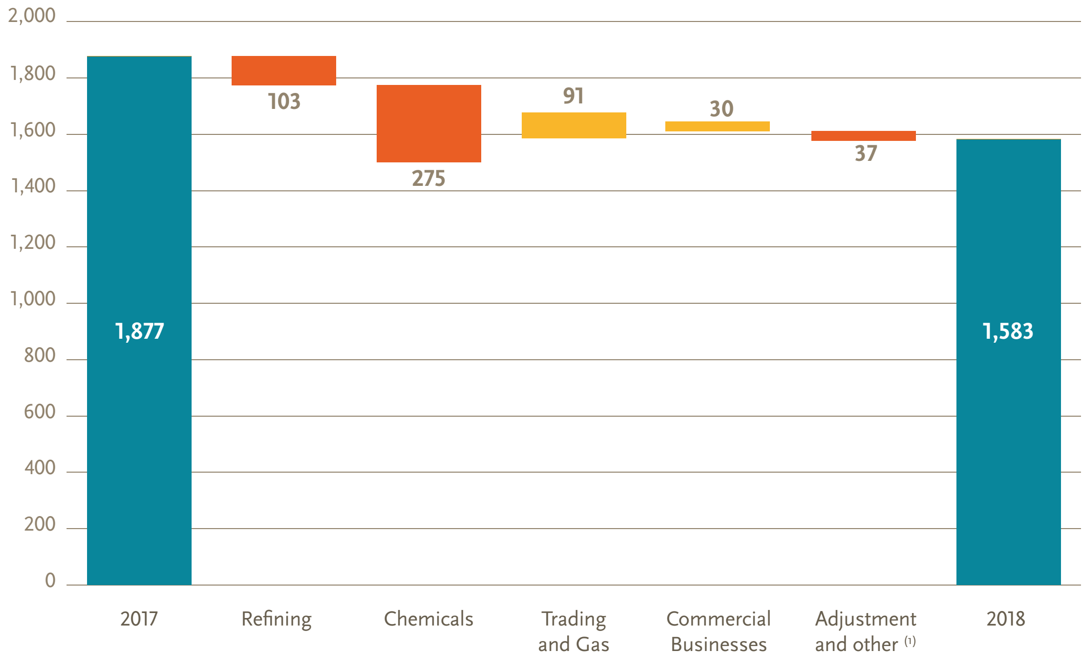
Adjusted net income totals €2,352million (vs. €2,131 million in 2017). These results include income tax expense totaling €1,569 million, which is an **effective tax rate** of 40% (compared to 26% in 2017, primarily due to the increase in *Upstream* business income which is taxed at high rates).

2,352M€
adjusted net income (10%)

1,831M€
Downstream investment

***Downstream* adjusted net income variation**

Millions of euros



(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[1]) and *Upstream* production assets (€-454 million) and *Downstream* (-€24 millon); 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
TOTAL	**57**	**(114)**

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

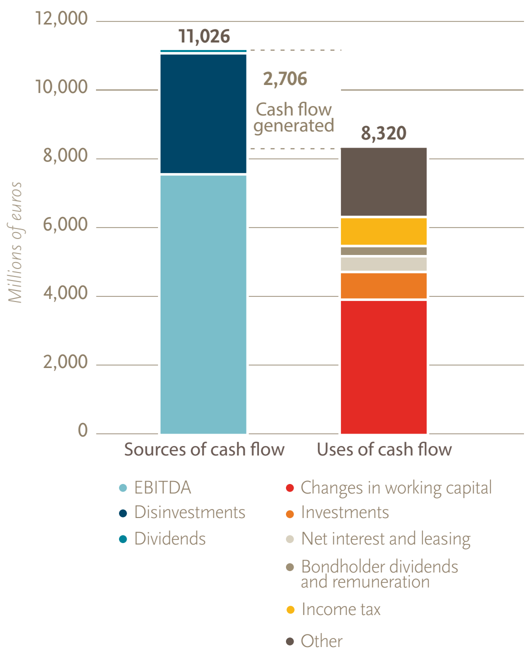
1. Excludes the amount recognized in reserves for the first application of IFRS 9 (see Note 2.2 of the 2018 Consolidated Financial Statements).

4.2. Cash flows

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

(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.

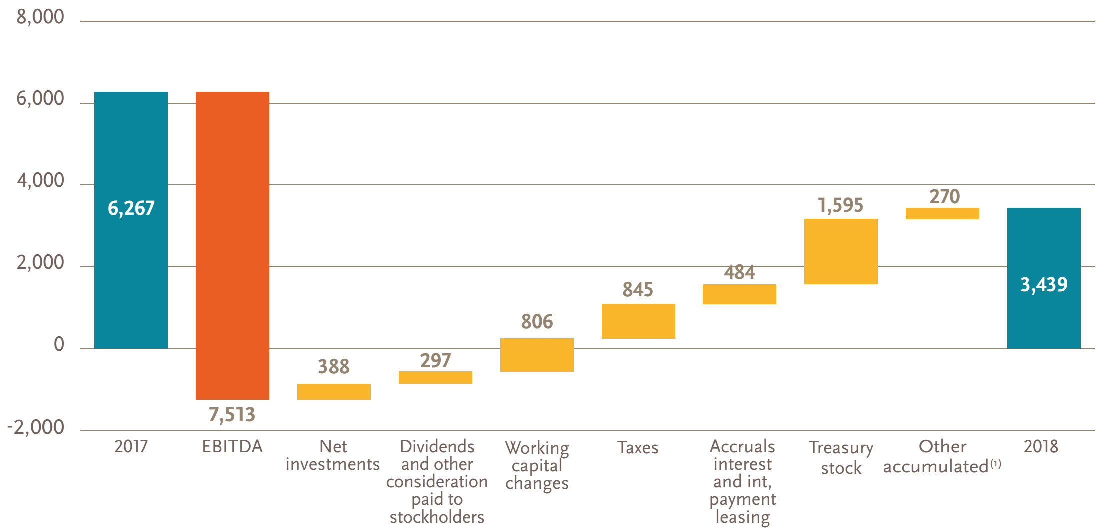
(MIllones de euros)

Financial position indicators	**12/31/2018**	**12/31/2017**[(1)]
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).

2,706M€
cash generated

Net debt variation



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

10%
leveraging

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:

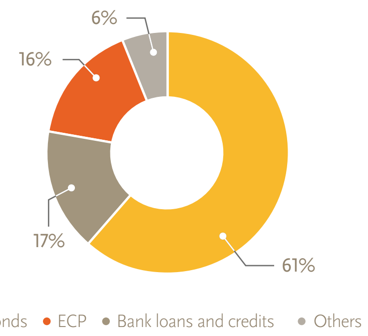
- In January 2018, ROGCI repurchased a fixed-annual 3.75% coupon bond maturing in February 2021 for a total of $251 million.
- In February 2018 the bond issued by Repsol International Finance B.V. (RIF) was canceled at maturity. This bond was issued in September 2012 under the EMTN Program for a nominal 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.

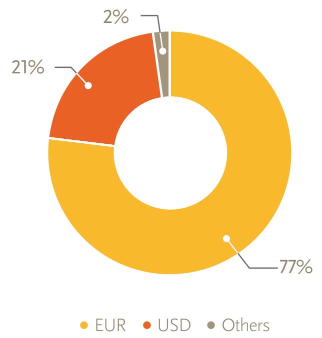
Gross debt

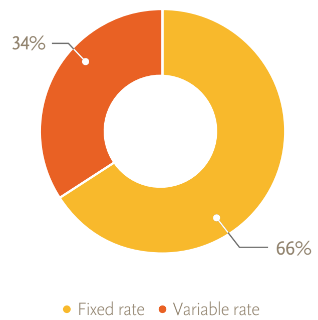
Gross debt at December 31, 2018 amounts to €10,326 million and mostly consists of financing obtained from capital markets (bonds and commercial paper) and, to a lesser extent, bank borrowings

2.3 times
liquidity/gross current debt

Gross debt

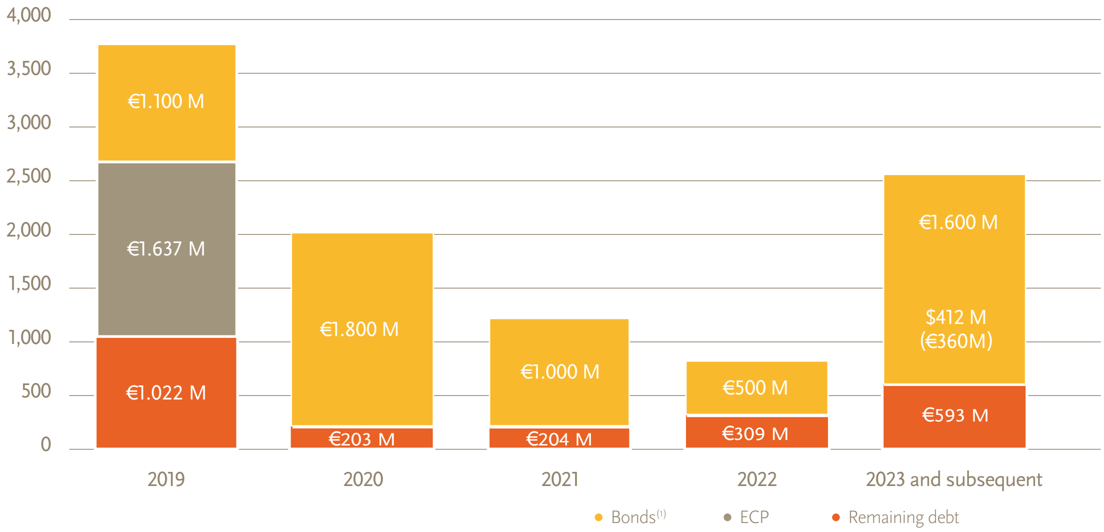






The **maturity** of the gross debt is as follows:

Debt maturities



(1) Issues secured by Repsol, S.A. carried out under the EMTN Program and Universal Shelf Prospectus.

8,742 M€
liquidity

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

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

Credit rating

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

	Standard & poor's		Moody's		Fitch	
TERM	**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"[1]program is as follows:

- Remuneration of € 0.873 per share[2] 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[3] 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.

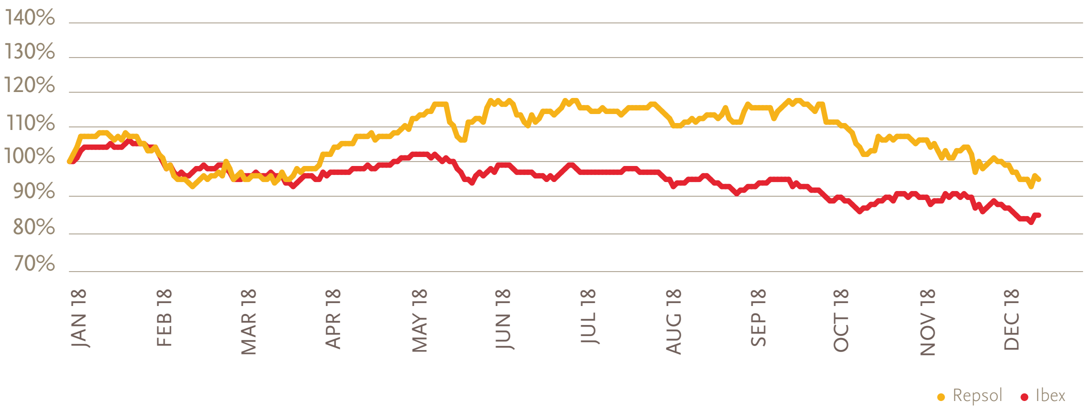
At the date of the authorization for issue of the Management Report, the Board of Directors is expected to submit a proposal to shareholders at the next Annual General Meeting to continue the *"Repsol Flexible Dividend"* program, through the implementation of a bonus share issue on the same dates as 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[1] (€/share)	0.87	0.76
Share price at period-end[2] (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[3] (million euros)	21,506	22,521
PER[4]	9.7	10.9
Dividend yield[5] (%)	6.2	5.7
Book value per share[6] (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.

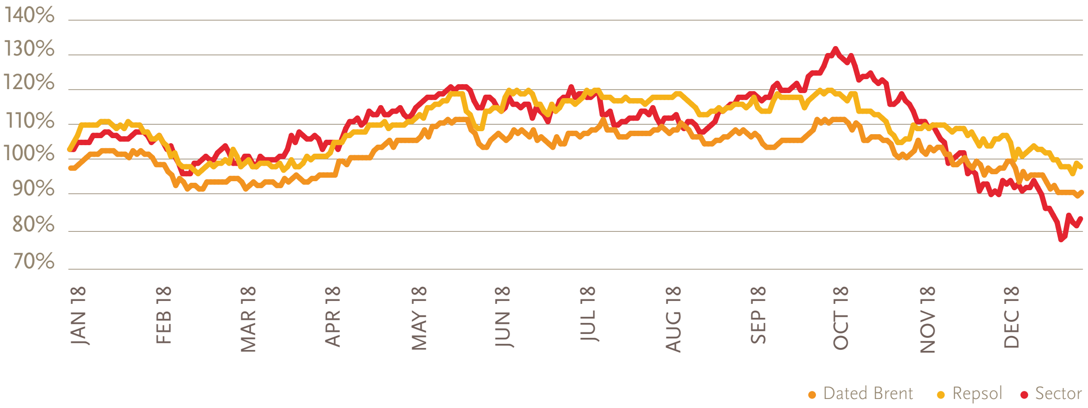
(4) Year-end closing market price per share / Earnings per share attributable to the parent company

(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

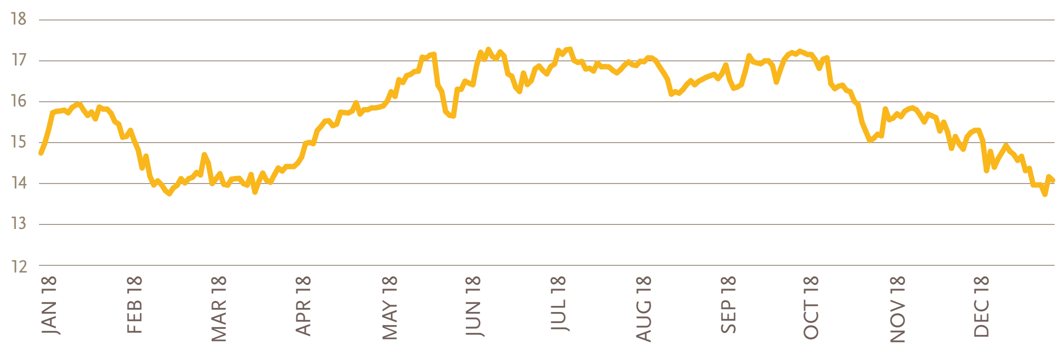
Repsol share price vs. European oil sector[1] and crude



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[1]

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.
- **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.

715 kboe/d
net output

Main operating figures

Main operating figures	2018	2017
Net undeveloped acreage (Km²)	232,331	199,599
Net developed acreage (Km²)	5,494	5,783
Reserves of crude oil, condensate and LPG (Mbbl)	638	617
Natural gas reserves (Mboe)	1,702	1,738
Proven reserve replacement ratio (%) (1)	94	89
Net production of liquids (kbbl/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 (2)	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)
Adjusted Net Income(1)	**1,325**	**632**	**693**
Special items	(326)	(151)	(175)
Net Income	**999**	**481**	**518**
Effective tax rate (%)	(48)	(40)	(8)
EBITDA	**4,801**	**3,507**	**1,294**
Investments	**1,973**	**2,089**	**(116)**

(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)
Adjusted Net Income	**1,325**	**632**	**693**

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)

246 Mboe ↑
addition of reserves

1. For more information, see "*Information on oil and gas exploration and production*" at www.repsol.com.

North America

64 Mboe
net output

9,998 km²
exploration acreage

535 Mboe
proven reserves

Operations performance	2018	2017
Net developed acreage (Km²)	2,134	2,199
Net undeveloped acreage (Km²)	12,562	8,538
Net development acreage (Km²)	4,698	5,234
Net exploration acreage (Km²)	9,998	5,503
Proven reserves (Mbeo)	535	504
Completed and ongoing exploratory wells(1):		
Positives	-	1
Negatives	2	-
Under evaluation	-	-
In progress	-	2
Development wells completed:		
Positives	136	153
Negatives	-	-
Under evaluation	-	-
Net production of liquids (Mbbl)	17	18
Net production of natural gas (bcf)	261	256
Total net output (Mbeo)	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.

Sustainability performance	2018	2017
No. of employees(1)	923	961
% of women	32	33
% of women in leadership positions	23	24
Spilled hydrocarbons (>1bbl) (t)	12.72	17.63
CO_2e 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 [1]	% Repsol	P/D/E [2]	L/G [2]	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

125 Mboe
net output

90,959 km^2
exploration acreage

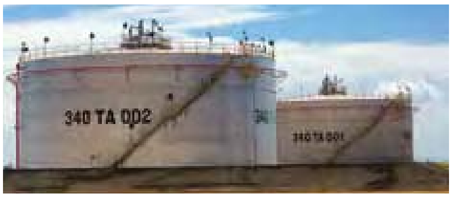
1,419 Mboe
proven reserves

Operations performance	2018	2017
Net developed acreage (Km^2)	682	688
Net undeveloped acreage (Km^2)	95,104	51,550
Net development acreage (Km^2)	4,827	4,475
Net exploration acreage (Km^2)	90,959	47,763
Proven reserves (Mbeo)	1,419	1,490
Completed and ongoing exploratory wells[1]:		
Positives	4	3
Negatives	6	4
Under evaluation	-	-
In progress	1	5
Development wells completed:		
Positives	28	69
Negatives	1	2
Under evaluation	3	3
Net production of liquids (Mbbl)	36	38
Net production of natural gas (bcf)	504	498
Total net output (Mbeo)	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.

Sustainability performance	2018	2017
No. of employees[1]	1,218	1,234
% of women	24	25
% of women in leadership positions	20	20
Spilled hydrocarbons (>1bbl) (t)	0.32	11
CO_2e 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[1]	% Repsol	P/D/E [2]	L/G [2]	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

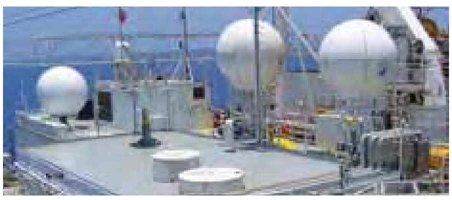
The Angelin non-operated production platform reached the country's waters and was installed in the West Block field, 60 km from the south-eastern coast. The facilities will be operated remotely. and the gas generated will flow to the Serrette platform through a new 21 km pipeline and then to the Cassia 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 sucessive extensions of the State of Economic Emergency). Extraordinary write-offs of Group assets in Venezuela were recognized, partly as a result of the modificaiton of the operating plans of production assets. For further infomraiton, see Note 20.3 of the 2018 Consolidated Financial Statements.

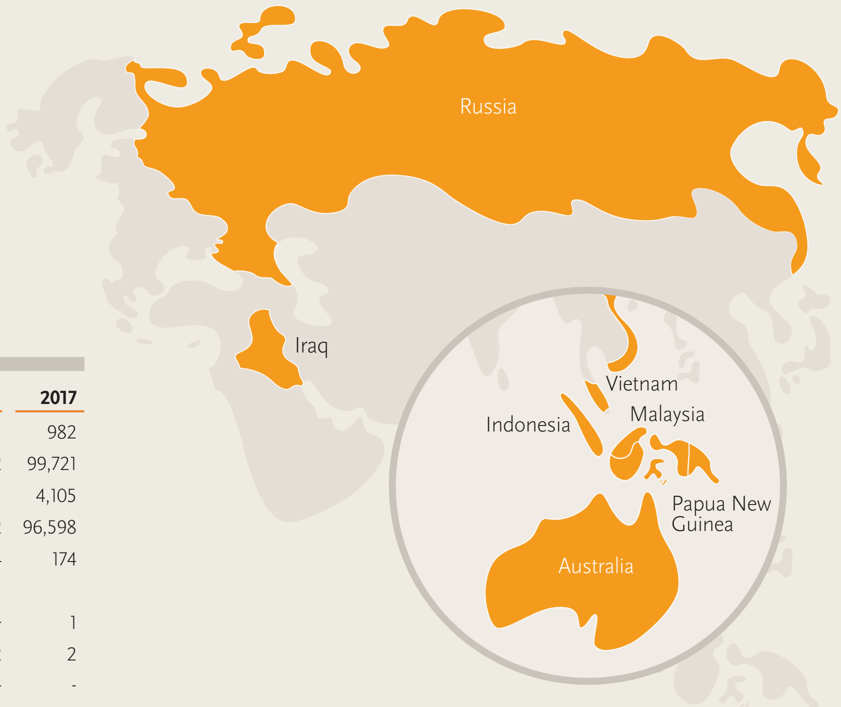




Asia and Oceania

29 Mboe
net output

98,152 km²
exploration acreage

154 Mboe
proven reserves



Operations performance	2018	2017
Net developed acreage (Km²)	1,051	982
Net undeveloped acreage (Km²)	100,052	99,721
Net development acreage (Km²)	2,951	4,105
Net exploration acreage (Km²)	98,152	96,598
Proven reserves (Mbeo)	154	174
Completed and ongoing exploratory wells(1):		
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 (Mbbl)	10	9
Net production of natural gas (bcf)	108	122
Total net output (Mbeo)	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(1)	736	1,038
% of women	32	27
% of women in leadership positions	18	18
Spilled hydrocarbons (>1bbl) (t)	-	-
CO_2e 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(1)	% Repsol	P/D/E (2)	L/G (2)	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 km²
exploration acreage

102 Mboe
proven reserves

Operations performance	2018	2017
Net developed acreage (Km²)	533	680
Net undeveloped acreage (Km²)	12,511	15,891
Net development acreage (Km²)	1,122	1,199
Net exploration acreage (Km²)	11,922	15,373
Proven reserves (Mbeo)	102	59
Completed and ongoing exploratory wells[1]:		
Positives	-	-
Negatives	3	2
Under evaluation	1	-
In progress	1	-
Development wells completed:		
Positives	4	4
Negatives	-	-
Under evaluation	-	-
Net production of liquids (Mbbl)	16	16
Net production of natural gas (bcf)	31	17
Total net output (Mbeo)	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[1]	908	886
% of women	32	31
% of women in leadership positions	25	24
Spilled hydrocarbons (>1bbl) (t)	-	-
CO_2e 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[1]	% Repsol	P/D/E [2]	L/G [2]	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

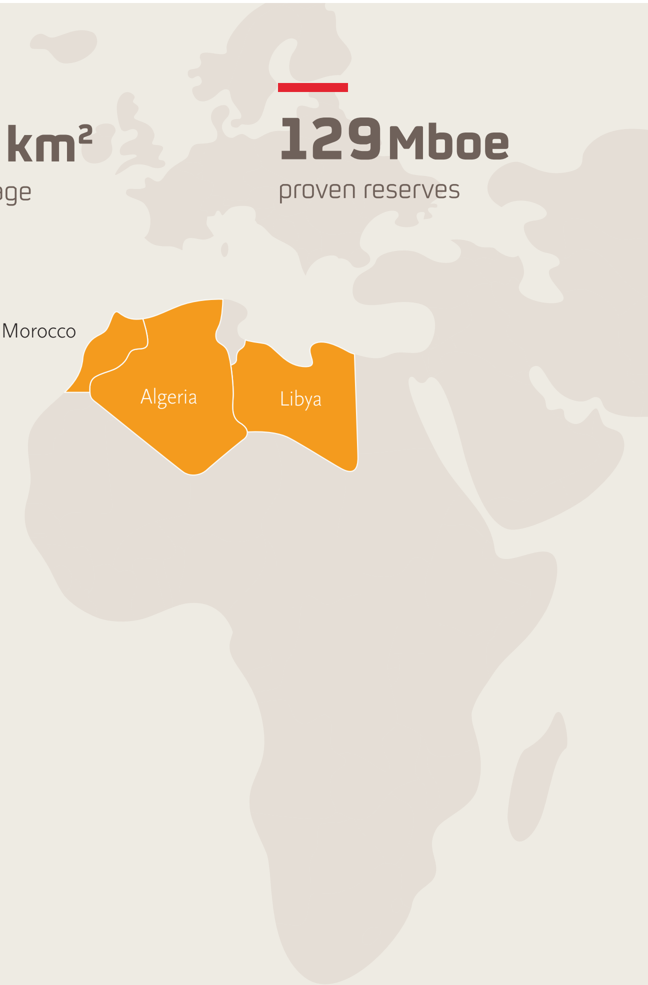
Repsol's participation in the exploration activity of its four blocks in which it had a 49% stake together with the operating partner OMV Petrom has been discontinued.

Africa

21 Mboe
net output

10,590 km²
exploration acreage

129 Mboe
proven reserves



Operations performance	2018	2017
Net developed acreage (Km²)	1,095	1,234
Net undeveloped acreage (Km²)	12,100	23,899
Net development acreage (Km²)	2,605	2,744
Net exploration acreage (Km²)	10,590	22,389
Proven reserves (Mbeo)	129	128
Completed and ongoing exploratory wells[1]:		
Positives	-	-
Negatives	3	1
Under evaluation	-	-
In progress	-	1
Development wells completed:		
Positives	7	12
Negatives	-	1
Under evaluation	-	-
Net production of liquids (Mbbl)	16	12
Net production of natural gas (bcf)	26	8
Total net output (Mbeo)	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.

Sustainability performance	2018	2017
No. of employees[1]	163	172
% of women	14	15
% of women in leadership positions	3	4
Spilled hydrocarbons (>1bbl) (t)	-	-
CO_2e 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[1]	% Repsol	P/D/E [2]	L/G [2]	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

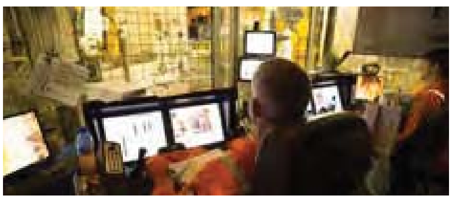
Repsol and Total have reached an agreement with the Algerian state-owned company Sonatrach to extend for 25 years the license for the Tin Fouye Tabankort (TFT) gas and condensate field in the Illizi Basin.

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

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)
Adjusted Net Income (1)	**1,583**	**1,877**	**(294)**
Inventory Effect	(68)	104	(172)
Special items	25	(121)	146
Net Income	**1,540**	**1,860**	**(320)**
Effective tax rate (%)	25	23	2
EBITDA	**2,859**	**3,386**	**(527)**
Investments (2)	**1,831**	**805**	**1,026**

(1) Detail by geographical area:

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

(2) Includes investment in Viesgo and Valdesolar in 2018

Sustainability performance	2018	2017	Δ
Nº of employees (1)	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.

51,766 Mt

sales of pretroleum product 2018

Sales of petroleum products	Europe		Rest of the world		Total	
Thousand metric tons	2018	2017	2018	2017	2018	2017
Own marketing	**21,754**	**21,186**	**2,681**	**2,288**	**24,435**	**23,474**
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
Other sales(1)	**9,506**	**8,471**	**1,358**	**1,393**	**10,864**	**9,864**
Light products	9,337	8,257	995	1,143	10,332	9,400
Other products	169	214	363	250	532	464
Exports(2)	**14,056**	**15,424**	**2,411**	**3,074**	**16,467**	**18,498**
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
TOTAL	**45,316**	**45,081**	**6,450**	**6,755**	**51,766**	**51,836**

(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 m3 of LNG and 430 m3 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 m3. 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 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)..

Mexico

+168 S.S. in 2018

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_2 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 prduce 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.

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[2] (%)	Lubricants (Thousands of t/d)
Cartagena	220	76	155
A Coruña	120	66	-
Puertollano	150	66	110
Tarragona[1]	186	44	-
Bilbao	220	63	-
Repsol Total (Spain)	**896**	**63**	**265**
La Pampilla (Peru)	117	24	-
TOTAL	**1,013**	**59**	**265**

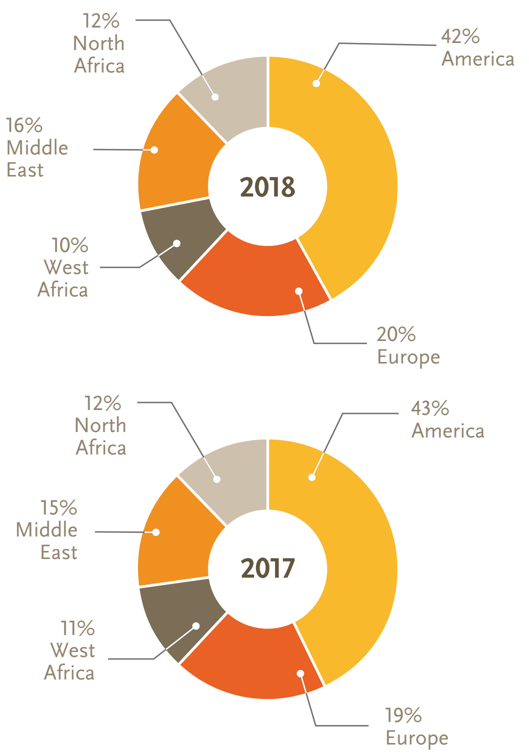
(1) The capacity of Tarragona includes 50% of the capacity of Asfaltos Españoles S.A. (ASESA), a company 50% owned by Repsol and CEPSA.
(2) Defined as the ratio between the equivalent capacity of Fluid Catalytic Cracking ('FCC') and the primary distillation capacity.

Performance

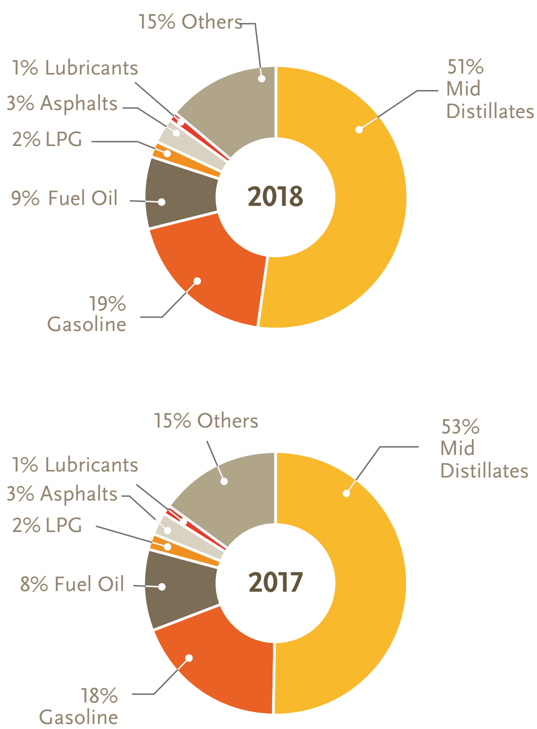
The refining margin index in Spain in 2018 stood at $6.7 per barrel, lower than in 2017 ($6.8 per barrel). For Peru, the annual refining margin index stood at $3.0 per barrel, compared to $5.4 per barrel in 2017.

1,013kbbl/d
primary distillation

Source of processed crude oil



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
TOTAL	**54,857**	**55,922**

(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 (1)	1,631	1,537
Lubricants	266	265
Others (including petrochemicals) (2)	7,078	7,913
TOTAL	**51,320**	**52,412**

(1) Includes 50% of ASESA's 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) (1)	31.52	5.28
CO_2e Emissions (Mt) (2)	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*
Basic petrochemicals	**2,603**
Ethylene	1,214
Propylene	864
Butadiene	185
Benzene	290
Methyl tert-butyl ether / Ethyl tert-butyl ether	50
Derivative petrochemical	**2,235**
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.

2.6 Mt
basic petrochemical capacity

2.6 Mt
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
Total	**2,610**	**2,855**

Sales by region	2018	2017
Europe	2,137	2,412
Rest of world	473	443
Total	**2,610**	**2,855**

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_2 e Emissions (Mt) (1)	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.

1,489

vessels chartered in 2018

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*[1] 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.

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*[1]) 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
Total	**4,849**

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(1)	58.75	46.35
CO_2e 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[1], 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
Europe	**1,304**	**1,356**
Spain	1,154	1,218
Portugal	150	138
Latin America	**26**	**19**
Peru (Autogas)	26	19
TOTAL	**1,330**	**1,375**

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(1)	652	705
TOTAL	**1,330**	**1,375**

(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, 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

3rd largest LPG operator in Portugal

>10 M of new packaging NEL

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.

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(1)	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
Total	**176**	**881**	**853**	**1,910**	**1,826**

(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-ozone 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.

adquisition of 40% of Bardahl

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.

Sustainability performance	2018	2017
Spilled hydrocarbons (>1bbl) reaching the average (t)	-	-
CO_2e 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%).

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

(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 (1)	2018
CO_2e Emissions (Mt)	0.2
TFR	0.5
Employees	386
Women	114
Men	172

(1) Data only for Viesgo assets.

2,952MW
installed capacity

Generation assets acquired by Repsol

2%
market share Electricity and gas retail in Spain

3,816 M€
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
Adjusted Net Income [1]	**(556)**	**(378)**	**(179)**
Special items	358	158	200
Net Income	**(198)**	**(220)**	**(21)**
Effective tax rate (%)	(23)	(39)	16
EBITDA	**(147)**	**(170)**	**23**
Net investments	**70**	**42**	**32**

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

>90 M€
in Digitalization

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).
- 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)**.At December 31, 2017, €252 million had been invested in Refining and Chemicals, which represents an estimated emission reduction of 663,000 tons of CO2 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 millon euros were invested in 130 actions which were undertaken.

6. Sustainability[1]

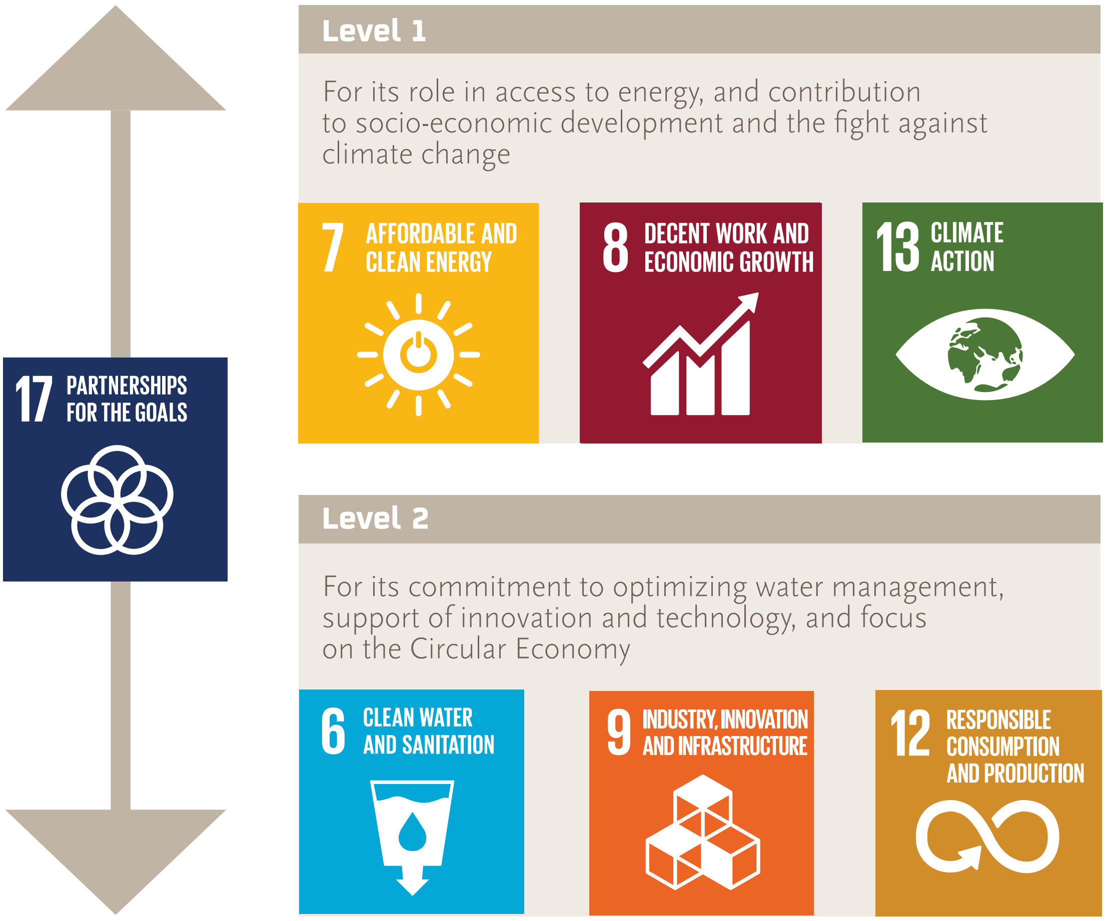
Repsol works to provide accessible, efficient and safe energy to meet growing energy demand without compromising future generations. Sustainability, a key factor in our vision of the future as an energy company, is integrated in the Company's strategy, and has the support and engagement of senior management. 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 prioritizacion 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**

SDG prioritizacion



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

Climate change

Be a part of the solution to climate change

People

Commit to people and promote their development and social environment

Safe operation

Ensure the safety of our employees, contractors, partners and the local community

The Global Sustainability Plan is based on the **six** pillars of Repsol's Sustainability Model.

Environment

Consume the resources needed to generate power more efficiently and with the least possible impact

Innovation and technology

Foster innovation and incorporate new technology to improve and grow

Ethics and transparency

Act responsibly and with integrity wherever the Company is present

Local Sustainability Plans:
13 Countries
6 Industrial Centers

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.

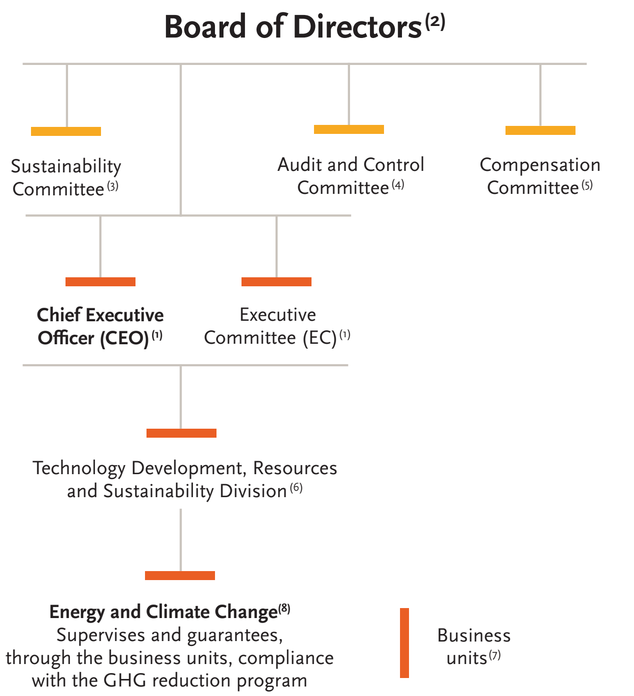
In ethics and transparency matters, the Audit and Control Committee and the Ethics and Compliance Committee oversees compliance with the Code of Ethics and Conduct, and they examine proposed codes of ethics and conduct and reforms thereof,

GSP

a

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.

7 AFFORDABLE AND CLEAN ENERGY

13 CLIMATE ACTION

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[1][2][3]

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.

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_2 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 in 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 suceed. 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_2 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_2 come from its

Energy Efficiency

Carbon Pricing

Role of natural gas

Carbon Capture, Use and Storage (CCUS)

Reneweable Energy

40 \$/t CO_2

internal price CO_2 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[1] 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_2 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[2].

  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_2/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_2 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.

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_2, with the aim of attaining $40/t CO_2 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_2 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_2 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_2 Capture, Use and Storage (CCUS) is a factor to be taken into account in the CO_2 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 CO_2 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.

OIL AND GAS CLIMATE INITIATIVE

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).

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

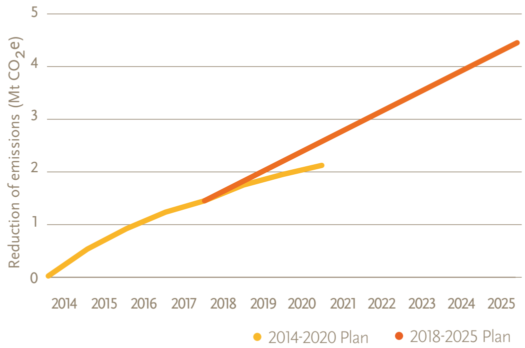
The main commitment to climate change is reflected in the goal of reducing 2.1 million tons of CO2 equivalent by the end of the 2014-2020 period. In 2018, Repsol is continuously improving and taking actions that avoided the emission of 309.8 kt of CO2e, which means that since 2014, a reduction of nearly 85% of the target set for the entire period has been met.

Repsol has established a new emission reduction target of 3 million tons of CO2e 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.

Reduction of emissions

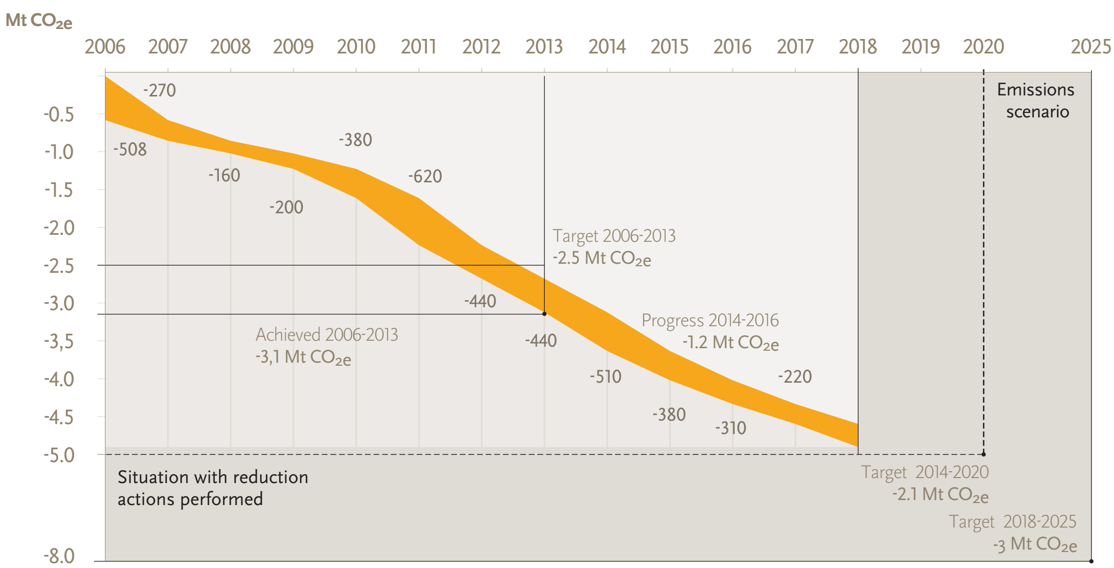


3 Mt CO2e
new emissions reduction target 2018-2025

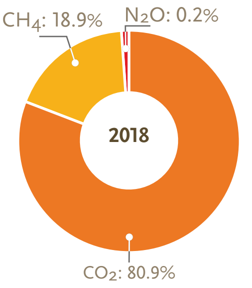
85%
compliance with the 2014-2020 Plan

4.9 Mt
CO2e reduction between 2006 and 2018

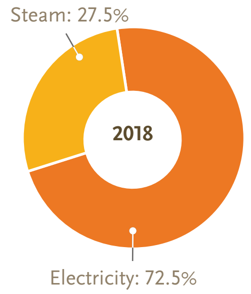
Reduction of CO2e emissions (millions of tons)



Scope 1

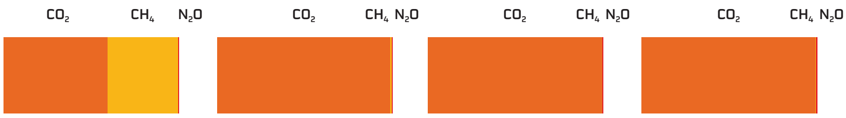


Scope 2



Our emissions

	Upstream	Downstream: Refining	Downstream: Chemical	Downstream: Other[4]	Total
Scope 1[1][2]	10.16 Mt	8.82 Mt	3.00 Mt	0.014 Mt	**21.9 Mt**
CO_2 / CH_4 / N_2O	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[1][3]	73 kt	170 kt	108kt	55 kt	**406 kt**



Scope 3[5][6]	**2018**	**2017**
Indirect CO_2 emissions associated with the purchase of goods and services (including hydrogen) (Mt)	8.24[1]	7.84
Transportation and distribution of products[7] (Mt)	0.51	0.52
CO_2 emissions deriving from the sale of products[8] (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_2 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_2 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.

() 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_2/GJ, which gages the company's commitment to providing society with the energy it demands (GJ) with the lowest possible emissions (tCO_2). Repsol intends to reduce its carbon intensity (tCO_2/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 CO2, 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 CO2 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.

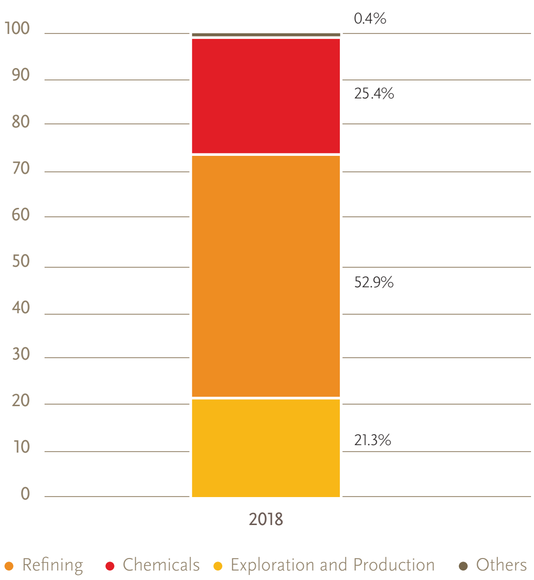
Energy consumption

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 (1)	2017
Fuel (millions of toe) (1)	4.87	5.02
Electricity purchased (10^6 MWh) (2)	0.83	0.72
Steam purchased (10^6 GJ) (3)	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

www.unpri.org

GSP 2020

Objective:
Improve employees' rate of satisfaction.

25,288
number of employees

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

5 GENDER EQUALITY

8 DECENT WORK AND ECONOMIC GROWTH

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 (1)	2017
Energy intensity in Refining (GJ/t processed crude oil) (1)	2.66	2.63
Energy intensity in Exploration and Production (GJ/boe produced) (1) (2)	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 (tCO_2e/t processed crude oil) (1)	0.193	0.191
Greenhouse gas emissions intensity in Exploration and Production (tCO_2e/ thousands of boe produced) (2)	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[1]

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[2], 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,[3] 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**[4] 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 (nº 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[1]	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
N° of employees with disabilities in Spain	487	492
N° of employees with disabilities in the rest of the world	83	84
Total N° of employees with disabilities	570	576
N° 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 i**ncorporation 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 opportunties 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[1] 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

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

GSP 2020

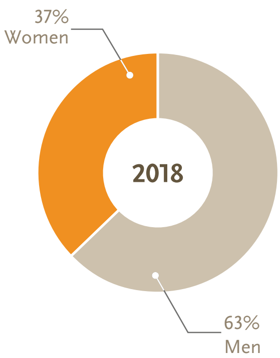
Objective:
Exceed legal obligations in labor integration of people with disabilities.

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

GSP 2020

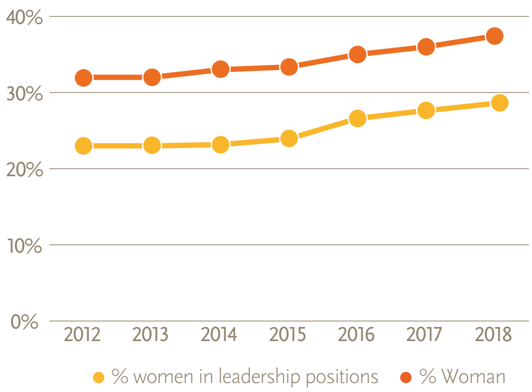
Objective:
increase by 30% the proportion of women in leadership positions.

Women in Repsol (%)



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



Gender indicators (1)	2018	2017
% women in the Company	37.4	36.0
% women among new hires	50.7	50.0
% of women in worldwide leadership positions (2)	29.2	28.2
% women in leadership positions in Spain(2)	34.7	33.1
% of women in worldwide management positions (3)	41.1	35.7
% women in management positions in Spain(3)	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[1] is shown below, by categories, age and gender:

Remuneration broken down by category

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

Remuneration broken down by age

Job category	Average remuneration(1) Women	Men	Wage gap by gender(2)
<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 ítems, 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 diff erent companies or sectors. Remuneration of employees under collective bargaining agreements, to whom are directly applied the levels specifed in the agreements, and in no case do these establish remunerative differences on the basis of gender. It is not advisbable 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

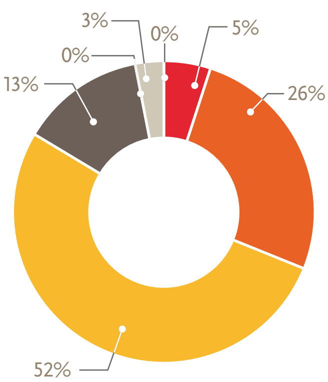
An analysis with a more detailed breakdown by companies, categories and ages allowing for gender comparison of increasingly similar situations yields result of 0.95 for all employees of the Repsol Group in Spain (weighted average ratio of women's average remuneration divided by men's average remuneration

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

Average staff costs per employee[2] stood at 70.7 thousand euros in 2018 (71.6 thousand euros in 2017). In 2018 total spending on social welfare[3] 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[4] 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.

GSP

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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° 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 (1)	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 (1)	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 (1)	23% (2)	9%
Voluntary turnover rate (2)	6%	4%
Total executive turnover rate (3)	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 **9th 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[1]

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.

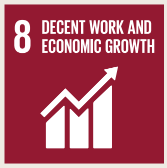
Our responsibility: to respect and remedy

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

1. For further community relations and human rights framework, see 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 presentedin a private audience to the European Parliament in 2019 at the "Multisectorail Diaglog: European entreprises and Due Diligence in Latin America" private.

GSP

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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 are 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

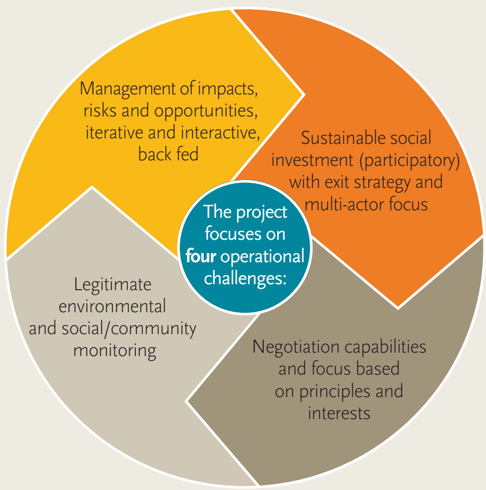
The company identifies and strengthens positive impacts and the shared value of regions where Repsol is present as a result of a consensus with communities. The context determines the scope and focus of the investment. In 2018 social investment totaled €43.3 million. Here are a few examples:

Sustainable co-existence project

Peru

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..
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	**Program to the benefit of communities within the area of influence of Block CPO9** 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).
Brazil	**"Costa Atlántica-Fundación SOS"** In collaboration with experts from the local university, the project focuses onn 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. **"Repsol-Sinopec educational platform"**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.
Ecuador	**Community Education Assistance Programs** 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.
Peru	**Electrical interconnection in the Nuevo Mundo Community** Electrical interconnection project between the Bajo Urubamba Transmission Network and the Nuevo Mundo Community's Distribution Network. The objective is to guarante 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. Investment: over €1.3 million.
Indonesia	**Community against forest fire** 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. **"Development program for the Suku Anak Dalam indigenous people"** 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.
Libya	**Provision of medical equipment** 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 arround 120,000 people.

49.1%

voluntary social investment vs. total social investment

GSP

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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 2020

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(1)	-	-
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 trough 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 aras 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[1]

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, anufactured, 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.

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 the 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.

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

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

8 DECENT WORK AND ECONOMIC GROWTH

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

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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[1]	2018	2017
PSIR[2] 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_2 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 [1]	2018	2017
Frequency Rate (FR) [2]	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)[3]	1.59	1.43
N° of company employee fatalities	-	0
N° 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 acccordance 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
TOTAL	153

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 [1]	2018	2017
Number of hydrocarbon spills > 1 barrel reaching the environment	25	17
Volume of hydrocarbon spills reaching the environment (tons) [1]	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.

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

6.4. Environment[1]

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

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.

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
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Ambition:
Cause neutral environmental impact in management of resources.

GSP
20
20

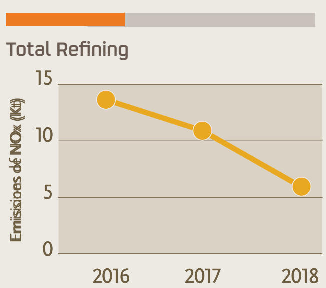
Objective:
implement Circular Economy projects that make a positive impact in society.

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/Nm3 to 10-20 mg/Nm[3].

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

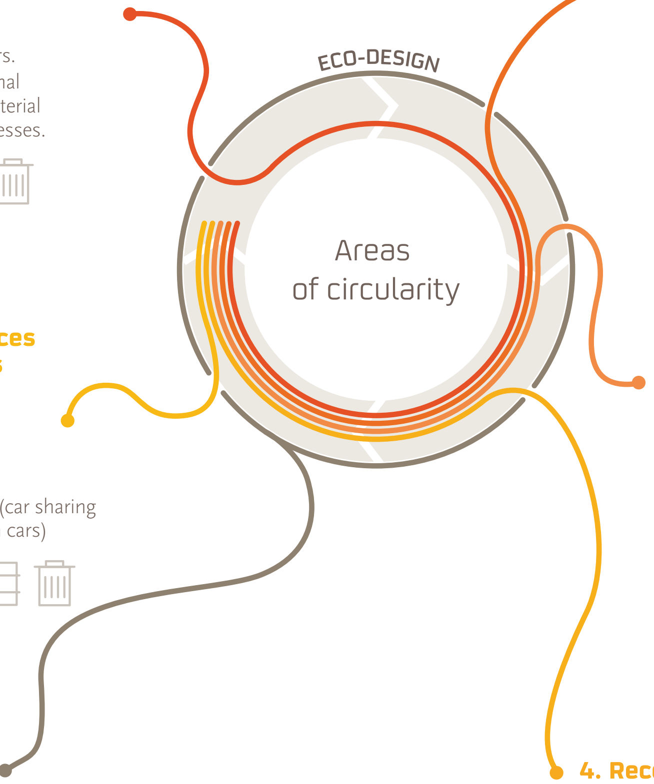
Use of alternate raw materials in the production of Company products.

Examples:
- Use of CO_2 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.

GSP 2020

Objective:
Minimize generation of waste and improve waste management.

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

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.

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 esssential 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.

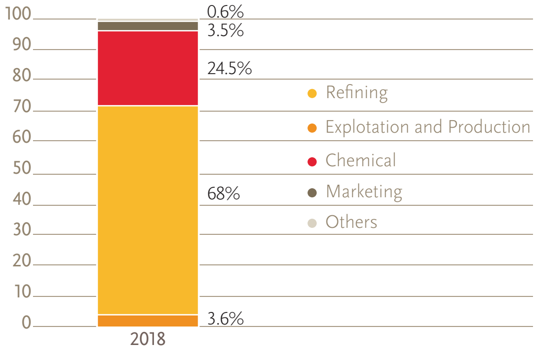
One example of this is the progress made on the La Pampilla Refinery Water Plan (Peru), as a result of a 2017 analysis of the usage and consumption of this resource at the facility to conduct a search for new areas of improvement. New initiatives have been implemented in relation to the monitoring of 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

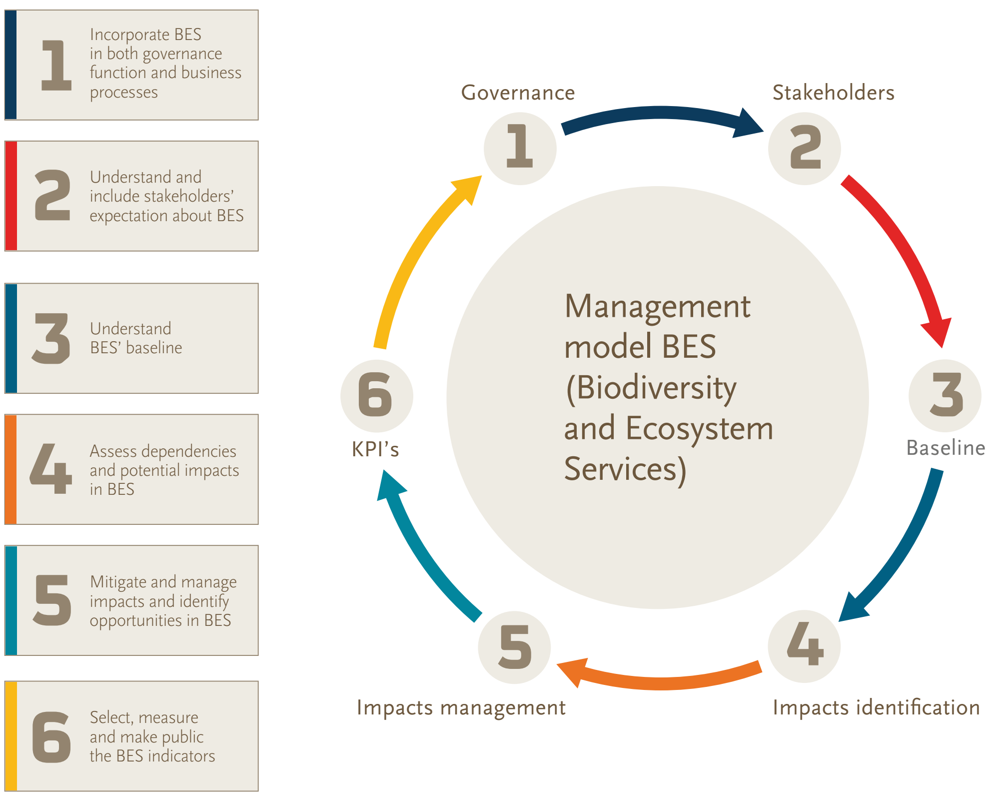
For further information on water, see **www.repsol.com**

- 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 Compaby 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_2
- 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.

7 AFFORDABLE AND CLEAN ENERGY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

17 PARTNERSHIPS FOR THE GOALS

GSP

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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_2**, 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_2reduction 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_2 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_2 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_2 polymer technology to replace commodities originating from fossils included the project to develop a polycarbonate *polyol with a high molecular weight (max. 30% CO_2),* 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) (1)(2)	84	72
Nº 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.

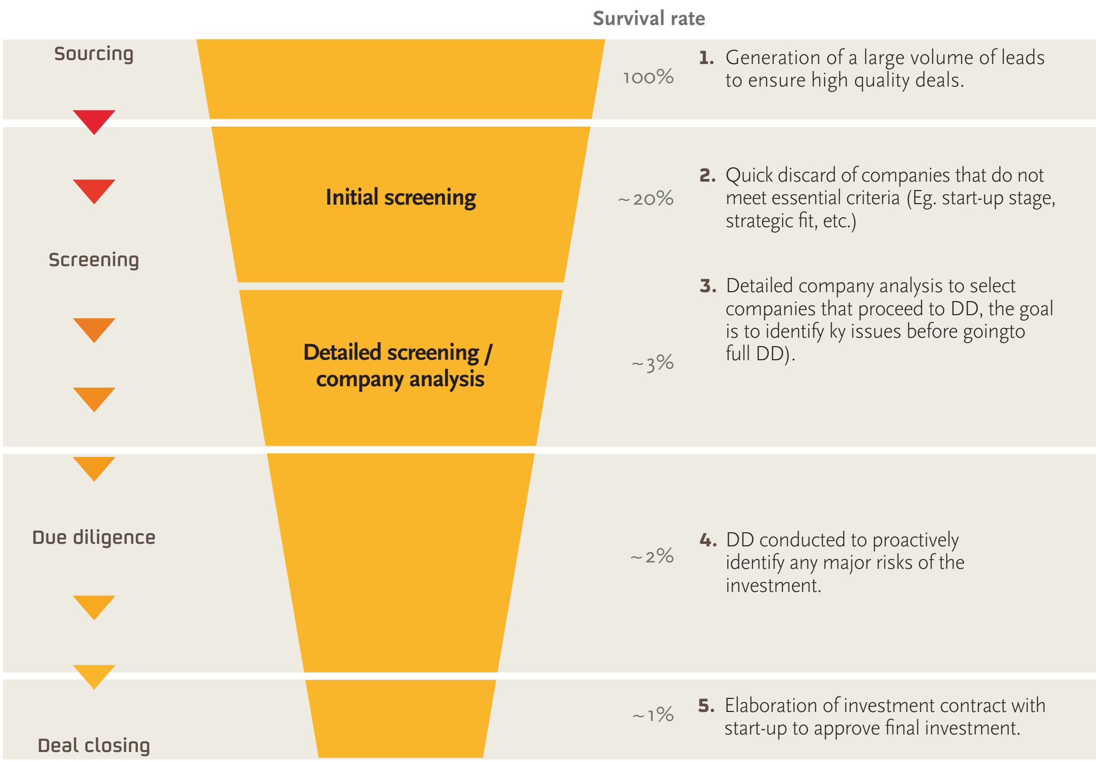
The Corporate Venturing operating model focuses on those 6 areas in order to complement Repsol's internal R+D capacities by bringing in external innovation. This is carried out by five-year funds investing in Start-ups. For the 2016-2020 fund, Repsol has committed to making a contribution of €85 million. 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
Focus on search fields aligned with your business challenges. Continuous search of opportunities and surfacing of new developments. Thought partnership to test assumptions on how your business might evolve and support in assessing value in potential new business areas.	Collaboration with Technology Lab Repsol to provide holistic solutions for your business challenges. Strong gobal network including other VCs, incubators, accelerators, academia,etc. Deep expertise in evaluating start-up potential and fit with your business during investment process. Strong support to start-ups to ensure the highest probability of success and value delivered to your business.	Reduced risk enviroment to test and assess potential disruptors. Side-by-side working model with the businesses to ensure continuous alignment of all stakeholders. Early definition of pilots in strong collaboration with you and start-up. Assistance with the integration of those concepts and business models that demonstrate potential for long term value creation.

The investment process is as follows:

Process. *Corporate Venturing*



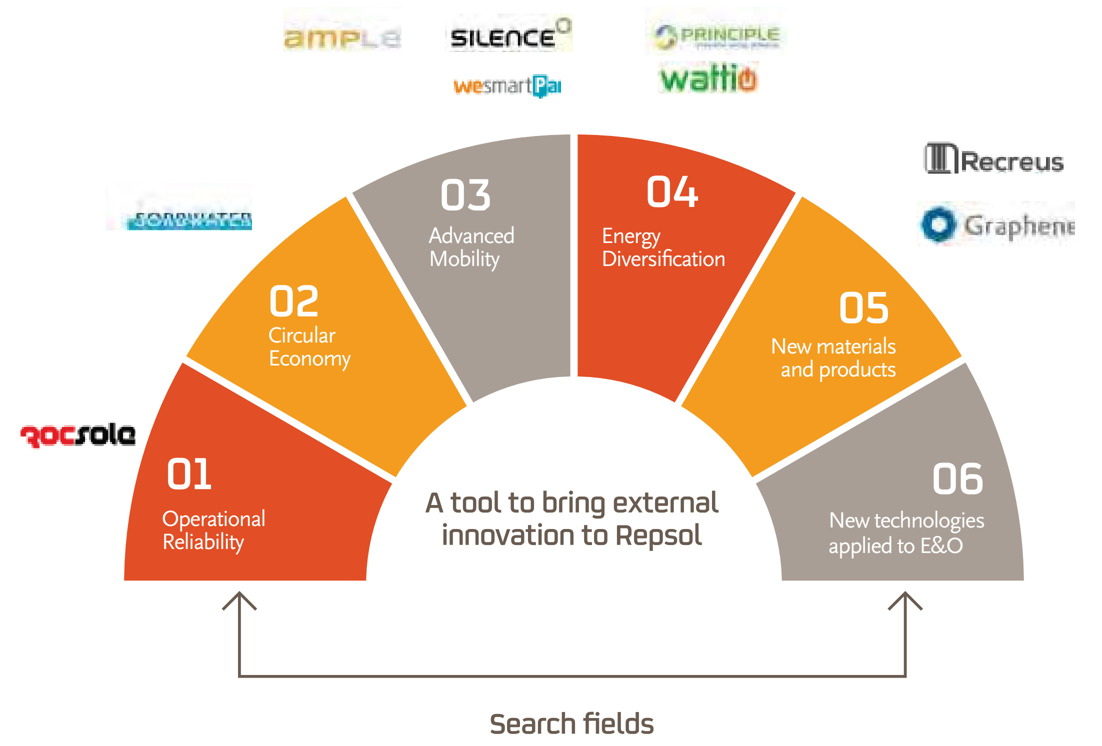
In addition to direct investment in start-ups, alongside its Oil & Gas sector partners Repsol also works on the OGCI **Climate Investments** (OCGI-CI). This is a vehicle to channel a $1,000 million investment commitment over ten years to start-ups in order to develop and accelerate technologies that 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_2; 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_2 ; 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 intellgience, 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 managementof 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.

6.6. Responsible tax policy

Repsol acts transparently at all times.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

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[1] Application and compliance evidence in Repsol

PRINCIPLES	EVIDENCE
1 Accountability and Governance Tax is a crucial part of corporate responsibility and it is overseen by the Board of Directors.	• Tax policy approved by the Board of Directors is binding on all Group employees. • The Board of Directors directly evolved in developing the Group's tax strategy and management. • Tax objectives incorporated to Repsol Global Sustainability Plan
2 Compliance 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 courtries where we create value.	• Internal rules and regulations to ensure full compliance of tax obligations. • Organizational structure and adequate resources to comply with tax obligations. • Internal process for setting transfer prices aligned with value created and the arm's length principle.
3 Business structure We use corporate structures driven bt commercial considerations, aligned activity business and wich have genuine substance. We do not seek abusive tax results..	• Corporate structure aligned with business and appropriate for legal requirements and corporate governance standards. • Streamlining of corporate structure. • No use of instrumental entities in tax havens or special purpose vehicles.
4 Relationship with authorities We seek, wherever possible, to develop cooperative relationships with tax authorities based on mutual respect, transparency and trust.	• Application of Spanish Code of Good Tax Practices and similar initiatives in other countries (Portugal, Singapore, United Kingdom and the Netherlands). • Voluntary submission to Spanish tax agency of tax transparency reports for 2015, 2016 and 2017. • Voluntary participation in pilot program of International Compliance Assurance Programme (ICAP).
5 Seeking and accepting tax incentives When we claim tax incentives offered by government authorities, we seek to ensure that they are transparent and consistent with statutory and regulatory frameworks.	• Use of tax benefits with respect for letter and spirit of law. • Verification that incentives are generally accessible to all economic operators. • Support for publication of tax incentives of oil contracts by authorities and governments.
6 Supporting effective tax system 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.	• Collaboration with international bodies (OECD, UN and EU), governments and NGOs. • Participation in international initiatives of responsable tax and tax governance (B-team, UNE).
7 Transparency We provide regularly information to our stakeholders, including investors, policy makers, employees, civil society and the general public, about our approach and taxes paid.	• Transparency leaders in Spain according to reports published by a number of observatories. • Publication of tax payments by country. • Detailed tax information on website and in annual reports.

(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, responsable tax policy and good tax governance. It may be found at www.bteam.org

Responsible tax policy

The Group has a specific section on its corporate website with information on tax strategy and policy, at **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.

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[1].

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[2].

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**[3] on net income was as follows:

Item	2018 Amount	2018 Rate	2017 Amount	2017 Rate
Income tax	1,494	40.4%[(1)]	1,122	37.9%
Total tax burden[(2)]	2,464	52.9%[(2)]	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
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Ambition:
Be publicly recognized as an honest and transparent company in tax-related matters.

Result generated and taxes effectively paid[1] in 2018, by country:

€ million	Adjusted net income[2]	Tax burden: Total	Tax burden: Income tax	Tax burden: Other taxes on profit	Taxes collected: Total	Taxes collected: VAT	Taxes collected: TH[3]	Taxes collected: Other	Total 2018	Total 2017
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
Europe	**1,257**	**1,287**	**854**	**433**	**9,819**	**3,484**	**5,940**	**395**	**11,106**	**10,159**
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	-	-	-	-	-
Latam & Caribbean	**303**	**569**	**148**	**421**	**592**	**331**	**178**	**82**	**1,161**	**916**
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
Asia and Oceania	**628**	**563**	**235**	**328**	**37**	**11**	**-**	**27**	**601**	**506**
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	-
North America	**42**	**117**	**12**	**105**	**50**	**(12)**	**-**	**62**	**167**	**150**
Libya	196	519	473	45	1	-	-	1	520	225
Algeria	36	40	34	6	4	-	-	4	44	21
Other	(121)	-	-	-	2	-	-	1	2	2
Africa	**111**	**559**	**507**	**52**	**7**	**-**	**-**	**7**	**566**	**248**
TOTAL	**2,341**	**3,095**	**1,755**	**1,339**	**10,506**	**3,815**	**6,118**	**572**	**13,600**	**11,979**

(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 aftertax 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[1], 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[2], 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.(1)	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

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.[1]	Bermuda	5.66%	Active	53.43	28.18	0%	-
Oleoducto de Crudos Pesados (OCP) Ltd.[2]	Cayman Islands	29.66%	Active	45.72	44.33	0%	-
Transasia Pipeline, Co.[3]	Mauritious	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[1]	Trinidad and Tobago	30%	Active	646.70	12.22	57.25%	(27.84)
Repsol Angostura, Ltd.[2]	Trinidad and Tobago	100%	Active	2.00	(1.98)	55%	0.68
Repsol Exploración Tobago, S.A. Sucursal en Trinidad y Tobago[3]	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.

The Company has an **Ethics and Compliance Channel** (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**[1].

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 enhaces ethical and responsible behavior.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

GSP 2020

Objective: 100% employees informed about prevention of and fight against corruption.

1. 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.

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Ambition:
No cases of corruption.

Ethics and compliance	2018	2017
Number of employees trained On-line in Ethics and Conduct Code(1)	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(2)	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[1] 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.

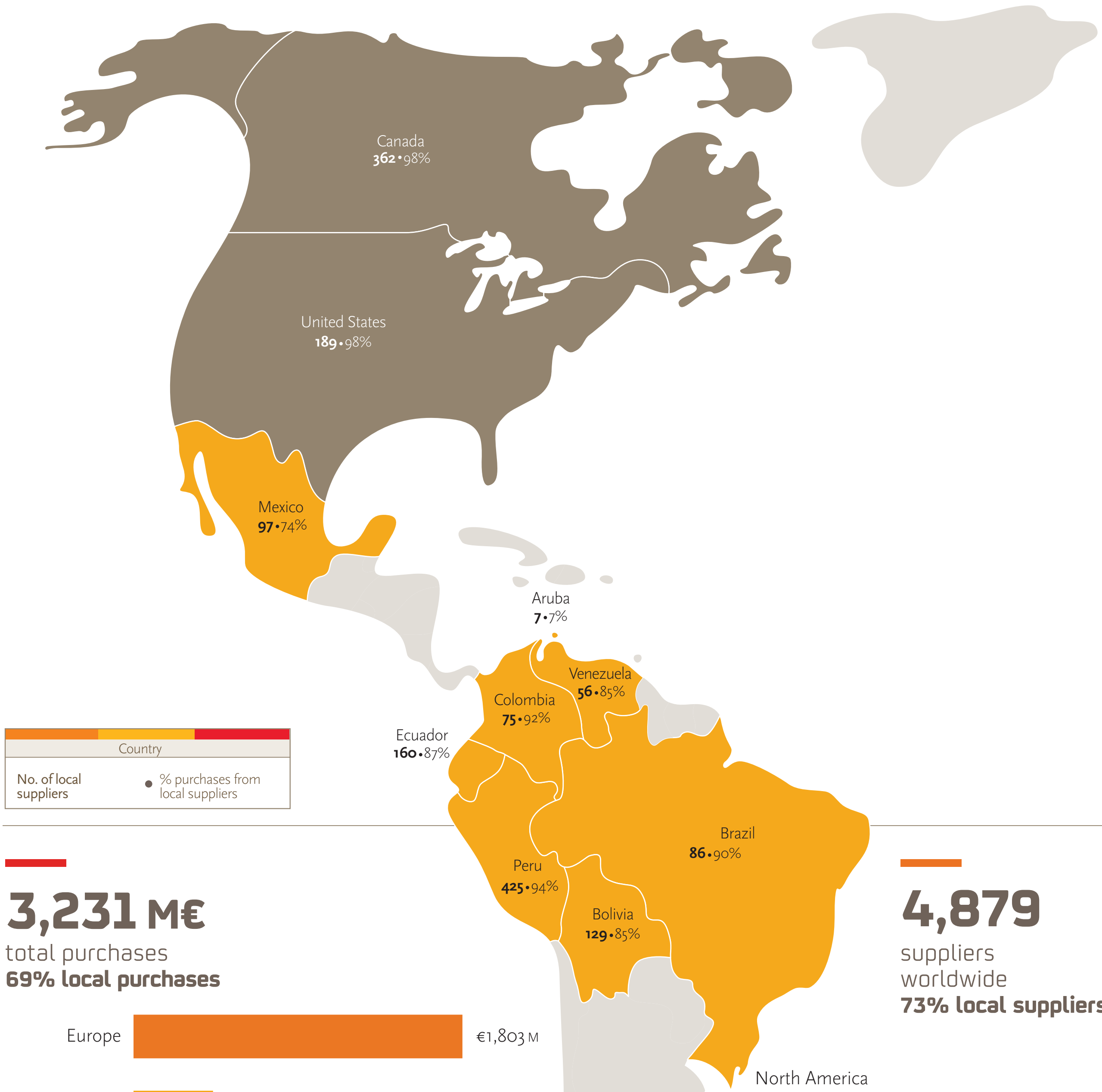
Environmental and social assessment of suppliers

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.

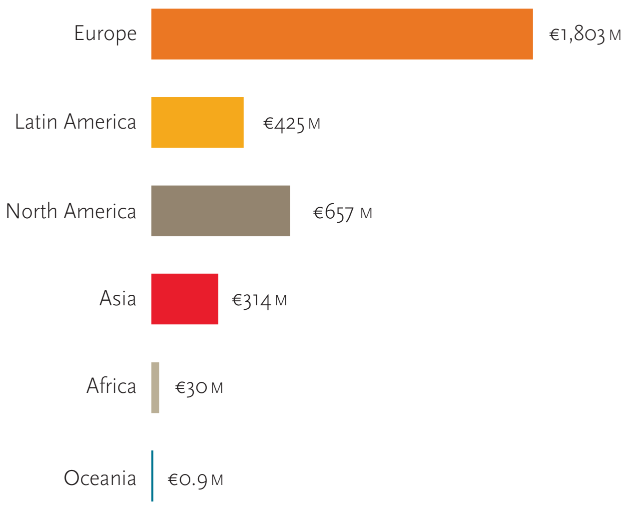
Aspects of integrity, corruption and bribery were verified in 2018 by means of the Thomson Reuters external service World Check One on 4,261 suppliers. A further 42 supplier assessment audits were performed using the Repsol protocol, and among other aspects these carried out an in situ verification with 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.

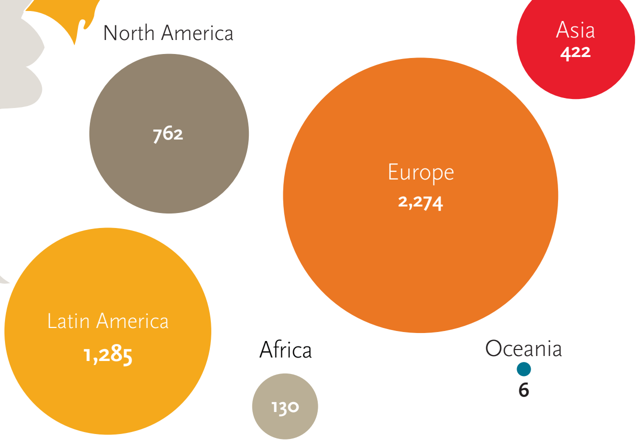
Company expenditure in the countries in which it operates stands at €3.231 million, 69% of which is accounted for by local suppliers.



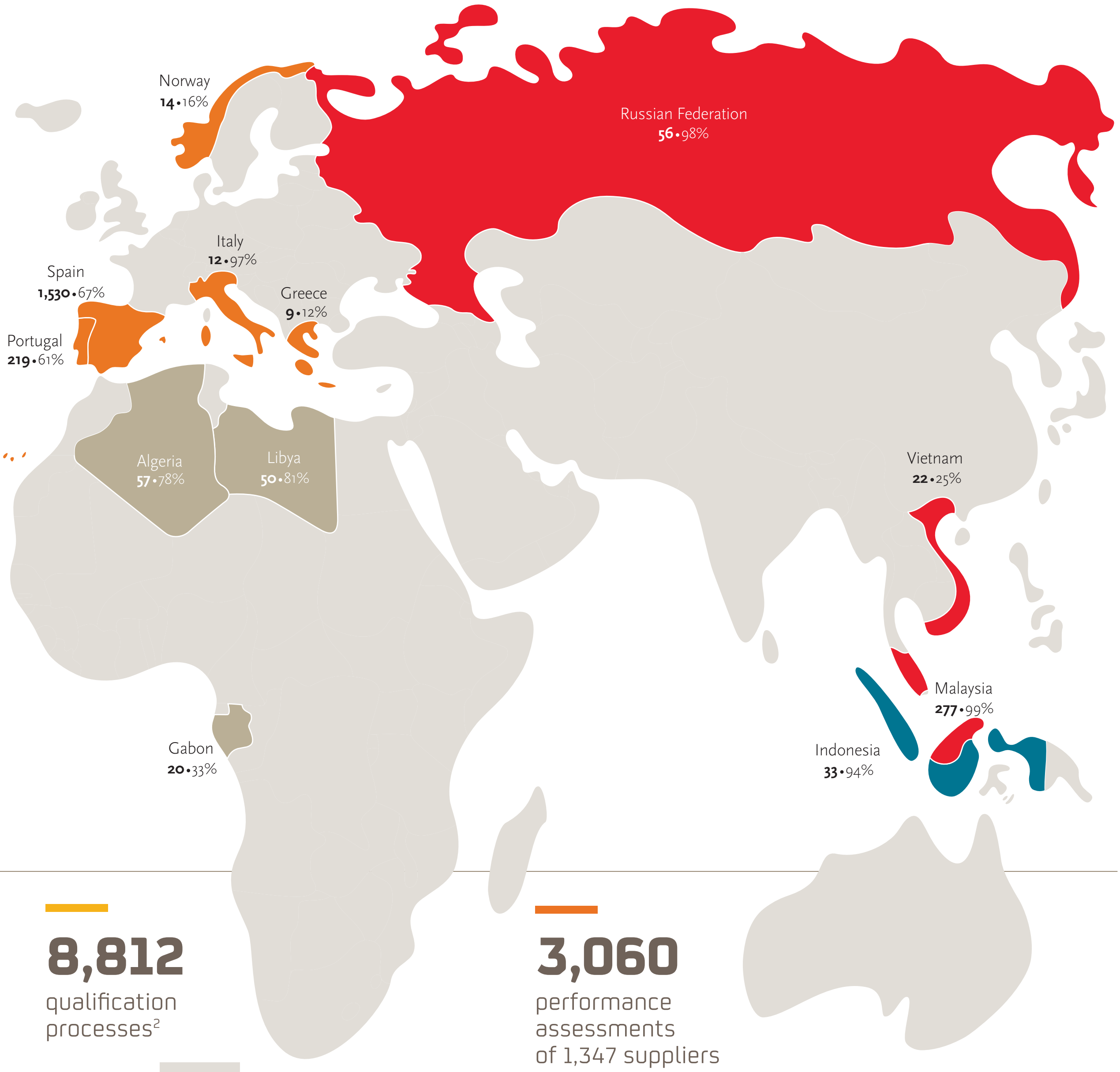
3,231 M€
total purchases
69% local purchases



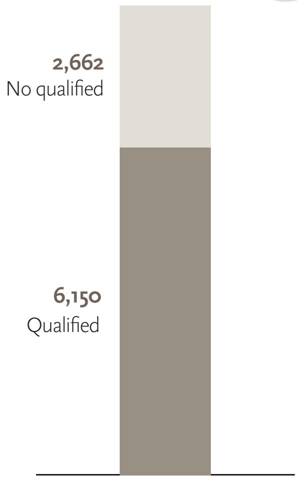
4,879
suppliers
worldwide
73% local suppliers[1]



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[2]



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.

Macroeonomic 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.

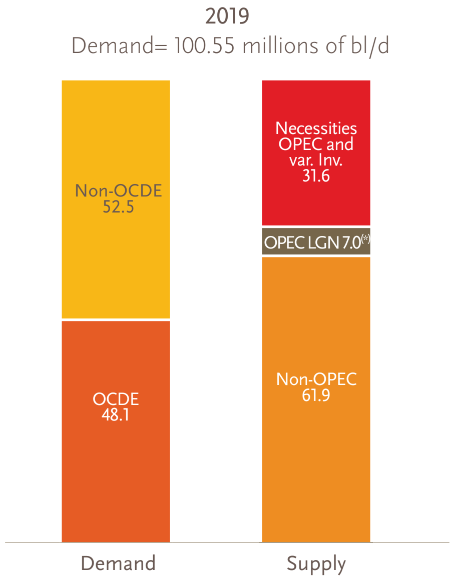
Energy sector outlook

Short-term energy sectoroutlook

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.

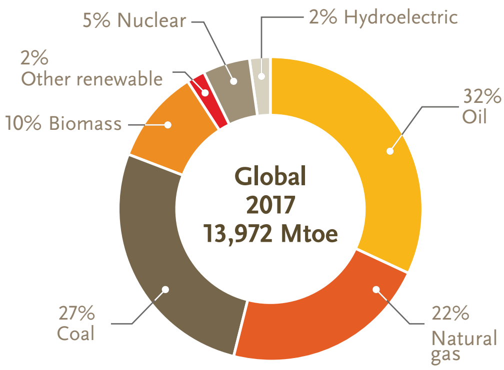
In spite of doubts concerning production trends, on the demand side strong growth of exports is expected (both of liquefied natural gas - LNG - and gas via pipeline). In 2019, both the liquefaction capacity due to the commissioning of new export terminals and the capacity of gas via pipeline to Mexico will continue to increase. New industrial plants are also expected to commence operations.

Long-term energy sector outlook

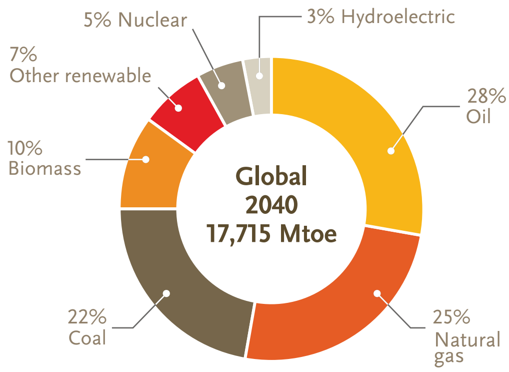
On a global scale, hydrocarbons contribute more than half of the primary energy consumed. Specifically, 32% of global primary energy consumption is derived from oil, which is the most commonly used energy source.

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

7.2. Outlook for business

720 KBoe/d
in 2019

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_2 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[1] 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[2], and the reader should therefore consider them in addition to, but not instead of, the latter.

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

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[3] 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[4]) 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:

	Fourth Quarter	
Millions of euros	2018	2017 [2]
Divestments	24	(72)
Workforce restructuring	(13)	(12)
Impairment	(559)	(612)
Provisions and other[1]	423	377
Discontinued operations	-	115
Total	**(125)**	**(204)**

(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:

	Fourth Quarter											
			Adjustments									
	Adjusted Result		Reclassification of Joint Ventures		Special items		Inventory Effectl[2]		Total Adjustments		EU-IFRS profit/loss	
€ Million	2018	2017[3]	2018	2017[3]	2018	2017	2018	2017	2018	2017	2018	2017[3]
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
Net income before tax	**1,104**	**803**	**38**	**195**	**(391)**	**16**	**(479)**	**209**	**(832)**	**420**	**272**	**1,223**
Income tax	(464)	(208)	(38)	(195)	266	(336)	124	(52)	352	(583)	(112)	(791)
Profit from continuing operations	**640**	**595**	**-**	**-**	**(125)**	**(320)**	**(355)**	**157**	**(480)**	**(163)**	**160**	**432**
Income attributed to minority interests for continuing operations	(8)	(7)	-	-	-	1	18	(3)	18	(2)	10	(9)
Net income from continuing activities attributable to the parent	**632**	**588**	**-**	**-**	**(125)**	**(319)**	**(337)**	**154**	**(462)**	**(165)**	**170**	**423**
Profit from discontinued operations	-	-	-	-	-	115	-	-	-	115	-	115
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY	**632**	**588**	**-**	**-**	**(125)**	**(204)**	**(337)**	**154**	**(462)**	**(50)**	**170**	**538**

(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									
	Adjusted Result		Reclassification of Joint Ventures		Special items		Inventory Effect(2)		Total Adjustments		EU-IFRS profit/loss	
	2018	2017(3)	2018	2017(3)	2018	2017	2018	2017	2018	2017	2018	2017(3)
Operating income	4,396	3,214(1)	(1,204)	(610)	(633)	42	(106)	143	(1,943)	(425)	2,453	2,789
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
Net income before tax	**3,949**	**2,907**	**(109)**	**96**	**(402)**	**(39)**	**(105)**	**143**	**(616)**	**200**	**3,333**	**3,107**
Income tax	(1.569)	(738)	109	(96)	46	(350)	28	(36)	183	(482)	(1,386)	(1,220)
Profit from continuing operations	**2,380**	**2,169**	**-**	**-**	**(356)**	**(389)**	**(77)**	**107**	**(433)**	**(282)**	**1,947**	**1,887**
Income attributed to minority interests for continuing operations	(28)	(38)	-	-	1	1	9	(3)	10	(2)	(18)	(40)
Net income from continuing activities attributable to the parent	**2,352**	**2,131**	**-**	**-**	**(355)**	**(388)**	**(68)**	**104**	**(423)**	**(284)**	**1,929**	**1,847**
Profit from discontinued operations	-	-	-	-	412	274	-	-	412	274	412	274
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT COMPANY	**2,352**	**2,131**	**-**	**-**	**57**	**(114)**	**(68)**	**104**	**(11)**	**(10)**	**2,341**	**2,121**

(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 & Gassector.

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(1)	
	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)
EBITDA	**1,680**	**2,008**	**(539)**	**(497)**	**-**	**-**	**1,141**	**1,511**
EBITDA at CCS	**2,160**	**1,799**	**(539)**	**(497)**	**(480)**	**209**	**1,141**	**1,511**

(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[1]	
	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)
EBITDA	**7,513**	**6,723**	**(1,820)**	**(1,470)**	**-**	**-**	**5,693**	**5,253**
EBITDA at CCS	**7,619**	**6,580**	**(1,820)**	**(1,470)**	**(106)**	**143**	**5,693**	**5,253**

(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)[1] / (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**
EU-IFRS operating profit	**2,453**	**2,789**
Joint Ventures reclassification	1,204	610
Income tax [1]	(1,489)	(1,241)
Results of companies accounted for using the equity method - net of tax	88	50
I. ROACE result at average weighted cost	**2,256**	**2,208**

Denominator	**2018**	**2017**
Total equity	30,914	30,063
Net financial debt	3,439	6,267
Capital employed at year-end	**34,353**	**36,330**
II. Average capital employed[2]	**33,730**	**34,520**
ROACE (I/II)	**6.7**	**6.4**

(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)
Free cash flow (I+II)	**(144)**	**884**	**(164)**	**73**	**(308)**	**957**
Generated cash flow	**(1,017)**	**683**	**(163)**	**78**	**(1,180)**	**761**
III. Cash flows from / (used in) financing activities and others(1)	(332)	(894)	125	(50)	(207)	(944)
Net increase / (decrease) in cash and cash equivalents (I+II+III)	**(476)**	**(10)**	**(39)**	**23**	**(515)**	**13**
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)
Free cash flow (I+II)	**5,056**	**2,560**	**(1,836)**	**(236)**	**3,220**	**2,324**
Cash flow generated	**2,706**	**1,391**	**(1,832)**	**(229)**	**874**	**1,162**
III. Cash flows from / (used in) financing activities and others(1)	(4,855)	(2,658)	1,820	248	(3,035)	(2,410)
Net increase / (decrease) in cash and cash equivalents (I+II+III)	**201**	**(98)**	**(16)**	**12**	**185**	**(86)**
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[1]	1,456	231	-	-	1,456	231
Liquidity	**8,742**	**7,554**	**(251)**	**(219)**	**8,491**	**7,335**

(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[1]**	
	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
Total	**1,855**	**1,093**	**(143)**	**(9)**	**1,712**	**1,084**

	At December 31					
	Operating investments		**Joint venture reclassification and other**		**EU-IFRS[1]**	
	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
Total	**3,874**	**2,936**	**(406)**	**(309)**	**3,468**	**2,627**

(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 [1]		Figure according to EU-IFRS balance sheet	
	dec-18	**dec-17**	**dec-18**	**dec-17**	**dec-18**	**dec-17**
Non-current assets						
Non-current financial instruments[2]	87	360	887	1,560	974	1,920
Current assets						
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
Non-current liabilities[3]						
Non-current financial liabilities	(6,625)	(7,611)	(2,767)	(2,469)	(9,392)	(10,080)
Current liabilities[3]						
Current financial liabilities	(3,827)	(4,160)	(462)	(46)	(4,289)	(4,206)
Items not included on the balance sheet						
Net mark to market valuation of financial derivatives (ex: exchange rate)[4]	275	70	(227)	-	48	70
Net debt	**(3,439)**	**(6,267)**			**(6,162)**	**(7,438)**

(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)
Current gross debt	**(3,756)**	**(4,142)**	**(463)**	**(45)**	**(4,219)**	**(4,187)**
Non-current financial liabilities	(6,570)	(7,542)	(2,767)	(2,470)	(9,337)	(10,012)
Non-current gross debt	**(6,570)**	**(7,542)**	**(2,767)**	**(2,470)**	**(9,337)**	**(10,012)**
Total Gross Debt	**(10,326)**	**(11,684)**	**(3,230)**	**(2,515)**	**(13,556)**	**(14,199)**

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.

	Fourth Quarter					
	Group Reporting Model		Reclassif. Joint Arrangements		EU-IFRS	
€ Million	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
Interest cover	**4.4%**	**4.1%**			**5.2%**	**4.5%**

	At December 31					
	Group Reporting Model		Reclassif. Joint Arrangements		EU-IFRS	
€ Million	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
Interest cover	**3.8%**	**5.2%**			**4.0%**	**5.5%**

Appendix II. Risks

Risk management

Repsol's Integrated Risk Management System - (SGIR)

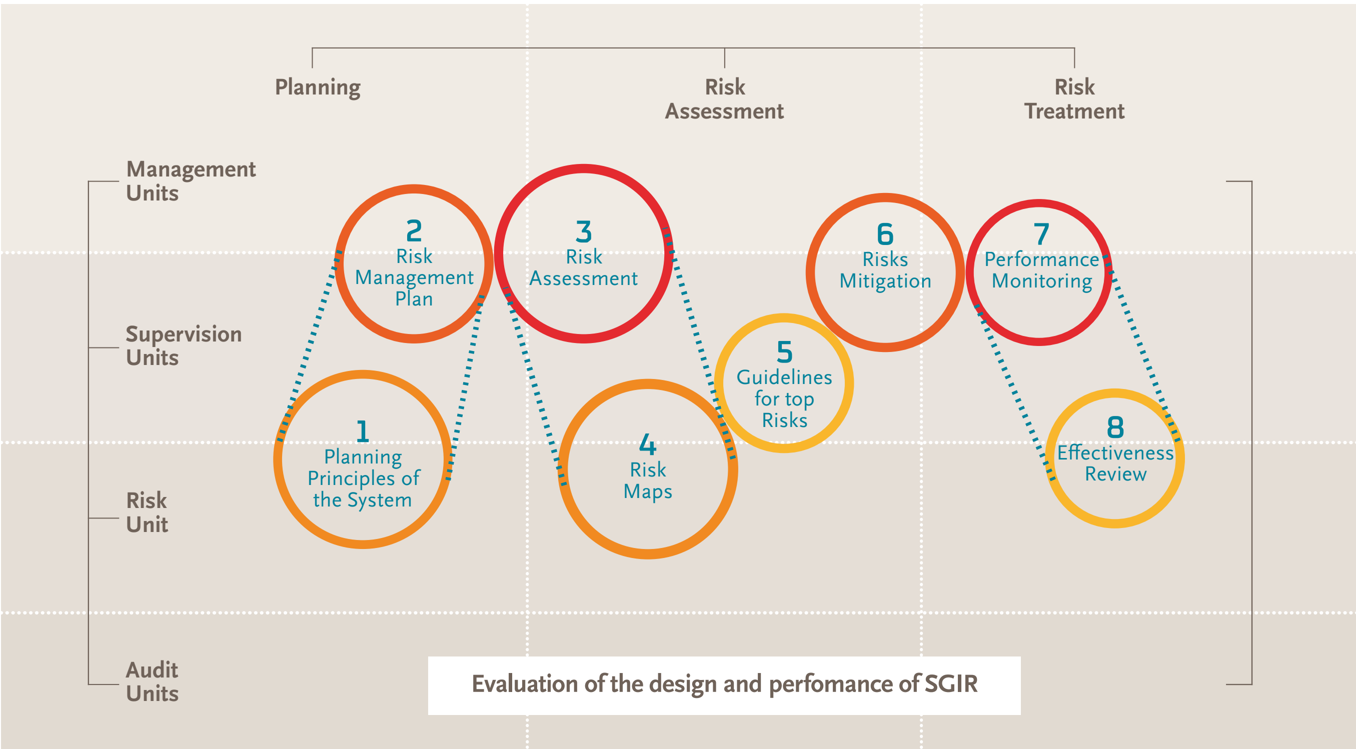
Repsol has an integrated risk management system designed to identify, analyze, and control risks from a global perspective. The Integrated Risk Management System (SGIR in Spanish) provides a comprehensive and reliable view of all risks that might affect the Company. The SGIR is based on a Risk Management 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:

Board of Directors

Approves the **policies and strategies of the Company**, which includes the risk control and management policy and the **oversight** of internal information and control systems.

Audit and Control Committee

Periodically checks the **efficacy** of internal control systems, internal audit and risk management systems so that the principal risks are properly identified, managed and disclosed.

Sustainability Committee

Evaluates systems for the management and control of risks in non-financial matters, in particular those related to matters within its competence.

Executive Committee

Approves **governance elements** in the field of risk management, monitors the correctness of the risk management implementation and **monitors** the Company's risk performance, including integration of the risk perspective in decision-making processes.

Risk Management Units

Responsible for the **direct risk management** in daily operations (identification, analysis, evaluation and treatment of risks).

Risk Supervisory Units

Supervisory Units: units with a governance function specialized in the management of certain types of risks have the mission of facilitating and supervising the implementation of **effective risk management** practices in the Management Units providing them with continuous advice.

Risk Unit: ensures that risk management is global, homogeneous, comprehensive and effectively influences decision-making processes. Specifically, it ensures that the risk assessment process is based on a common methodology for the identification and assessment of risks by all responsible areas, allowing a simple and robust characterization of risks, quantification of their frequency or probability and their potential economic **consequences on reputation** or image **and/or on people,** should they materialize. Each year, in order to obtain the **Group's Risk Map**, it coordinates the drawing up of the individual maps of each of the Management Units.

Risk Audit Units

They evaluate the design and operation of risk management systems to ensure that they are properly identified, measured, prioritized and controlled according to current standards and good industry practice.

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[1] 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[2] in addition to an Internal Audit Unit focused on evaluating and improving existing controls in order to verify that potential risks that could affect the achievement of the Group's objectives are reasonably identified, measured and controlled.

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.

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 depositioning:	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 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 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 proyects of the Repsol Group are carried out though joint ventures associated in which the Group's capacity to control and influence the functioning and management of operations, and to indentity 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.

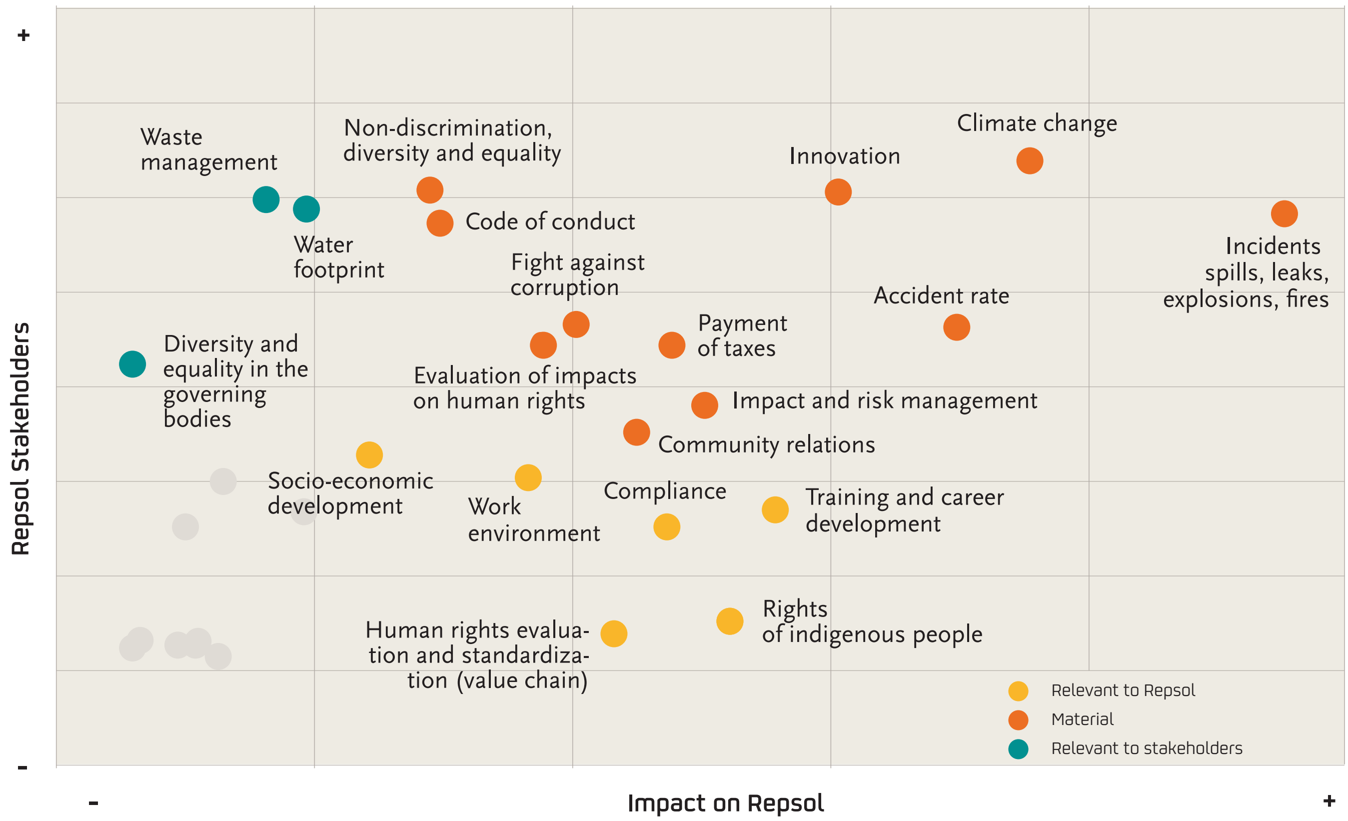
Appendix III. GRI indicators

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	Environment	6.3	Environment (Water)
Waste management		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 and Transparency	6.6	Responsible tax policy
Fight against corruption		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.[1]

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 employeed 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
Total		**25,288**	**25,085**

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
Total		**22,781**	**22,425**

The data published reflect the number of fixed employees, irrespective of their percentage of employment.

Annual average number of contracts

	<30				30-50				>50					
	Permanent contracts		Temporary contracts		Permanent contracts		Temporary contracts		Permanent contracts		Temporary contracts			
Category	**Full time**	**Part time**	**Full time**	**Part time**	**Full time**	**Part time**	**Full time**	**Part time**	**Full time**	**Part time**	**Full time**	**Part time**	**Total Full time**	**Total Part time**
Executives	**-**	**-**	**-**	**-**	**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
Technical managers	**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
Technicians	**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
Administrative staff	**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
Manual workers and junior personnel	**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
General total	**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
Total employees	Men	16,066	16,272
	Women	9,222	8,813
Total		**25,288**	**25,085**

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(1) / median annual total compensation for all employees(2)	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(3)	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.(3)	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
Direct economic value generated:	**51,186**	**42,613**
Sales and other operating income	50,946	42,378
Finance income	177	194
Gains on disposal of fixed assets	62	41
Economic value distributed:	**47,623**	**39,422**
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
Retained ecomnomic value	**3,562**	**3,168**
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[1]	Country minimum wage (local currency/month)	Repsol minimun wage [2] (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 form the local community in 2018
Argelia	8.11 %
Bolivia	88.89 %
Brazil	50.00 %
Canada	58.39 %
Colombia	75.00 %
Ecuador	90.48 %
USA	23.30 %
Spain	88.39 %

Country	% Executive personnel, Managers and Technical Managers form the local community in 2018
Indonesia	65.22 %
Libya	28.57 %
Malaysia	75.32 %
Mexico	50.00 %
Norway	67.80 %
Peru	79.46 %
Portugal	90.77 %
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 (millon euros)(*)

	2018	2017
Repsol	11.57	14.86
Repsol Foundations	9.69	8.62
Total	**21.26**	**23.48**

** 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)

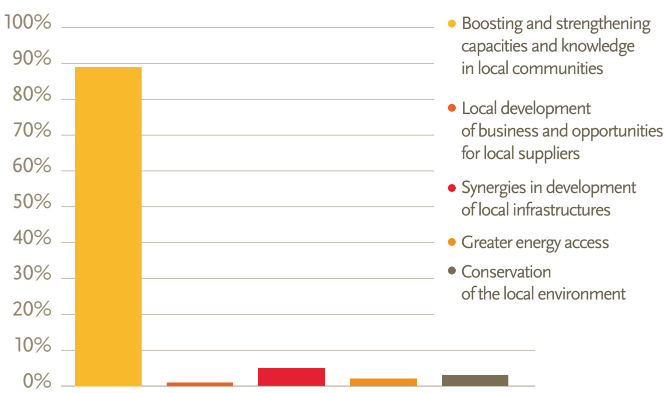
	2018	2017
Contribution in cash	17.45	22.21
Contributions in time	0.52	0.42
Contributions in kind	2.65	0.14
Management costs	0.64	0.71
Total	**21.26**	**23.48**

Voluntary social investment by type of project (millon 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(*)	0.47	0.61
Total	**21.26**	**23.48[1]**

* Management costs without specific allocation to projects €0.47 million.

Voluntary sociel investment by type of proyect [%]



Voluntary social investment, by country (million euros)

	2018	2017
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 Stated	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
Total	**21.26**	**23.48**

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:

Mandatory social investment by country (millon euros)

	2018	2017
Brazil	9.24	6.09
Canada	0.00[1]	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
Total	**22.04**	**15.81**

(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_2 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_2 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_2. **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. There 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 auser 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_2 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[1].

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 SO2, NOx and COVNMs (t)	2017
SO2	29,923.64
NOx	20,603.19
COVMN	35,889.99

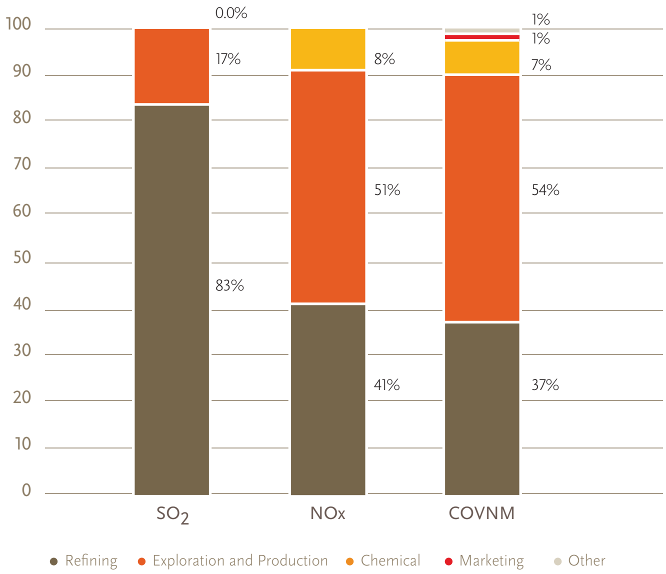
SO2 and NOX emissions in the refining and chemical businesses are measured with continuous concentration and smoke flow analyzers. When there is no continuous nanalizer, internal environmental parameter guideline are applied, where the methodology for calculating these emissions is established.

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

Disclosure of major atmospheric emissions by activity



SO2 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_2 /thousands tons of processed crude oil	0.528	0.477
Tons of NO_X / 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(1)	2018	2017
Tons SO_2 / thousands of boe produced	0.030	0.030
Tons NO_2 / 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.

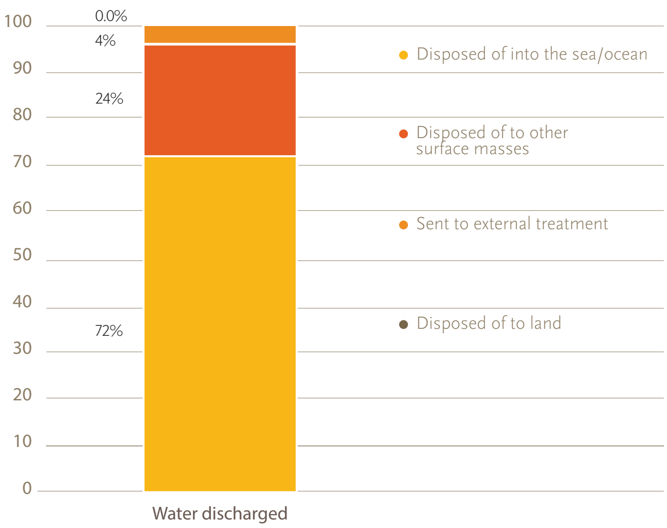
The Company also continues to enhance the quality of fuel in the La Pampilla Refinery of Peru, with the establishment of new diesel and gas production units of 0.005% sulfur content. The new facilities are capable of desulfurizing diesel and gasoline produced in the refinery with a maximum of 50 ppm 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:

Water discharged by destination



Treatment of discharged water

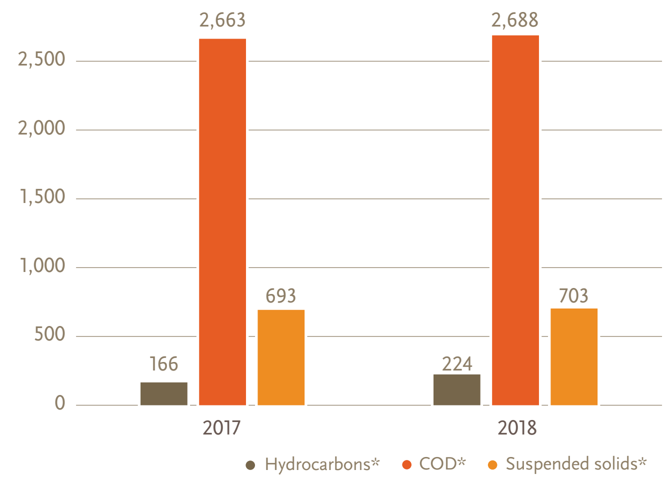
The fluid effluents from our facilities are subjected to purification processes to minimize their environmental impact and ensure compliance with legal requirements. The type of wastewater treatment process is specific to the activity and the characteristics of the site. Treatment may be a physical-chemical (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).

Main contaminants discharged



* 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.

1. International Sustainability & Carbon Certification.

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%
Total	224	100%

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

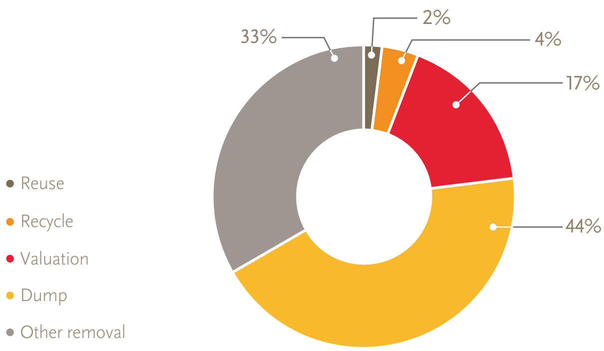
Disclosure of hazardous and non-hazardous waste per activity in 2018

Activity	Hazardous waste[2] (metric tons)	Non-hazardous waste (metric tons)
Exploration and Production[1]	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
Total	**70,342.6**	**147,439.5**

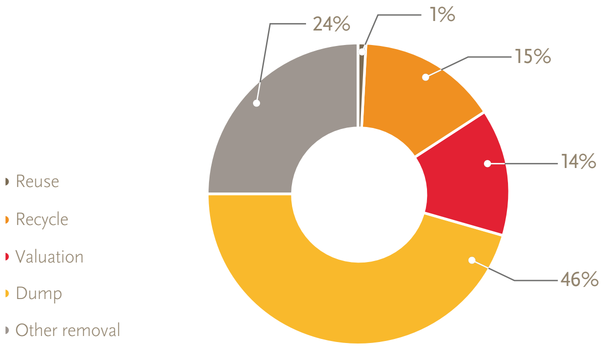
(1) Of the non-hazardous waste in E&P, somewhat more than 90% relate to the remediation of contaminated lands in Canada, a one-off activity not linked to ordinary operations.
(2) Hazardous waste increased by 75% in 2018 on the previous year, mainly due to the Refining (sludge from wáter separators in 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[1] 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[2] and IOGP[3] 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(1)	
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(1)
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 Viewer1 (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[1]

Number and percentage of new employee hires

Region		<30		30-50		>50		2018		2017	
		Nº	%	Nº	%	Nº	%	Nº	%	Nº	%
Africa	Women	1	100%	1	5%	-	-				
	Men	1	50%	1	1%	-	-				
	Total							**4**	**2%**		**2%**
Asia	Women	0		9	4%	-	-				
	Men	2	7%	6	1%	**-**	**-**				
	Total							**17**	**2%**	**43**	**4%**
Europe	Women	445	79%	640	13%	50	4%				
	Men	599	71%	586	8%	53	1%				
	Total							**2,373**	**13%**	**2,092**	**11%**
Latin America	Women	427	70%	316	28%	2	3%				
	Men	310	68%	218	16%	14	3%				
	Total							**1,287**	**32%**	**23**	**26%**
North America	Women	12	41%	26	8%	7	5%				
	Men	11	14%	66	11%	7	3%				
	Total							**129**	**10%**	**2**	**2%**
Total	Women	855	73%	992	15%	59	4%				
	Men	923	65%	877	9%	74	2%	**3,810**	**15%**	**3,157**	**13%**

(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.

Voluntary employee turnover

Region		<30	30-50	>50	2018	2017
Africa	Women	100%	15%	-	4%	1%
	Men	-	2%	-		
Asia	Women	50%	7%	24%	21%	6%
	Men	36%	29%	13%		
Europe	Women	17%	3%	1%	3%	1%
	Men	13%	2%	-		
Latin America	Women	40%	14%	5%	17%	17%
	Men	29%	11%	5%		
North America	Women	21%	11%	3%	7%	6%
	Men	12%	6%	2%		
Total	Women	29%	6%	2%	6%	4%
	Men	19%	5%	1%		

The Latin America turnover rate is concentrated in the Marketing business and is aligned with the economic growth and labor market of the country.

Total employee turnover

Region		<30	30-50	>50	2018	2017
Africa	Women	100%	20%	-	5%	4%
	Men	-	3%	-		
Asia	Women	50%	9%	29%	27%	9%
	Men	36%	32%	40%		
Europe	Women	91%	24%	17%	23%	5%
	Men	75%	13%	19%		
Latin America	Women	47%	17%	8%	23%	25%
	Men	40%	17%	10%		
North America	Women	24%	20%	25%	17%	14%
	Men	14%	13%	20%		
Oceania	Women	-	-	-	100%	700%
	Men	-	100%	-		
Total	Women	67%	22%	18%	23%	9%
	Men	59%	14%	19%		

This is calculated as the turnover of permanent employees out of the total number of employees at 12.31.2018.

Number of dismissals

		<30		30-50		>50		General total
Region		**Temporary contracts**	**Permanent contracts**	**Temporary contracts**	**Permanent contracts**	**Temporary contracts**	**Permanent contracts**	
Asia	**Men**	**-**	**-**	**-**	**5**	**-**	**7**	**12**
	Administrative staff	-	-	-	1	-	1	2
	Technical managers	-	-	-	4	-	2	6
	Technicians	-	-	-	-	-	4	4
	Women	**-**	**-**	**-**	**3**	**-**	**-**	**3**
	Administrative staff	-	-	-	1	-	-	1
	Technicians	-	-	-	2	-	-	2
Europe	**Men**	**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
	Women	**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	**Men**	**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
	Women	**-**	**15**	**-**	**14**	**-**	**2**	**31**
	Technicians	-	15	-	14	-	2	31
North America	**Men**	**-**	**-**	**-**	**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
	Women	**-**	**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
General total		**20**	**20**	**17**	**160**	**1**	**289**	**507**

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
Total	**5,301.5**	**28,055.9**	**54,936.5**	**13,786.9**	**159.0**	**3,519.1**	**460.8**

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
	Total	**575**	**654**
Total employees that took maternity or paternity leave	Women	192	227
	Men	340	400
	Total	**532**	**627**
Total employees that returned to work after leave	Women	186	214
	Men	320	397
	Total	**506**	**611**
Return to work rate(1)	Women	97%	94%
	Men	94%	99%
	Total	**95%**	**97%**

Retention		2018	2017
Total number of employees that were still employed 12 months after their return to work (1)	Women	210	223
	Men	386	411
	Total	**596**	**634**
Retention rate(2)	Women	98%	96%
	Men	97%	99%
	Total	**98%**	**98%**

(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
Bolivia	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.
Canada	Monthly meetings on health and safety, with the participation of the specialist from SL. Line and worker representatives attend
Colombia	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.
Ecuador	Central Committee in Quito and two subcommittees in Block 16 (NPF and SPF). Each committee or subcommittee ha representatives of the employer (Repsol) and representatives of the workers. The information managed in the committees must be sent annually to the authorities.
Spain	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)
United States	Monthly meetings on safety and the environment, with the inclusion of health topics when deemed appropriate.
Malaysia	There a central committee and a field committee. Monthly meetings
Peru	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.
Portugal	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.
Russia	There is no formal committee, although there are good practices pursuant to Company policy
Venezuela	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 ilness

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:

Malaria	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.
Vaccination	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
Algeria	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.
Brazil	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.
Colombia	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.
Ecuador	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.
Holland	Project of assessment of health-related risks. On-the-job posture training
Indonesia	Air quality monitoring at the Jakarta office. First aid training. Training in ergonomics and pandemics.
Malaysia	Risk mitigation through health monitoring, exposure control and follow-up.
Peru	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.
Portugal	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.
Russia	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.
Singapore	Purchase of ergonomic chairs and other ergonomic comfort items.
Venezuela	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
Executives	Training hours/Year	10,071	9,232
	Person	39	36
	Women	51	49
	Men	37	33
Technical managers	Training hours/Year	112,641	84,498
	Person	47	37
	Women	54	42
	Men	44	35
Technicians	Training hours/Year	561,832	528,213
	Person	48	46
	Women	46	44
	Men	50	47
Administrative staff	Training hours/Year	24,319	20,367
	Person	27	20
	Women	23	19
	Men	36	21
Manual workers junior personnel	Training hours/Year	358,518	314,558
	Person	42	36
	Women	19	16
	Men	53	45
Total	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
General	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. Several programs have been carried out aimed at the professionalization of the P&O function; such as training for Business Partners, programs for the Compensation area and others aimed at learning the new Workday tool. 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). Programs of generic skills and languages. Programs available at all times for all Repsol employees.
Health, Safety and Environment	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. We updated the design of online training for improved incident investigation based on case studies.
Master Programs	**REGE Master:** 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&P area, in addition to contents related to the Internal Digital Transformation **E&P Master:** 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. **Industrial Master:** Training for recruitment of new university degreeholders. A total of 37 students from five different countries completed this program during the year.
Refining and Chemical	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. 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)
Upstream	The E&P Academy provides applied learning content that integrates with the E&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.
Marketing and LPG	Education and Training Program for the **sale of Gas and Electricity** on service station, Direct Sales and LPG channels aimed at 27,000 people Three editions of the University Expert Program in Commercial Management have been given. Training program in the management of merchandising and sales in the franchise Stop&Go. Program for leadership in service quality excellence in service stations 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.
Training for Occupational Integration and Employability Programs	Training programs and non-employment internships for disabled persons and other vulnerable groups (non-employees) to promote their employability in the sector. No. of training actions: 8 No. of beneficiaries: : 80 people . 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

Performance reviews

404-3 Percentage of employees receiving regular performance and career development reviews

Performance and career development reviews

	2018[1]			2017		
	Women	Men	Total	Women	Men	Total
Executives	50	195	245	45	217	262
Technical managers	712	1,648	2,360	690	1,650	2,340
Technicians	2,742	5,222	7,964	2,950	5,656	8,606
Clerical staff	575	227	802	613	301	914
Manual workers junior personnel	296	2,428	2,724	374	2,719	3,093
Total	**4,375**	**9,720**	**14,095**	**4,672**	**10,543**	**15,215**

(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

		2018			2017		
Category		**<30**	**30-50**	**>50**	**<30**	**30-50**	**>50**
Executives	Women	-	28	24	-	25	21
	Men	-	81	139	-	90	126
	Total	-	109	163	-	115	147
	% W	-	27	15	-	22	14
Technical managers	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
Technicians	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
Clerical staff	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
Manual workers junior personnel	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
Total	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 (1) (2) (3)

Country	Executive personnel(4)	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(1)								Wage gap by gender(2)
	Executives		Technical managers		Technicians		Clerical staff, manual laborers and other(3)		
	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[1]					
	<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 wasges of 2018 wage review campaign). In view of the dispersal of wages between countries and businesses in each región, the median value between tthe 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 profesdional 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[1]

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
Bolivia	Margarita: Caipipendi and Huacaya. 5 indigenous communities pertaining to the Guaraní 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.
Canada	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.
Colombia	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.
Ecuador	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.
Papua New Guinea	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.
Peru	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.
Russia	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.
Indonesia	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	Smells, noise, gas emissions into the atmosphere, dust, visual impacts and, to a lesser extent, discharges. Potential health effects on the people living locally as a result of the inhalation of gases associated with exploration activities Temporary use of land to carry out the exploration activities. Hiring of local manpower to carry out the exploration work. Migratory movements toward operations they may cause on use of local services..
Offshore exploration and production	Temporary change in fishing routes to accommodate the presence of boats and other equipment related to oil and gas operations. Temporary change in fishing sector revenue due to the installation of equipment and facilities for offshore exploration purposes. Economic activity related to tourism. Hiring of local manpower to carry out the exploration work.

Anti-corruption

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

	Executives		Technical Managers		Technicians		Clerical staff		Manual workers and junior personnel	
Country	Nª	%	Nª	%	Nª	%	Nª	%	Nª	%
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%				
Total	**217**	**79%**	**2,062**	**80%**	**8,474**	**63%**	**683**	**60%**	**5,251**	**45%**

(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.

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[1] 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
	GRI 101	**Fundamentals**			
	GRI 102	**General contents**			
		Organizational Profile			
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	https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshtml		√
G4-16	102-13	Affiliation to associations	https://repsol.energy/es/sostenibilidad/iniciativas-y-adhesiones/index.cshtml	√	√
		Strategy			
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	√
		Ethics and integrity			
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	√
		Governance			
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: https://www.repsol.com/en/shareholders-and-investors/corporate-governance/committees-to-the-board/nominations-committee/index.cshtml https://www.repsol.com/imagenes/global/en/00-00538PO_Directors_Selection_Policy_en_tcm14-66877.pdf 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 https://www.repsol.com/imagenes/global/en/Reglamento_del_Consejo_27-07-2016_ENG_tcm14-13029.pdf		√
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 https://www.repsol.com/imagenes/global/en/Reglamento_del_Consejo_27-07-2016_ENG_tcm14-13029.pdf Appendix VII: Annual Corporate Governance Report 2018 - B.3.4. Description of the evaluation of the Board of Directorsn 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. https://www.repsol.energy/imagenes/global/es/Politica_Remuneraciones_tcm13-30745.pdf Directors' Remuneration Policy 2018-2020 https://www.repsol.com/imagenes/global/en/Pol%C3%ADtica_de_Remuneraciones_EN_VF_tcm14-64095.pdf	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)
		Stakeholder engagement			
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	https://repsol.energy/es/sostenibilidad/nuestro-modelo/index.cshtml		√
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	√
		Reporting practices			
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 infoaccionistas@repsol.com or to repsolteescucha@repsol.com		√
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 www.Repsol.com		√

Material issues

GRI-G4	GRI Standard	Indicator description	Reference in Management Report, Reports or website	Page/ Omission	Verification
		GENERAL CONTENTS			
		Dimensión económica			
	GRI 201	Economic performance			
G4-DMA, 20, 21	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	√
G4-EC1	201-1	Direct economic value generated and distributed	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS-Economic Performance	125	√(5)
G4-EC2	201-2	Financial implications and other risks and opportunities arising from climate change	Section 6.1. Climate change	62	√(9)
G4-EC3	201-3	Obligations of the defined benefit plan and other retirement plans	Consolidated Financial Statements 2018 - Note 29 Obligations to employees		√
G4-EC4	201-4	Financial assistance received from the government	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	125	√
	GRI 202	Presence in the market			
G4-DMA, 20, 21	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	125, 126	√
G4-EC5	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	√
G4-EC6	202-2	Proportion of senior management hired from the local community	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Economic Performance	126	√
	GRI 203	Indirect economic effects			
G4-DMA, 20, 21	103	Management approach	Section 6.2.2. Respect for Human Rights and Community Relations Apartado 6.8 Supply chain	76, 77, 101, 126	√
G4-EC7	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	√
G4-EC8	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	Procurement practices			
G4-DMA, 20, 21	103	Management approach	Section 6.8. Supply chain	100	√
G4-EC9	204-1	Proportion of expenditure on local suppliers	Section 6.8. Supply chain	101, 102, 103	√(2)
G4-OG1	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	√
		Anti-corruption			
	GRI 205	Anti-corruption			
G4-DMA, 20, 21	103	Management approach	Section 6.7. Ethics and compliance Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social performance - Fight against corruption	99, 147	√
G4-SO3	205-1	Operations assessed for corruption-related risks	Section 6.7. Ethics and compliance	100	√(16)
G4-SO4	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)
G4-SO5	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	Unfair competition			
G4-DMA, 20, 21	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Social Performance - Regulatory Compliance	148	√
G4-SO7	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	√
		Eviromental dimension			
		Environmental performance			
	GRI 301	Materials			
G4-DMA, 20, 21	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	√
G4-EN1	301-1	Materials used by weight or volume	Section 5. Business performance	51	√(6)
G4-EN2	301-2	Recycled inputs	Non-material		Not verified
G4-OG8	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)
G4-EN28	301-3	Reused products and packaging materials	Non-material		Not verified
	GRI 302	Energy			
G4-DMA, 20, 21	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	√
G4-EN3	302-1	Energy consumption within the organization	Section 6.1. Climate Change	69	√(7)
G4-EN4	302-2	Energy consumption outside the organization	Section 6.1. Climate Change	68	√
G4-EN5	302-3	Energy Intensity	Section 6.1. Climate Change	69	√(7)
G4-OG2	OG2	Total investment in renewable energy	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental Performance - Energy Efficiency and Climate Change	127	√
G4-OG3	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)
G4-EN6	302-4	Reduction of energy consumption	Section 6.1. Climate Change	69	√(7)
G4-EN7	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)
G4-OG14	***OG14***	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	Water			
G4-DMA, 20, 21	103	Management approach	Section 6.4. Environment	85	√
G4-EN8	303-1	Water extraction by source	Section 6.4. Environment	87	√(18)
G4-EN9	303-2	Water sources significantly affected by water extraction	Section 6.4. Environment	87	√(9)
G4-EN10	303-3	Recycled and reused water	Section 6.4. Environment	87	√
	GRI 304	Biodiversity			
G4-DMA, 20, 21	103	Management approach	Appendix III: GRI Indicators - PART II: SPECIFIC CONTENTS - Environmental performance - Biodiversity	87, 132-133	√
G4-EN11	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)
G4-EN12	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	√
	GRI 305	Emissions			
G4-DMA, 20, 21	103	Management approach	Section 6.1. Climate Changeo 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	√
	GRI 306	Effluents and waste			
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)
	GRI 307	Effluents and waste			
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
	GRI 308	Environmental evaluation of suppliers			
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	√
		Social performance			
	GRI 401	Employment			
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	√
	GRI 402	Labor/management relation			
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.		√
	GRI 403	Health and safety at work			
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	√
	GRI 404	Training and education			
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
	GRI 405	Diversity and equal opportunities			
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)
	GRI 406	Non-discrimination			
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)
	GRI 407	Freedom of association and collective bargaining			
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)
	GRI 408	Child labor			
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)
	GRI 409	Forced or compulsory labor			
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)
	GRI 410	Safety practices			
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	√
	GRI 411	Rights of indigenous peoples			
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	√
	GRI 412	**Human Rights Assessment**			
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	√
	GRI 413	**Local communities**			
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	√
	GRI 414	**Social evaluation of suppliers**			
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	√
	GRI 415	**Public policy**			
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
	GRI 416	Consumer health and safety			
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
	GRI 417	Marketing and labelling			
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
	GRI 418	Customer privacy			
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
	GRI 419	Socio-economic compliance			
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 abseentism 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
0. General contents			
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	
1. Information on environmental issues			
a) General: • Current and foreseeable effects of thecompany 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 this 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	303-1, 303-2, 303-3	Section 6.4. Environment	
• Consumption of raw materials and the measures taken to improve their efficient use	103, 301-1, 301-2	Section 5. Performance of our businesses. Improving efficiency in the use of raw materials	is not reported as they are not considered a material aspect (see Materiality Matrix page 120).
• Direct and indirect energy consumption, measures taken to improve energy efficiency and the use of renewable energies	103, 302-1, 302-2, 302-3, 302-4, 302-5	Section 6.1. Climate change	
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	
2. Information on social and personnel matters			
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.
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• 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	
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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
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b) Subcontracting and suppliers	103, 102-9, 308-1, 414-1	Section 6.8 Supply chain	
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• Public grants received	201-4	Appendix III: GRI Indicators - PART II: MATERIAL ASPECTS - Economic - Economic performance	
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Appendix VI: table of conversions and abbreviations

			Oil				Gas		Electricity
			Liters	Barrels	Cubic meters	tep	Cubic meters	Cubic feet	kWh
Oil	1 barrel[1]	bbl	158.99	1	0.16	0.14	162.60	5,615	$1{,}7X10^3$
	1 cubic meter[1]	m3	1,000	6.29	1	0.86	1,033	36,481	10,691.5
	1 ton of oil equivalent[1]	tep	1,160.49	7.30	1.16	1	1,187	41,911	12,407.4
Gas	1 cubic meter	m3	0.98	0.01	0.001	0.001	1	35.32	10.35
	1,000 cubic feet = 1.04x106 Btu	ft3	27.64	0.18	0.03	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	ft3	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	m3	35.3147	6.2898	1,000	1

Term	Description	Term	Description	Term	Description
bbl / bbl/d	Barrel/ Barrel per day	**kbbl**	Thousand barrels of oil	**Mm3/d**	Million cubic meters per day
Bcf	Billion cubic feet	**kbbl/d**	Thousand barrels of oil per day	**Mscf/d**	Million standard cubic feet per day
Bcm	Billion cubic meters	**kboe**	Thousand barrels of oil equivalent	**kscf/d**	Thousand standard cubic feet per day
Bep	Barrel of oil equivalent	**kboe/d**	Thousand barrels of oil equivalent per day	**MW**	Megawatt (million watts)
Btu/MBtu	*British thermal unit/ Btu/million Btu*	km2	Square kilometer	**MWh**	Megawatts per hour
LPG	Liquefied Petroleum Gas	**Kt/Mt**	Thousand tons/million tons	**TCF**	Trillion cubic feet
LNG	Liquefied Natural Gas	**Mbbl**	Million barrels	**tep**	Ton of oil equivalent
Gwh	Gigawatts per hour	**Mboe**	Million barrels of oil equivalent	**USD / Dollar / $**	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.

REPSOL S.A.

2018 Annual Corporate Governance Report

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

REPSOL

DETAILS OF ISSUER

Dated end of year 31/12/2018

TAX REGISTRATION NUMBER: A-78375725

Name: Repsol, S.A.

Registered office: C/ Méndez Álvaro, 44, Madrid

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A. EXECUTIVE SUMMARY

1. Presentation by the Chairman of the Board of Directors

Our corporate governance practices have the purpose of ensuring that both the management model of the Company and the Board of Directors and Committees decisions will be oriented to preserve the long interest of our stakeholders and to guarantee the sustainability of the group. Our corporate governance system is in a constant revision process and improvement, and incorporates the most developed international market recommendations and the tendencies in this matter.

The Directors that compose our Board have an extense professional experience which have diversity on the grounds of formation, origin, genre and age. After the last appointment of directors, the percentage of women has reached the 20% and we keep on working to fulfil the Governance Code recommendations in this matter. This year, as a new element, it is important to highlight that our Board has fifteen members within the limits proposed by the Code of Good Governance.

During the year 2018, the Board and the Committees have kept on working in the supervision of the main issues for the Company and taking decisions in the relevant issues, such it is the update of the Strategic Plan 2018-2020, the sustainability plan and the implementation of a remuneration aligned with the market.

In relation to this Annual Corporate Government Report, I would like to highlight the new free format permitted under the Circular 2/2018 of the CNMV, with a structure and design renewed, in an analogous way to other initiatives such as the Voluntary Remunerations Report undertaken in the last years which have had good reception by Repsol shareholders and investors and that answers to Repsol' wishes to continue in the vanguard of the transparency in the corporate governance information and facilitate its shareholders' understanding.

This year we will keep on working in the exercise of Corporate Governance system, helped by the continuous dialogue with our stakeholders under strict respect of our values, integrity, responsibility, transparency, flexibility and innovation, made them participates of Repsol's future.

Antonio Brufau Niubo

Chairman of the Board of Directors

REPSOL

2. At a glance

Board of Directors

Separation of position Chairman and Chief Executive Officer

Chairman Non-Executive Director

13 meetings in 2018

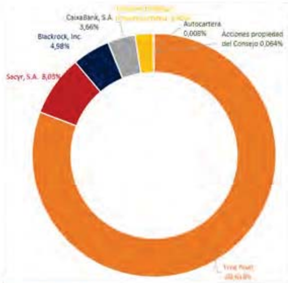
98.5% attendance in person

20% women on the Board

26.6% international Directors

6.7 years average term of office

Shareholder composition (% of share capital)



General Shareholders Meeting

May 11, 2018

Shareholders in attendance represented **58.8%** of the Company's share capital

All proposals submitted were **approved** (14)

The **proposals** were approved with an average of **96.824% votes in favor** of the share capital in attendance

Directors hold **0.064%** of the Company's share capital

Board Committees

Delegate Committee

25%	25%	25%	25%
Executive	Proprietary	Independent	Other Non-Executive

8 members

Chairman: Non-Executive Director

8 meetings in 2018

100% attendance in person

Audit and Control Committee

100% Independent

5 members

Chair: Independent Director

10 meetings in 2018

100% attendance in person

Appointments Committee

75% Independent | 25% Proprietary

4 members

Chairman: Independent Director

11 meetings in 2018

93.5% attendance in person

Remuneration Committee

75% Independent | 25% Proprietary

4 members

Chairman: Independent Director

4 meetings in 2018

94.8% attendance in person

Sustainability Committee

67% Independent | 33% Proprietary

3 members

Chairman: Independent Director

4 meetings in 2018

78.6% attendance in person

Board of Directors' skills

Executive management
14/15 Directors

International experience
15/15 Directors

Accountability finance and risk management
9/15 Directors

Energy sector knowledge
9/15 Directors

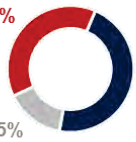
Strategy
12/15 Directors

Institutional, legal and corporate governance
8/15 Directors

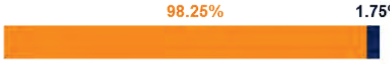
Sustainability
5/15 Directors

Science and technology
4/15 Directors

Years of service of Non-Executive Directors



Compliance with the recommendations of the Good Governance Code



3. The Board of Directors

The Company's system of corporate governance, which was established in accordance with best practices in Spain and abroad, guides the functioning of the Board of Directors and is based on the principles of transparency, independence and responsibility.

Repsol's Board of Directors has the size and structure necessary to promote efficient functioning and maximize participation, in accordance with the Company's share capital structure. Its composition was determined based on criteria of complementarity, balance, and diversity of knowledge, professional experience, nationality and gender[1].

[1] Further information on the composition of the Board of Directors may be consulted in section "B. REGULATORY INFORMATION – 3. Repsol's governance body" of this Report.

Executive Directors Total no.: 2 % total: 13.3%		Proprietary Directors Total no.: 3 % total: 20%		Independent Directors Total no.: 8 % total: 53.3%	Other Non-Executive Directors Total no.: 2 % total: 13.3%	
Name of director	**Position in company's organization**	**Name of director**	**Name of significant shareholder represented or that proposed appointment**	**Name of director**	**Name of director and reasons**	**Company, executive or shareholder with which the director is related**
Mr. Josu Jon Imaz San Miguel	Chief Executive Officer	Mr. Manuel Manrique Cecilia	Sacyr, S.A.	Ms. Maite Ballester Fornés	Mr. Antonio Brufau Niubó[2]	Repsol, S.A.
Mr. Luis Suárez de Lezo Mantilla	General Director Secretary and Secretary to the Board of Directors	Mr. José Manuel Loureda Mantiñán	Sacyr, S.A.	Mr. Luis Carlos Croissier Batista	Mr. Henri Philippe Reichstul[3]	Repsol, S.A.
		Mr. Rene Dahan	Temasek Holdings (Private) Limited	Mr. Ángel Durández Adeva		
				Ms. Carmina Ganyet i Cirera		
				Mr. Ignacio Martín San Vicente		
				Mr. Mariano Marzo Carpio		
				Ms. Isabel Torremocha Ferrezuelo		
				Mr. J. Robinson West		

As established in the Company Bylaws, the Board must be formed by a maximum of sixteen (16) and a minimum of nine (9) Directors. The Board of Directors is currently comprised of fifteen (15) members and the Board of Directors, at the proposal of the Nominations Committee, agreed to propose to fix in this number the members of the Board at the next Annual General Meeting.

[2] Mr. Brufau was the Chairman and CEO of Repsol until April 30, 2015 and, therefore, cannot be considered an Independent Director. He also cannot be classified as a Proprietary Director, given that he does not have a significant stake and has not been appointed as a result of being a shareholder or representing shareholders of the Company.

[3] Mr. Reichstul was an Independent Director from December 2005 to May 2017 and, therefore, cannot be considered an Independent Director. He also cannot be classified as a Proprietary Director, given that he does not have a significant stake and has not been appointed as a result of being a shareholder or representing shareholders of the Company.

Key issues

Changes to the composition of the Board in 2018	▪ Reduction in the number of Board members to **15**. ▪ Appointments of Carmina Ganyet i Cirera and Ignacio Martín San Vicente at the General Meeting of May 11, 2018. ▪ Appointment of Henri Philippe Reichstul by co-optation on October 30, 2018. ▪ Expiry of the term of office of Artur Carulla Font and resignations of Mario Fernández Pelaz, Gonzalo Gortázar Rotaeche and Jordi Gual Solé prior to the end of their term of office.
Structure	▪ Ample majority of Non-Executive Directors **86.7%** ▪ More than half of Independent Directors **53.3%** and rotation in the position. The average current term of office is four years. ▪ Independence of the Committees.
Diversity	▪ Presence of women on the Board of **20%** following the appointment of Carmina Ganyet i Cirera. ▪ Repsol's commitment to increase the percentage of women on the Board of Directors to **30%** by **2020**. ▪ International representation on the Board of **26.6%**: Rene Dahan (Dutch), Robinson West and Maite Ballester (Americans) and Henri Philippe Reichstul (Brazilian).
Separation of the role of Chairman and CEO	▪ The positions of Chairman of the Board of Directors and the Company's Chief Executive have been separate since April 2014. ▪ Josu Jon Imaz is the Chief Executive Officer and discharges executive functions and Antonio Brufau holds the position of Chairman of the Board of Directors. ▪ The separation of functions ensures the balance of powers, promoting the independence and objectivity of the Board in its supervisory tasks, while simultaneously reinforcing the management capacity of the businesses to increase their efficiency and ability to create value.

4. Interaction with investors

Repsol is committed to following best practices, and voluntarily incorporates recommendations from shareholders, investors, proxy advisors and other stakeholders, such as financial analysts, regulatory and supervisory bodies, or credit rating agencies, among others.

The Company therefore continuously assesses the expectations of these stakeholders, engages in ongoing dialogue with them and regularly reports in a transparent manner on its financial, governance, environmental and social performance. The Chief Executive Officer, Josu Jon Imaz, manages and leads specific roadshows on the Company's environmental, social and corporate governance (ESG) matters, responding to requests for information from stakeholders.

The Board of Directors is informed on a regular basis of the perceptions and expectations of shareholders, investors, proxy advisors and other stakeholders.

In 2018 Repsol held the 5th Sustainability Day with ESG investors[4], for the purpose of making them aware of its strategy and performance regarding sustainability, as well as the actions being taken by the Company to respond to the energy transition challenge.

[4] Environmental, Social and Governance. These investors apply sustainability criteria when making decisions.

Activity with ESG investors and shareholders in 2018

139 visits buy side/sell side

42 investors visited for the first time in 2018

19 roadshows

12 cities visited

Interaction with shareholders that hold:

~190M shares of the Company's total shares → **~28%** of institutional shareholders

The total number of investors visited during the year represents 72% of the total socially responsible shareholding

Presence on ESG indexes

FTSE4Good Index	Euronext Vigeo Eiris
Presence on the FTSE4Good index series since 2011, which measures the performance of companies that demonstrate sound environmental, social and governance (ESG) practices. FTSE4Good indexes are used by a wide variety of market participants to create and evaluate responsible investment funds and other products.	Repsol is included on the Euronext Vigeo Europe 120 and Euronext Vigeo Eurozone 120 indexes, which recognize us as one of the 120 European and Eurozone companies with one of the best levels of performance in corporate responsibility. The companies included in this index have achieved the highest scores, according to the revision of up to 330 indicators.
CDP Climate	**Ethibel**
The CDP recognizes the companies with the best energy and carbon management. Since 2006, Repsol has been ranked as one of the best companies in its sector. In 2018, Repsol ranked at the management level in the fight against climate change with a B rating. Holding a position at the management level means that the Company strives to mitigate the risks arising from climate change and to include climate change in the company's strategy.	The Company's presence on the Ethibel Sustainability Index (ESI) Excellence Global and Ethibel Sustainability Index (ESI) Excellence Europe for its sustainability practices.
	ISS-oekom
	In 2018, ISS-oekom awarded us the "Prime" rating with regard to ESG, which means that the Company complies with the sustainability performance requirements required by the analyst for companies in our sector.

Activity with other investors and shareholders in 2018

325 investors contacted

17 conferences

20 roadshows

19 cities visited

Interaction with shareholders that hold:

~314M shares of the Company's total shares → **~56%** of institutional shareholders

Repsol Shareholders Community

In order to strengthen the Company's direct and two-way relationship with individual shareholders, Repsol established the "Repsol en Acción Community" channel, where the Company's shareholders may sign up voluntarily.

More than **75,000** shareholders registered

~30,000 queries resolved by mail or telephone calls

More than **12** roadshows of results in various Spanish cities

Repsol Shareholders Advisory Committee

The Company has had the Repsol Shareholders Advisory Committee since 2014, which was created with the aim of improving the dialogue between the company and its shareholders and is part of the Repsol Group's corporate governance policy, as an initiative to promote and establish channels for a regular exchange of information with groups of shareholders. The Committee is composed of twelve (12) minority shareholders, the ED CFO, who chairs it, and the ED Investor Relations Director as the Vice-chairman.

The shareholders members of the Committee have submitted various proposals to improve the relationship and communication with this group, which have been analyzed in full and applied when deemed appropriate.

Information provided to the market

The Repsol Group has a Investor Relations Division whose responsibilities include ensuring that the information supplied by the Company to the market (financial analysts and institutional investors, among others) is transmitted in an equitable and symmetrical manner and on a timely basis and, in accordance with the Repsol Group's Internal Code of Conduct in relation to the Securities Market, that such information is accurate, clear, complete and, when required by the nature of the information, quantified, without being misleading or confusing.

The Repsol Group has also approved and published a communication and contact policy for shareholders, institutional investors and proxy advisors that defines and establishes the principles and guidelines for contacting and communicating with these groups.

B. THE REPSOL CORPORATE GOVERNANCE SYSTEM

1. Regulatory framework

The external regulatory framework of reference and the Company's internal regulations regarding corporate governance are described below.

1.1. External regulatory framework

Revised Text of the Spanish Corporate Enterprises Act, approved by Legislative Royal Decree 1/2010, of July 2 (the "Corporate Enterprises Act")	CNMV Circular 5/2013, of June 12 ("Circular 5/2013"), amended by CNMV Circular 2/2018, of June 12 ("Circular 2/2018")
It constitutes the main regulation that governs in general the functioning of corporate enterprises under Spanish law. With regard to companies whose shares are admitted to listing on an official secondary market, particular mention should be given to Title XIV of this law, which governs the special characteristics applicable to these types of companies under the ordinary regime. These include the obligation to report to the Spanish National Securities Market Commission (the "CNMV") and publish a corporate governance report on an annual basis (the "Annual Corporate Governance Report") as a Material Event.	This Circular establishes the annual corporate governance report models for listed companies, savings banks and other entities that issue securities listed for trading on official securities markets. This Circular has recently been modified in order to allowto present this report in a free format. Repsol has made use of this possibility in order to adapt the structure of the information to its context and circumstances. . It also intends to enhance, so as to better explain the Company's performance, the information provided with regard to its corporate governance, respecting at all times the minimum content required of the annual corporate governance report model and including the required statistical appendix in accordance with the models established in Circular 5/2013. This annual corporate governance report was approved by a majority of the Board of Directors at its meeting on February 27, 2019.

Good Governance Code for Listed Companies, approved by resolution of the Board of the CNMV on February 18, 2015 (the "GGC")

This is the reference framework in Spain on best practices regarding corporate governance. It is voluntary and follows the "comply or explain" principle.

With regard to the structure of the GGC, it should be noted that a series of general principles (25) have been identified, which are those that inspire and underpin the (64) recommendations on each specific matter.

Degree of compliance with good governance recommendations

Appendix I of this annual corporate governance report contains detailed information on compliance with the recommendations of the GGC, as well as any relevant explanations, where applicable.

1.2. Internal regulatory framework

The complete and updated texts of the Company's internal regulations that are described below, as well as other corporate governance information and other information on general meetings that must be made available to shareholders, are available for consultation on the Company's corporate website(www.repsol.com), under the 'Shareholders and Investors - Corporate Governance' section.

These regulations are reviewed on a regular basis in order to incorporate best corporate governance practices and maintain the highest degree of transparency of information in relation to the Company's shareholders and other stakeholders.

This not only evidences compliance on the part of Repsol with applicable regulations, but also its intent to go beyond the inclusion of and adherence to recommendations, best practices and trends in corporate governance, both at a national and international level.

Company Bylaws	• Basic regulations, approved at the General Shareholders Meeting, that govern the internal functioning of the Company and, among other matters, the rights and obligations of the shareholders and the structure, functioning and composition of the General Shareholders Meeting, the Board of Directors and its various Committees. The Bylaws were amended on three occasions in 2018 (January 9, July 10 and November 14, 2018), with these amendments affecting Articles 5 and 6.
Regulations of the General Meeting	• Regulations, approved at the General Shareholders Meeting, the purpose of which is to govern the Repsol General Shareholders Meeting, establishing for such purpose the principles of its organization and operation and the rules governing its legal and bylaw-stipulated activities and supplementing the applicable rules established in current commercial legislation and in the Company Bylaws. • Approved on April 4, 2003 and last amended on April 30, 2015.
Board Regulations	• Regulations, approved by the Board of Directors, the purpose of which is to govern its structure, competencies and functioning, as well as that of its Committees(1). • Approved on December 19, 2007 and last amended in July 2016.
Internal Code of Conduct in the Securities Market	• Regulations, approved by the Board of Directors, the purpose of which is to govern the rules of conduct that must be observed by the persons included in its scope of application in its actions related to securities markets. • Approved on July 11, 2003 and last amended on January 28, 2019.
Ethics and Conduct Code	• Regulations, approved by the Board of Directors, the purpose of which is to establish the reference framework to understand and put into practice the behaviors and expectations that Repsol has in the persons that form part of the Company in their daily work. • Approved on July 27, 2016.
Corporate policies	In addition to the aforementioned internal regulations, the Board of Directors has approved the following policies: • Director selection policy. • Policy of communication and contact with shareholders, institutional investors and proxy advisors. • Sustainability policy. • Anti-corruption policy. • Tax Policy • Risk Management Policy

(1) The specific rules governing Board committees are included in Articles 33, 34, 35, 36 and 37 of the Board of Directors Regulations.

2. Ownership structure of the Company

2.1. Ownership structure

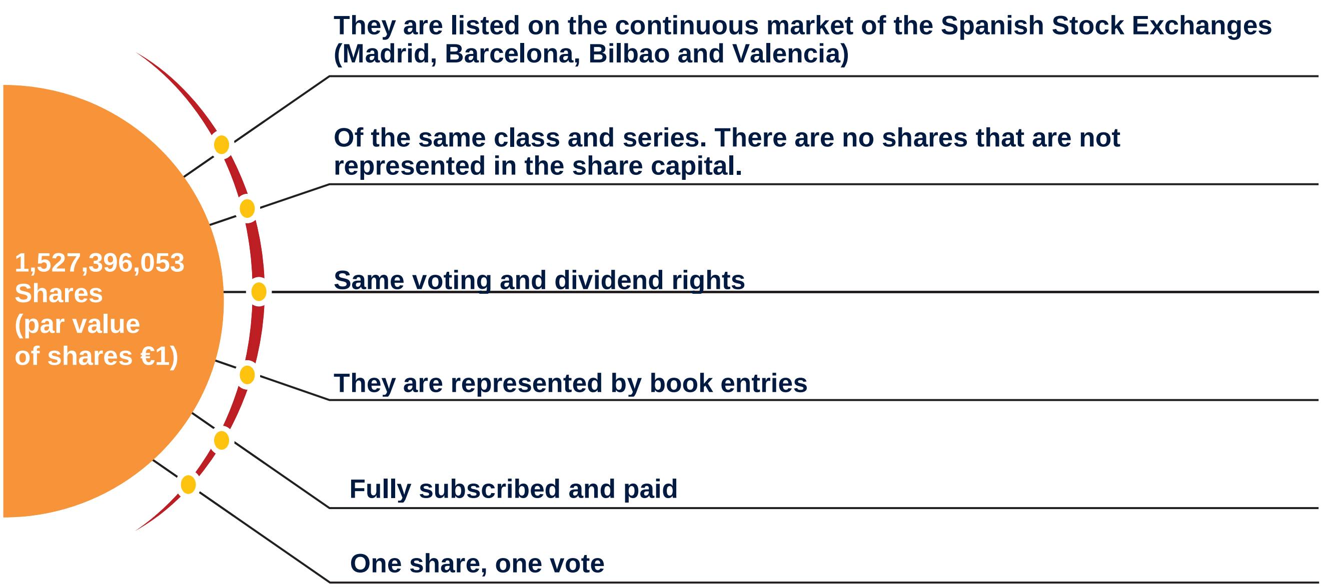
Share capital structure

SHARE CAPITAL AT DECEMBER 31, 2018 **€1,527,396,053**

In 2018 share capital was altered on three occasions:

January 9, 2018	Closing of the paid-up capital increased approved as item 7 of the agenda for the General Shareholders Meeting held on May 19, 2017.
July 10, 2018	Closing of the paid-up capital increase approved as item 7 of the agenda for the General Shareholders Meeting held on May 11, 2018.
November 14, 2018	Execution of the reduction of capital reduction through cancelation of own shares approved as item 6 of the agenda for the General Shareholders Meeting held on May 11, 2018

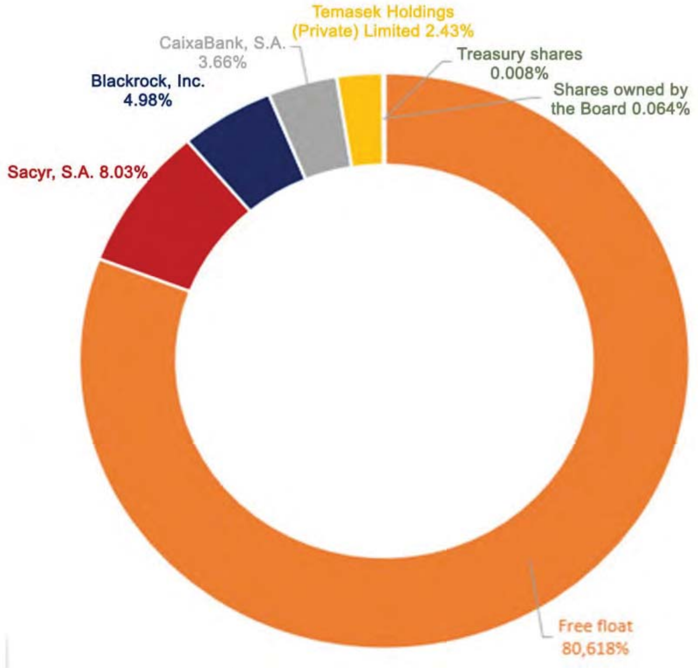
Likewise, the second Repsol's paid-up capital increase approved as item 5 of the agenda of the General Shareholders Meeting held on May 11, 2018, bringing the Company's share capital to €1,558,877,582, divided into 1,558,877,582 shares and 1,558,877,582 voting rights.



Repsol, S.A. shares were negotiated on the Buenos Aires Stock Exchange until January 28, 2019, the date on which the exclusion from listing of the Repsol share came into effect in Argentina.

Repsol also has American Depositary Shares ("ADS") that are listed on the United States OTCQX market, and shares of the Peruvian company Refinería La Pampilla, S.A., belonging to the Company's consolidated group, which are listed on the Lima Stock Exchange in Peru.

At December 31, 2018, the share capital, with the free float representing 80.618% of share capital, was distributed as follows:



There is no individual or legal entity that exercises or may exercise control over the Company, understanding as control what is established in article 42 of the Commercial Code, for the purposes of Article 5 of the revised text of the Securities Market Law, approved by Legislative Royal Decree 4/2015, of October 23 (the "Securities Market Law").

Significant interests

At December 31, 2018, the direct and indirect holders of significant interests in Repsol, excluding the Directors, are as follows:

	% of voting rights attributed to shares		% of voting rights through financial instruments		% of total
	Direct	Indirect	Direct	Indirect	
SACYR, S.A.	--	8.03	--	--	8.03
BLACKROCK, Inc. (1)	--	4.63		0.35	4.98
CAIXABANK, S.A. (2)	3.66	--	--	--	3.66
TEMASEK HOLDINGS (PRIVATE) LIMITED	--	2.43	--	--	2.43

Breakdown of direct holders with indirect interests

Indirect holder	Direct holder	% of voting rights attributed to shares	% of voting rights through financial instruments	% of total
SACYR, S.A.	SACYR INVESTMENTS, S.A.	1.96	--	8.03
	SACYR INVESTMENTS II, S.A.	4.76	--	
	SACYR SECURITIES, S.A.	1.31	--	
BLACKROCK, INC.	ENTITIES CONTROLLED BY BLACKROCK	4.63	0.35	4.98
TEMASEK HOLDINGS (PRIVATE) LIMITED	CHEMBRA INVESTMENT PTE, LTD.	2.43	--	2.43

(1) BlackRock, Inc. holds its stake through various controlled entities. The information relating to BlackRock, Inc. is based on the statement filed by this entity with the CNMV on August 2, 2018 on the share capital figure of 1,596,173,736 shares.

(2) On September 20, 2018, CaixaBank, S.A. reported the resolution passed by its Board of Directors to proceed with the sale of its entire shareholding in Repsol, S.A.

The details set out in this section, as of December 31, 2018, from the information supplied by Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A.U. (IBERCLEAR), and from the information sent by shareholders to the Company and to the Spanish National Securities Market Commission (CNMV).

Principal changes to the shareholder structure in 2018

Name of significant shareholder	Date of transaction	Description of the transaction
BLACKROCK, INC.	January 24, 2018	Interest has risen above 5% of share capital
BLACKROCK, INC.	March 9, 2018	Interest has fallen below 5% of share capital
BLACKROCK, INC.	May 31, 2018	Interest has risen above 5% of share capital
BLACKROCK, INC.	June 6, 2018	Interest has fallen below 5% of share capital
BLACKROCK, INC.	June 15, 2018	Interest has risen above 5% of share capital
BLACKROCK, INC.	June 27, 2018	Interest has fallen below 5% of share capital
BLACKROCK, INC.	July 9, 2018	Interest has risen above 5% of share capital
BLACKROCK, INC.	July 31, 2018	Interest has fallen below 5% of share capital
TEMASEK HOLDINGS (PRIVATE) LIMITED	September 13, 2018	Interest has fallen below 3% of share capital
CAIXABANK, S.A.	September 25, 2018	Interest has fallen below 5% of share capital

Company voting rights held by Board members

Total voting rights held by the Company's Directors amounted to **0.064%**.

			Breakdown of individual positions								
	Number of shares		% of voting rights attributed to shares		% of voting rights through financial instruments		Total number of shares	% of total	% of voting rights <u>that may be transferred</u> through financial instruments	
	Direct	Indirect	Direct	Indirect	Direct	Indirect			Direct	Indirect
Antonio Brufau Niubó	516,409	--	0.034	--	--	--	516,409	0.034	--	--
Josu Jon Imaz San Miguel	226,398	--	0.015	--	--	--	226,398	0.015	--	--
Rene Dahan	60,838	--	0.004	--	--	--	60,838	0.004	--	--
Ángel Durández Adeva	12,801	--	0.001	--	--	--	12,801	0.001	--	--
José Manuel Loureda Mantiñán	80	90,383	0.000	0.006	--	--	90,463	0.006	--	--
Luis Suárez de Lezo Mantilla	60,820	--	0.004	--	--	--	60,820	0.004	--	--
Isabel Torremocha Ferrezuelo	9,396	--	0.001	--	--	--	9,396	0.001	--	--
Maite Ballester Fornés	--	--	0.000	--	--	--	--	0.000	--	--
Luis Carlos Croissier Batista	1,764	--	0.000	--	--	--	1,764	0.000	--	--
María del Carmen Ganyet Cirera	19	--	0.000	--	--	--	19	0.000	--	--
Manuel Manrique Cecilia	140	1,247	0.000	0.000	--	--	1,387	0.000	--	--
Ignacio Martín San Vicente	6,794	--	0.000	--	--	--	6,794	0.000	--	--
Mariano Marzo Carpio	--	--	0.000	--	--	--	--	0.000	--	--
Henri Philippe Reichstul	50	--	0.000	--	--	--	50	0.000	--	--
J. Robinson West	--	--	0.000	--	--	--	--	0.000	--	--

	Direct holder	% of voting rights attributed to shares	% of voting rights through financial instruments	% of total	% of voting rights that may be transferred through financial instruments
	Breakdown of direct holders with indirect interests (mentioned above)				
José Manuel Loureda Mantiñán	PRILOU, S.L.	0.006	--	0.006	--
Manuel Manrique Cecilia	CYMOFAG, S.L.U.	0.000	--	0.000	--

Representation of significant shareholders on the Board of Directors

The appointment of Directors José Manuel Loureda Mantiñán and Manuel Manrique Cecilia was proposed by the significant shareholder Sacyr, S.A., whom relation is detailed below:

Relationships of the Directors with the significant shareholder Sacyr, S.A. and/or entities of its group

Name of related director or representative	Name of related significant shareholder	Name of the group company of the significant shareholder	Description of relationship/position
Jose Manuel Loureda Mantiñán	SACYR, S.A.	SACYR, S.A.	▪ Indirect holder of 8% of the share capital of Sacyr, S.A. through Prilou, S.L. and Prilomi, S.L. ▪ Representative of Prilou, S.L. on the board of Sacyr, S.A.
		VALORIZA GESTIÓN, S.A.	Chairman
		SACYR CONSTRUCCIÓN, S.A.	Director
Manuel Manrique Cecilia	SACYR, S.A.	SACYR, S.A.	▪ Chairman - Chief Executive Officer ▪ Indirect holder of 1.535% of the share capital of Sacyr, S.A. through Cymofag, S.L.U.
		SACYR FLUOR, S.A.	Director
		SACYR INGENIERIA E INFRAESTRUCTURAS, S.A.	Director
		SACYR SERVICIOS, S.A.	Director
		SACYR CONCESIONES, S.L.	Director
		VALORIZA GESTIÓN, S.A.	Director
		SACYR PARTICIPACIONES MOBILIARIAS, S.L.	Representative of Sacyr, S.A. as Sole Director of Sacyr Vallehermoso Participaciones Mobiliarias, S.L.
		SACYR FINANCE, S.A.	Representative of Sacyr, S.A. as Sole Director of

Relationships of the Directors with the significant shareholder Sacyr, S.A. and/or entities of its group			
Name of related director or representative	**Name of related significant shareholder**	**Name of the group company of the significant shareholder**	**Description of relationship/position**
			Sacyr Finance, S.A.

In accordance with the notice submitted to the CNMV on September 13, 2018, the shareholding of Temasek Holdings (Private) Limited reduced to 2.975% of share capital. Therefore, with regard to the Proprietary Non-Executive Director appointed by Temasek, Rene Dahan, on October 30, 2018 the Board of Directors, following a report from the Nominations Committee, agreed that he should remain as Director based on his experience, knowledge, prestige and contribution. Due to the stake that Temasek still holds in Repsol, Mr. Dahan must continue to be considered a Proprietary Director.

The Company does not have any record of any family, commercial, contractual or corporate relationships between holders of significant stakes, or any significant relationships of this type or those arising from ordinary trading activities between the holders of significant stakes and the Company.

Restrictions on voting rights and nomination of members of management bodies

The exercise of voting rights corresponding to shares and its capacity to appoint members of the Board of Directors may be affected by the following regulations applicable to the Company.

Article 34 of Royal Decree-Law 6/2000, of June 23, on urgent measures to intensify competition in goods and services markets (“Royal Degree-Law 6/2000”)	Law 3/2013, of June 4, on the creation of the Spanish National Markets and Competition Commission
It establishes restrictions on the voting right and the ability to directly or indirectly appoint members of the management bodies of companies that have the status of principal operator in the same market or sector, including, among others, markets for the production and distribution of fuels, liquefied gases of oil and natural gas as well as generation and supply of electricity. The main operator is defined as the entities that hold the five largest shares of the market in question. These limitations are specified in individual or legal entities who, directly or indirectly, participate in the capital or in the voting rights of two or more companies that have the status of principal operator in the same market or sector, or have themselves the condition of principal operator in the same market or sector may not exercise the voting rights in a second company that has the same status of principal operator in the same market or sector, in a share of more than 3% of the total in the capital or in other securities that confer political rights of that other company, nor may they directly or indirectly appoint members of the administrative bodies of said company These constraints will not be applicable to parent companies that are principal operators in respect of their subsidiaries that are in the same position, provided this structure is imposed by law or the result of a mere redistribution of securities or assets among group companies. However, the Spanish National Markets and Competition Commission (the “CNMC”) may authorize the exercise of the voting rights corresponding to the excess with regard to interests or the appointment of members of the governance bodies, provided this does not favor the exchange of strategic information among operators or imply any risks of coordination of their strategic actions.	It establishes a procedure for controlling certain business transactions in the energy sector, among them the acquisition of interests in companies that carry out oil refining activities, transportation through oil pipelines and storage of petroleum products. All these facilities that are also considered as strategic assets. In particular, the acquisition of a stake in the share capital that give a significant influence in the management of those companies that, directly or through controlled companies, carry out such activities have to be communicated to the CNMC who will be competent to hear such operations in accordance with the provisions of the ninth additional provision of Law 3/2013, of June 4, until the competent Ministry has the necessary means to exercise said competence. Said operations may be subject to the imposition of conditions relating to the exercise of the activity of the affected companies or to the purchaser, if the latter is not a national of the European Union or the European Economic Area and it is considered that there is a real and sufficiently serious threat that risks arise for the guarantee of supply of hydrocarbons.

Furthermore, and in line with recommendation number 1 of the Good Governance Code for Listed

Companies, Repsol's Bylaws do not contain any restrictions as to the maximum number of votes that may be cast by a single shareholder, or impose any other restrictions that may hinder the acquisition of a controlling stake in the market.

Lastly, it should be noted that in 2018 the Company did not resolve to take any measures to neutralize a takeover bid pursuant to Article 135 of the Securities Market Law.

Shareholders agreements

The Company has not been notified of any shareholders agreements that affect it, and no concerted actions have taken place between its shareholders.

Significant agreements that may be affected by a change in control of the Company as a result of a takeover bid

The Company usually participates in the exploration and exploitation of hydrocarbons through consortiums or joint ventures with other oil companies, both public and private. The agreements regulating the relations among partners of the joint ventures commonly grant the other members a right of pre-emption, in the case that any of the members in the cases in which one of the members intends to directly or partially transfer their participation. , in some cases, this could also be applied in cases of indirect transmission, that is, when a change of control occurs in a member.

The laws regulating the oil and gas industry in several countries in which the company operates also submit to prior authorization by the competent government of any transfer of all or part of licenses for hydrocarbon exploration and exploitation concessions, and such authorization is sometimes also required for takeovers of the concessionary company or companies, especially the one that operates the mining business.

Treasury shares

At 2018 year-end, the Company directly held:

Treasury shares

129,084

% of voting rights

0.008%

Significant changes during the year

In addition to the discretionary treasury share transactions, noteworthy of mention are the purchases made under the Share Repurchase Program to be subsequently redeemed, which began on September 4 and ended on November 8, through which 62,705,079 shares were acquired.

In addition, on November 14 a capital reduction was carried out through the redemption of 68,777,603 treasury shares, with a par value of one euro each, approved by the Repsol General Shareholders Meeting held on May 11, 2018 as item six on the agenda.

With regard to treasury share transactions, the Board of Directors is currently authorized to carry out the derivative acquisition of Repsol shares, either directly or through subsidiaries, by virtue of the authorization approved at the Company's Annual General Meeting held on second call on May 11, 2018, as item 8 of the agenda, the resolution of which is transcribed as follows:

"One. To authorize the Board of Directors for the derivative acquisition of shares of Repsol, S.A., by sale, purchase, exchange or any other onerous legal business modality, directly or through subsidiaries, up to a maximum number of shares, that added to those already own by Repsol, S.A. and its subsidiaries, not exceeding 10% of the share capital and for a price or equivalent value that may not be lower than the nominal value of the shares nor exceed the quoted price on the stock market.

The authorization includes the acquisition of shares that, if any, may be disbursed among the employees and directors of the Company and its Group or used to satisfy the exercise of option rights that such persons may hold.

This authorization, which is subject to compliance with all other applicable legal requirements, will be valid for 5 years from the date of this General Shareholders Meeting, rendering null and void, with regard to the part not used, the authorization granted at the Annual General Meeting held on March 28, 2014 as item twenty on the Agenda.

Two. To authorize the Board of Directors to in turn delegate (with the power of delegation, where appropriate) to the Delegate Committee and/or the Chief Executive Officer, pursuant to that established in Article 249 bis.l) of the Corporate Enterprises Act, all the powers that may be delegated that are referred to in this resolution, and all without prejudice to the powers of attorney that exist or may be conferred in relation to the content of this resolution."

2.2. General Shareholders Meeting

The General Shareholders Meeting is the sovereign corporate body through which the shareholders' right to participate in the Company's decision-making process is exercised. The basic principles of its organization and operation are governed in the Company Bylaws and in its Regulations, which contain the rules governing its legal and bylaw-stipulated activities and supplement the applicable rules established in current commercial legislation and the Company Bylaws.

The General Meeting, duly called and convened, will decide by the majorities required in each case by law, the Company Bylaws and the Regulations of the General Meeting on the matters within its competence and, in particular, on the following:

Powers of the General Meeting
▪ Approval of the financial statements of Repsol and the consolidated financial statements of its group, the management of the Board of Directors, and the proposed allocation of profit or loss. ▪ Increase and reduction of share capital, including authorization to the Board of Directors to increase share capital under the terms established in the Corporate Enterprises Act and the removal or limitation of pre-emption rights. ▪ Approval of the issue of debentures and authorization to the Board of Directors to do so. ▪ Appointment and removal of directors, and ratification or revocation of appointments by co-optation made by the Board. ▪ Acquisition, disposal or contribution to another company of the Company's essential operating assets. ▪ Transfer to subsidiaries of essential activities performed up until that time by the Company, even if the Company retains full control over these activities. ▪ Approval, when permitted by law, of structural modifications and, in particular, the transformation, merger, spin-off, global assignment of assets and liabilities, and transfer of the registered office abroad. ▪ Approval of the Directors' remuneration policy. ▪ Releasing of Directors, on an individual basis, from the obligations deriving from their duty of loyalty in the following cases: a. Authorization of related party transactions in the cases contemplated in Article 22 bis of the Company Bylaws. b. Release from the prohibition of obtaining advantages or remuneration from third parties, other than the Company and its Group, associated with the performance of their duties, unless these are merely courtesies. c. Release from the obligation not to compete with the Company, pursuant to Article 44 bis of the Company Bylaws. ▪ Approval of operations that have the equivalent effect of liquidating the Company. ▪ Authorization for the acquisition of treasury shares. ▪ Approval of the final liquidation balance sheet. ▪ Appointment and, as case may be, removal of auditors. ▪ Approval of amendments to the Bylaws in accordance with Law and the Company Bylaws. ▪ Dissolution of the Company.

Accordingly, the Company has not made any decisions that must be submitted for approval at the General Shareholders Meeting, other than those established by law, which involved the acquisition, disposal or contribution to another company of essential assets or any other similar corporate transaction.

Quorums for calling the meeting and voting

The quorum required to validly convene the General Shareholders Meeting is governed by the rules established in the Corporate Enterprises Act.

However, with regard to the majorities necessary for passing resolutions, the Company Bylaws, as authorized by law, establish a larger quorum, both on first and second call, of 75% of the share capital with voting rights attending the General Meeting to validly pass the resolutions indicated below.

Matters that require larger majorities (75% of the share capital with voting rights)
▪ Authorization of related party transactions in the cases contemplated in Article 22 bis of the Company Bylaws. ▪ Releasing of a Director from their obligation of non-competition pursuant to Article 44 bis of the Company Bylaws. ▪ Amendment to Articles 22 bis and 44 bis of the Company Bylaws on related party transactions and prohibition of competition for Directors. ▪ Amendment to Article 22.3 of the Company Bylaws, which explains the larger majority for voting. ▪ Amendment to Article 13.8 of the Regulations of the General Shareholders Meeting, which explains the larger majority for voting.

Amendments to the Company Bylaws are governed by the following articles:

Article 21 of the Company Bylaws	Article 22 of the Company Bylaws
This article indicates that in order for the General Meeting, whether annual or extraordinary, to be able to validly agree to any amendment to the Bylaws, the following will be necessary: First call: the attendance of shareholders, in person or by proxy, representing at least 50% of the subscribed share capital with voting rights. Second call: the attendance of shareholders representing 25% of the share capital.	This article indicates that in order to validly pass a resolution to amend the Bylaws, the following majorities are required: If the share capital in person or by proxy exceeds 50% of the subscribed share capital with voting rights, the favorable vote of the absolute majority will be sufficient, such that the resolution will be deemed to have passed when the votes in favor represent more than half of the votes corresponding to the shares present in person or by proxy at the meeting. When shareholders attending the meeting on second call represent 25% or more of the subscribed share capital with voting rights, but less than 50%, the favorable vote of two thirds of the share capital present in person or by proxy at the meeting will be required. However, and in accordance with that indicated above, a special requirement is established with regard to the regime set forth in the Corporate Enterprises Act for the amendment of Article 22 bis ("Related party transactions") and Article 44 bis ("Prohibition of competition") of the Bylaws, and the amendment of the special rule itself (Article 22.3). In order to validly approve these amendments to the Bylaws, they will require, both on first and second call, the favorable vote of 75% of the share capital with voting rights attending the General Meeting.

Right to attend

Those shareholders that meet the following conditions may attend the General Meeting:

- Their shares are registered in the corresponding accounting record five days before the meeting is held.
- They have the corresponding attendance, proxy and distance voting card.

There are no other restrictions established in the bylaws requiring a minimum number of shares to attend General Meetings.

Attendance, proxy and distance voting cards are issued by the corresponding member of Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A.U. (IBERCLEAR) in each case or by the Company itself.

These cards may be exchanged on the date of the meeting for other standardized documents for recording attendance, issued by the Company, in order to:

- facilitate the compiling of the attendance list;
- exercise voting rights, and
- exercise other shareholders' rights.

Voting by remote means of communication prior to the meeting

Shareholders with the right to attend may vote by remote means of communication on the proposals regarding the items on the agenda prior to the date of the meeting, provided the identity of the shareholder exercising their voting rights is duly guaranteed (Article 23 of the Company Bylaws and Article 7 of the Regulations of the General Shareholders Meeting).

Details of attendance and main resolutions passed at the 2018 General Meeting

At 12:00 p.m. on May 11, 2018, the Repsol Annual General Meeting was held at Palacio Municipal de Congresos, Avenida de la Capital de España-Madrid, sin número, Campo de las Naciones. The General Meeting was held on second call.

Data on attendance at General Shareholders Meetings					
Date of General Meeting	**% of attendance in person**	**% by proxy**	**% of distance voting**		**Total**
			Electronic vote	**Others**	
May 20, 2016	18.87%	32.43%	0.02%	1.54%	52.86%
Of which is free float:	0.13%	32.43%	0.02%	1.54%	34.12%
May 19, 2017	8.35%	46.74%	0.02%	1.88%	56.99%
Of which is free float:	0.10%	36.89%	0.02%	1.88%	38.89%
May 11, 2018	8.09%	50.07%	0.02%	0.58%	58.76%
Of which is free float:	0.15%	40.22%	0.02%	0.58%	40.97%

Right to information

Information and documentation on corporate governance and on the most recent general meetings are available on Repsol's corporate website (www.repsol.com), under the 'Shareholders and Investors - Corporate Governance' section, through the following links:

https://www.repsol.com/en/shareholders-and-investors/corporate-governance/index.cshtml

https://www.repsol.com/en/shareholders-and-investors/corporate-governance/annual-general-meeting/index.cshtml

At the Annual General Meeting held on May 11, 2018, the Chairman and the Chief Executive Officer notified shareholders, among other matters, of the following: (i) the macroeconomic environment; (ii) the energy transition; (iii) compliance with strategic obligations; (iv) the results of 2017 and the first quarter of 2018; and (v) the outlook of the Company.

It should also be noted that the Company continued to bring its procedures and internal regulations into line with the recommendations of the Good Governance Code approved by the CNMV. All proposals on the agenda of the 2018 Meeting were approved by an ample majority of shareholders. The voting results for each of the resolutions are indicated below.

Results of the vote on the proposed resolutions for the items on the agenda			
Resolutions		**Number of shares** [5]	**% of share capital in attendance** [6]
One. Review and approval, if appropriate, of the Financial Statements and Management Report of Repsol, S.A. and the Consolidated Financial Statements and Consolidated Management Report for the year ended December 31, 2017.	For	908,144,454	99.298 %
	Against	207,011	0.023 %
	Abstained	130,694	0.014 %
Two. Review and approval, if appropriate, of the proposed allocation of profit in 2017.	For	907,405,593	99.217 %
	Against	956,325	0.105 %
	Abstained	120,241	0.013 %
Three. Review and approval, if appropriate, of the management of the Board of Directors of Repsol, S.A. during 2017.	For	885,330,399	96.813 %
	Against	22,702,555	2.483 %
	Abstained	360,513	0.039 %
Four. Share capital increase for an amount to be determined in accordance with the terms of the resolution, by issuing new common shares with a par value of one (1) euro each, of the same class and series as those currently in circulation, charged to reserves, offering the shareholders the possibility of selling the scrip dividend rights to the Company itself or on the market. Delegation of powers (…)	For	907,492,679	99.227 %
	Against	864,289	0.095 %
	Abstained	125,191	0.014 %
Five. Second share capital increase for an amount to be determined in accordance with the terms of the resolution, by issuing new common shares with a par value of one (1) euro each, of the same class and series as those currently in circulation, charged to reserves, offering the shareholders the possibility of selling the scrip dividend rights to the Company itself or on the market. Delegation of powers (…)	For	907,471,175	99.225 %
	Against	876,595	0.096 %
	Abstained	134,389	0.015 %
Six. Approval of a share capital reduction for an amount to be determined in accordance with the resolution, through the redemption of the Company's treasury shares. Delegation of powers (…)	For	908,140,904	99.298 %
	Against	186,354	0.020 %
	Abstained	154,901	0.017 %
Seven. Delegation to the Board of Directors, in accordance with the provisions of Article 297.1.b) of the Corporate Enterprises Act, of the power to increase share capital, once or on several occasions and at any time within a period of five years, through monetary contributions, up to a maximum nominal amount of €778,232,482, rendering null and void the second resolution passed by the General Shareholders Meeting held on March 28, 2014 under item nineteen on the Agenda. Delegation of the power to exclude the pre-emption right, in accordance with Article 506 of the Corporate Enterprises Act.	For	760,913,104	83.200 %
	Against	142,787,194	15.613 %
	Abstained	4,781,861	0.523 %
Eight. Authorization to the Board of Directors, with express power of delegation, for the derivative acquisition of Repsol, S.A. shares, directly or through subsidiaries, within a period of five years from the resolution of the Meeting, rendering null and void, with regard to the part not used, the authorization	For	892,084,629	97.542 %
	Against	15,843,002	1.732 %

[5] Repsol holds treasury shares which, pursuant to Article 148 of the Corporate Enterprises Act, are calculated at the General Meeting for the purpose of establishing the required quorum and pass the resolutions, however, they are not calculated for voting purposes as the exercise of voting and other rights are suspended.
[6] The percentage of share capital in attendance represented by votes in favor, votes against and abstentions, which is published on the Company's corporate website and reproduced herein, is calculated by taking into account the effect of treasury shares.

granted at the Annual General Meeting held on March 28, 2014 under item twenty on the Agenda.	Abstained	554,528	0.061 %
Nine. Ratification of the appointment by co-optation and re-election as Director of Jordi Gual Solé.	For	839,686,295	91.813 %
	Against	68,520,889	7.492 %
	Abstained	274,975	0.030 %
Ten. Appointment of María del Carmen Ganyet i Cirera as Director.	For	904,777,399	98.930 %
	Against	3,428,721	0.375 %
	Abstained	276,039	0.030 %
Eleven. Appointment of Ignacio Martín San Vicente as Director.	For	897,341,837	98.117 %
	Against	10,855,611	1.187 %
	Abstained	284,711	0.031 %
Twelve. Advisory vote on the Repsol, S.A. Annual Report on Directors' Remuneration for 2017.	For	864,094,909	94.491 %
	Against	32,954,738	3.604 %
	Abstained	11,343,820	1.240 %
Thirteen. 2019-2021 Share Acquisition Plan.	For	906,137,508	99.079 %
	Against	2,157,073	0.236 %
	Abstained	187,578	0.021 %
Fourteen. Delegation of powers to interpret, supplement, develop, execute, rectify and formalize the resolutions passed by the General Meeting.	For	908,082,944	99.292 %
	Against	265,794	0.029 %
	Abstained	133,421	0.015 %

3. Repsol's governance body

3.1. Composition of the Board of Directors

As established in the Company Bylaws, the Board of Directors must be formed by a maximum of sixteen (16) and a minimum of nine (9) Directors. The Board of Directors is currently formed by fifteen (15) directors, although the number set at the General Meeting of April 30, 2014 was sixteen (16). The Board of Directors has therefore agreed, at the proposal of the Nomination Committee, to propose reducing the number of Board members to 15 at the next Annual General Meeting.

The composition of the Board of Directors at December 31, 2018 is shown in the table below:

Director	Profile	Committees	First appointment	Last appointment	Selection procedure	Date of birth
Antonio Brufau Niubó	Chairman - Other Non-Executive	Delegate Committee (C)	7/23/1996	4/30/2015	General Shareholders Meeting Resolution	3/12/1948
Josu Jon Imaz San Miguel	Chief Executive Officer - Executive	Delegate Committee	4/30/2014	4/30/2015	General Shareholders Meeting Resolution	9/6/1963
Manuel Manrique Cecilia	Deputy Chairman - Proprietary Non-Executive	Delegate Committee	4/25/2013	5/19/2017	General Shareholders Meeting Resolution	1/1/1954
Mª Teresa Ballester Fornés	Director - Independent Non-Executive	Audit and Control Committee; Remuneration Committee	5/19/2017	5/19/2017	General Shareholders Meeting Resolution	5/13/1963
Luis Carlos Croissier Batista	Director - Independent Non-Executive	Audit and Control Committee; Sustainability Committee	5/9/2007	4/30/2015	General Shareholders Meeting Resolution	8/19/1950
Rene Dahan	Director - Proprietary Non-Executive	Delegate Committee	5/31/2013	4/30/2015	General Shareholders Meeting Resolution	8/26/1941
Ángel Durández Adeva	Director - Independent Non-Executive	Audit and Control Committee; Appointments Committee (C); Remuneration Committee (C)	5/9/2007	4/30/2015	General Shareholders Meeting Resolution	3/21/1943
Carmina Ganyet i Cirera	Director - Independent Non-Executive	Audit and Control Committee; Appointments Committee	5/11/2018	5/11/2018	General Shareholders Meeting Resolution	4/8/1968
José Manuel Loureda Mantiñán	Director - Proprietary Non-Executive	Appointments Committee; Remuneration Committee; Sustainability Committee	1/31/2007	4/30/2015	General Shareholders Meeting Resolution	6/20/1939
Ignacio Martín San Vicente	Director - Independent Non-Executive	Delegate Committee; Remuneration Committee	5/11/2018	5/11/2018	General Shareholders Meeting Resolution	5/4/1955
Henri Philippe Reichstul	Director - Other Non-Executive	Delegate Committee	10/30/2018*	10/30/2018	Co-optation	4/12/1949
Mariano Marzo Carpio	Director - Independent Non-Executive	Appointments Committee; Sustainability Committee (C)	5/19/2017	5/19/2017	General Shareholders Meeting Resolution	9/8/1951
J. Robinson West	Director - Independent Non-Executive	Delegate Committee	1/28/2015	4/30/2015	General Shareholders Meeting Resolution	9/16/1946
Luis Suárez de Lezo Mantilla	Director Secretary - Executive	Delegate Committee	2/2/2005	5/19/2017	General Shareholders Meeting Resolution	11/24/1951
Isabel Torremocha Ferrezuelo	Director - Independent Non-Executive	Audit and Control Committee (C)	5/19/2017	5/19/2017	General Shareholders Meeting Resolution	1/25/1964

Committees of the Board of Directors

- Delegate Committee
- Audit and Control Committee
- Appointments Committee
- Remuneration Committee
- Sustainability Committee
- C Chairman of the Committee

* Mr. Reichstul previously held the position of Company Director from December 2005 to May 2017.

Resignations in 2018:

RESIGNATIONS FROM THE BOARD OF DIRECTORS IN 2018					
Director	**Category when standing down from office**	**Date of last appointment**	**Date of retirement**	**Committees of which they were a member**	**Comments**
Mario Fernández Pelaz	Independent	4/30/2015	2/20/2018	▪ Remuneration Committee ▪ Audit and Control Committee ▪ Nomination Committee	Mr. Fernández Pelaz submitted his letter of resignation prior to the end of his term of office as a result of the notice of the Supreme Court decision dismissing his appeal against the judgment handing down by the Provincial Court of Vizcaya on March 20, 2017.
Artur Carulla Font	Independent	3/28/2014	5/11/2018	▪ Delegate Committee ▪ Nomination Committee ▪ Remuneration Committee	Expiry of the term of office of Artur Carulla Font as Director of the Company.
Gonzalo Gortázar Rotaeche	Proprietary director in representation of Caixabank, S.A.	5/20/2016	9/20/2018	▪ Delegate Committee ▪ Remuneration Committee	Gonzalo Gortázar Rotaeche, First Deputy Chairman of the Board of Directors, submitted his letter of resignation, prior to the expiry of the term of office, as a result of the announcement of Caixabank, S.A. to proceed with the sale of all of its stake in the Company
Jordi Gual Solé	Proprietary director in representation of Caixabank, S.A.	5/11/2018	9/20/2018	▪ Nomination Committee ▪ Sustainability Committee	Jordi Gual Solé submitted his letter of resignation, prior to the expiry of the term of office, as a result of the announcement of Caixabank, S.A. to proceed with the sale of all of its stake in the Company

Chairman of the Board of Directors (Other Non-Executive)

Antonio Brufau Niubó. *Degree in Economics from the University of Barcelona. Named Doctor Honoris Causa by Ramon Llull University in Barcelona*

CURRENTLY

- Chairman of Repsol since 2004
- Chairman of the Repsol Foundation
- Member of the Board of Acción Empresarial of CEOE
- Member of the Spanish Association of Executives and Círculo de Economía
- Trustee of the Instituto Ildefons Cerdà Private Foundation
- Trustee of the CEDE Foundation (Spanish Confederation of Directors and Executives)
- Honorary Chairman of the GLOBALleida Inter-Institutional Consortium
- Trustee of Real Instituto Elcano
- Trustee of FUNSEAM
- Trustee of COTEC (Foundation for Technological Innovation)
- Trustee of the Princesa de Girona Foundation

PRIOR EXPERIENCE AS

- Partner and Director of Auditing at Arthur Andersen
- Deputy Managing Director of the "la Caixa" Group
- Managing Director of the "la Caixa" Group from 1999 to 2004
- Chairman of the Gas Natural Group from 1997 to 2004

Chief Executive Officer (Executive)

Josu Jon Imaz San Miguel*. PhD in Chemical Sciences from the University of the Basque Country. He graduated from the School of Chemical Sciences in San Sebastián and received the award of excellence upon completion of his degree.*

CURRENTLY

- Chief Executive Officer of Repsol since 2014
- Trustee of the Repsol Foundation

PRIOR EXPERIENCE AS

- Chairman of Petronor
- Director of New Energies at Repsol
- Managing Director of the Industrial Area and New Energies at Repsol
- Deputy Chairman of Gas Natural SDG, S.A. from September 2016 to February 2018
- Visiting scholar at Harvard Kennedy School in the US
- Director of Industry, Trade, and Tourism of the Basque Government in 1999
- President of the Basque Nationalist Party (EAJ-PNV)

Deputy Chairman
(Proprietary Non-Executive Director proposed by Sacyr, S.A.)

***Manuel Manrique Cecilia**. Degree in Civil Engineering from Escuela Técnica Superior, Madrid.*

CURRENTLY

- Chairman and Chief Executive Officer of Sacyr, S.A.
- Chairman and Chief Executive Officer of Sacyr Construcción, S.A.U.
- Director of other Sacyr Group companies
- Chairman of the Sacyr Foundation
- Member of the Executive Committee of the Sacyr Vallehermoso Group

PRIOR EXPERIENCE AS

- Founding Partner of Sacyr
- Head of International at Sacyr, S.A.
- Managing Director of Construction at Sacyr, S.A.

Independent Non-Executive Director

***María Teresa Ballester Fornés**. Graduated Cum Laude in Finance and Political Science from Boston College. MBA from Columbia University in New York City.*

CURRENTLY

- Founder and managing partner of the private equity fund Nexxus Iberia I.
- Director of Prisa Radio, S.A.
- Member of the Círculo de Empresarios
- Member of the Institute of Directors and Administrators (ICA)
- Member of the Women Corporate Directors (WCD)
- Member of the International Women's Forum (IWF)

PRIOR EXPERIENCE AS

- Financial executive at GTE Corporation (Verizon) in the US
- Strategy consultant at Booz, Allen & Hamilton
- Chief Executive Officer of 3i in Spain
- From 2014 to January 2017, she provided services to EY as an external advisor of the Transaction Services (TAS) division
- President of the Spanish Association of Venture Capital Entities (ASCRI)

Independent Non-Executive Director

Luis Carlos Croissier Batista*. Degree in Economics from Complutense University of Madrid. Postgraduate studies and PhD from Université de la Sorbonne - Université de Paris.*

CURRENTLY

- Director of Adveo, S.A.
- Director of Alantra Partners, S.A.
- Sole Director of Eurofocus Consultores, S.L.

PRIOR EXPERIENCE AS

- Professor in charge of economic policy at Complutense University of Madrid.
- Subsecretary of the Ministry of Industry and Energy
- President of the National Institute of Industry (I.N.I.)
- Minister of Industry and Energy
- President of Spanish National Securities Market Commission (CNMV)

Proprietary Non-Executive Director proposed by Temasek Holdings (Private) Limited

Rene Dahan

CURRENTLY

- Member of the International Advisory Board of the IE Business School in Madrid
- Chairman of the Dahan Family Foundation
- Chairman of the Supervisory Board of the Dutch company NRGV Retail Nederland B.V. since 2016

PRIOR EXPERIENCE AS

- Director and Executive Deputy Chairman of ExxonMobil until 2002
- From 2002 to 2009, he served as Director on the Supervisory Boards of VNU N.V., TNT N.V. and Aegon N.V. and the Advisory Boards of CVC (private equity) and the Guggenheim Group in New York.
- Chairman of the Supervisory Board of Royal Ahold, N.V., a position he held until 2013

Independent Non-Executive Director

Ángel Durández Adeva. *BA in Economics, Professor of Commerce, chartered accountant and founding member of the Registry of Economic Auditors.*

CURRENTLY

- Director of Prosegur, S.A.
- Director Quantica Producciones, S.L.
- Director of Ideas4all, S.L.
- Chairman of Arcadia Capital, S.L.
- Member of the Independiente Foundation
- Deputy Chairman of the Euroamérica Foundation
- Chairman of the Foros Foundation

PRIOR EXPERIENCE AS

- Partner of Arthur Andersen from 1976 to 2000.
- Up until March 2004, he headed the Euroamérica Foundation, of which he was a founding trustee.
- Chairman of OJD-Oficina de Justificación de la Difusión, S.A. from 2004 to 2016.
- Member of the Board of Directors of Mediaset España, S.A.

Independent Non-Executive Director

Carmina Ganyet i Cirera. *Degree in Economics and Business Administration from Universitat Autònoma de Barcelona. Postgraduate studies at ESADE.*

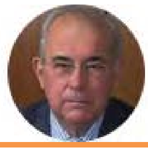
CURRENTLY

- Corporate Managing Director of Inmobiliaria Colonial and forms part of its Management Committee.
- Member of the Board of Directors of Société Foncière Lyonnaise.
- Member of the Management Board of Círculo de Economía
- Member of the Board Ethos Ramon Llull - Ethics and Business
- Member of the Executive Committee of Barcelona Global
- Member of the Management Board of Esade-Alumni

PRIOR EXPERIENCE AS

- Auditor at Artur Andersen
- Head of Investment and Management Control of the Financial, Real Estate and Insurance Group of Caixa Holding (currently Criteria) since 1995
- In 1999, she led the IPO of Colonial and in 2000, she was appointed Financial Director and became part of its Management Committee.
- In 2004, she led the takeover bid for Société Foncière Lyonnaise (real estate company listed on the Paris Stock Exchange), consolidating Colonial as a benchmark real estate development company in Europe.
- She participated in designing the takeover bid for Axiare and in all the operations of organic and corporate growth that have allowed Colonial to be part of the Ibex 35 and a benchmark pan-European real estate office leader.

- Member of the Board of Directors of ICF (Instituto Catalán de Finanzas)
- Member of the Board of Directors of SegurCaixa Adeslas.
- Professor at the School of Business Administration of Universitat Ramon Llull and Trustee of the Ramon Llull Universitat
- Founder of l'Espai Vicens Vives



Proprietary Non-Executive Director proposed by Sacyr, S.A.

***José Manuel Loureda Mantiñán**. Civil Engineer.*

CURRENTLY

- Director of Sacyr, S.A. (in representation of Prilou, S.L.)
- Chairman of Valoriza Gestión, S.A.U.
- Director of Sacyr Construcciones, S.A.U.

PRIOR EXPERIENCE AS

- Founder of Sacyr, where he was Chief Executive Officer until 2000 and Chairman until 2004.
- From 2003 to 2004, following the merger of Sacyr and Vallehermoso, he was Chairman of the Sacyr Vallehermoso Group.

Independent Non-Executive Director

***Ignacio Martín San Vicente**. Industrial Electrical Engineer from the University of Navarra.*

CURRENTLY

- Director of Bankoa-Credit Agricole
- Director of Indra Sistemas, S.A.
- Director of Acerinox, S.A.

PRIOR EXPERIENCE AS

- Managing Director of GKN Automotive International
- Member of the Global Executive Committee of GKN Automotive International
- Chief Executive Officer in the US of GKN Automotive International
- Deputy Managing Director to the Chairman of Alcatel España
- General Manager of Operations in Europe for the GKN Driveline Group
- Executive Deputy Chairman of the GSB Group, where he led the merger with Corporación Industrial Egaña, which gave rise to CIE Automotive
- Chief Executive Officer of CIE Automotive until 2012
- Executive Chairman of Gamesa from 2012 until its merger with Siemens Wind Power in May 2017

Other Non-Executive Director

***Henri Philippe Reichstul**. Degree in Economics from the University of São Paulo. PhD from Hertford College in Oxford.*

CURRENTLY

- Member of the Advisory Board of Lhoist do Brasil Ltda.
- Member of the Supervisory Board of Vigilancia de PSA Peugeot Citroen, S.A.
- Chairman and Member of the Supervisory Board of the Fives Group
- Member of the Board of Directors of the LATAM Airlines Group
- Member of the Board of Directors of TAM Linhas Aéreas
- Chairman of the Brazilian Foundation for Sustainable Development (FBDS)

PRIOR EXPERIENCE AS

- Secretary of the State Business Budget Office
- Deputy Minister of Planning in Brazil
- Executive Deputy Chairman of Banco Inter American Express, S.A. from 1988 to 1999
- Chairman of Brazilian State Oil Company Petrobrás from 1999 to 2001

Independent Non-Executive Director

***Mariano Marzo Carpio**. Degree in Geology from the University of Barcelona. PhD in Geological Sciences. Professor of Stratigraphy, Energy Resources and Petroleum Geology in the Earth Sciences Department of the University of Barcelona.*

CURRENTLY

- Member of the American Association of Petroleum Geologists
- Member of the European Association of Petroleum Geoscientists & Engineers.
- Member of the Advisory Board of the Spanish Energy Club

PRIOR EXPERIENCE AS

- Head of Section 4 (Earth Sciences) of the Reial Acadèmia de Ciències i Arts de Barcelona [Royal Academy of Sciences and Arts of Barcelona].
- He has served on several advisory boards on energy for central and regional governments and other bodies.
- He maintains an ongoing relationship with the oil and gas industry through applied research on the exploration and sedimentological characterization of sites.
- He is a member of the editorial boards of internationally renowned magazines in the field of geology, such as Basin Research, Geology and Sedimentology, and has published several papers and given numerous lectures.

Independent Non-Executive Director

***J. Robinson West**. Graduate of the University of North Carolina Chapel Hill and Jurist Doctor from Temple University Law School in Philadelphia.*

CURRENTLY

- Managing Director of The Boston Consulting Group
- Member of the National Petroleum Council
- Member of the Council on Foreign Relations
- Chairman of the German Marwill Fund of the US
- Chairman Emeritus of the United States Institute of Peace

PRIOR EXPERIENCE AS

- Founder of PFC Energy, a company over which he presided until 2013.
- Assistant Secretary of the Interior during the Reagan administration, where he developed and implemented the five-year leasing plan for the U.S. Outer Continental Shelf (OCS), the largest non-financial auction in the world at that time.
- Deputy Assistant Secretary of Defense for International Economic Affairs during the Ford administration, receiving the Secretary of Defense Medal for Outstanding Civilian Service.

Independent Non-Executive Director

Isabel Torremocha Ferrezuelo. *Degree in Chemistry from the Universidad Autónoma of Madrid. Specialization course in Plastics and Rubber from the CSIC, Leadership Program at the IMD Business School, Program for Management Development (PMD) at IESE Business School,Corporate Finance Course at IE Business School and Executive Program on Singularity University.*

CURRENTLY

- Trustee and Chairman of the Nomination Committee at the "Plan Internacional" Foundation
- Mentor in the start-up accelerator "Atelier by ISEM" of the University of Navarra
- Member of the Institute of Directors and Administrators (ICA)
- Member of Women Corporate Directors (WCD)
- Member of Foundation Forum of Forums

PRIOR EXPERIENCE AS

- Managing Director and member of the Board of Directors of Accenture España
- Director of Transformation Opportunities at Accenture in the industry of Telecommunications, Media and High Technology (CMT)
- Director of Operations in Europe, Africa and Latin America in CMT
- Responsible for diversity and equality for Europe, Africa and Latin America

General Secretary Director and Secretary to the Board of Directors (Executive)

Luis Suárez de Lezo Mantilla. *Law Degree from Complutense University and State Counsel (on leave of absence).*

CURRENTLY

- Deputy Chairman of the Repsol Foundation

PRIOR EXPERIENCE AS

- Director Legal Affairs of Campsa until the oil monopoly ended.
- Attorney at law, primarily in the energy sector
- Secretary of the Board of Directors of Banco Herrero
- Member of the Board of Directors of Port Aventura,S.A.
- Member of the Board of Directors of Compañía Logística de Hidrocarburos CLH, S.A. from 2005 to 2010
- Member of the Board of Directors of Naturgy Energy Group, S.A. (formerly Gas Natural SDG, S.A.) from 2010 to 2018

Presence on other boards

In accordance with the Board of Directors Regulations, the Company's Directors may not hold more than four board mandates in other listed companies other than Repsol[7].

The Directors that in turn are directors or representatives of Directors that are legal entities of other listed companies are indicated below[8]:

[7] Pursuant to Article 18 of the Board of Directors Regulations, and to these effects:
(a) all boards of companies that form part of the same group, as well as those board memberships held as proprietary director proposed by any company of this group, will be calculated as a single board mandate; and (b) those board mandates on asset-holding companies or companies that are vehicles or ancillary to exercising the professional services by the Director, their spouse or domestic partner, or their close family members will not be calculated. Exceptionally and due to reasons properly justified, the Board may waive the Director from this prohibition. In addition, the Director must inform the Nomination Committee of any other professional obligations they may have and any material changes in their professional situation, as well as any that may affect the nature or condition by virtue of which they have been appointed Director.

Name of director	Name of listed company	Position
Luis Carlos Croissier Batista	ADVEO, S.A.	Director
	ALANTRA PARTNERS, S.A.	Director
Manuel Manrique Cecilia	SACYR, S.A.	Chairman - Chief Executive Officer
Ángel Durández Adeva	PROSEGUR, S.A.	Director
Jose Manuel Loureda Mantiñán	SACYR, S.A.	Representative of Prilou, S.L. on the board of Sacyr Vallehermoso, S.A.
Carmina Ganyet i Cirera	SOCIÉTÉ FONCIÈRE LYONNAISE	Director
Ignacio Martín San Vicente	INDRA SISTEMAS, S.A.	Director
	ACERINOX, S.A.	Director
Henri Philippe Reichstul	LATAM AIRLINES GROUP, S.A.	Director

None of the Company's current Directors assume the position of director, representative of director or executive in other companies of the Group.

Trend in the presence of women on the Board of Directors

The Company set the target of increasing the presence of women on the Board of Directors to 30% by 2020. In order to meet this target, the number of women on the Board has increased in recent years, and the shareholders at the Annual General Meeting held on May 11, 2018 approved the appointment of a new female Independent Director – Carmina Ganyet i Cirera–, thus increasing the presence of women on the Board of Directors to 20%.

The following table reflects the trend in the presence of women on the Board and the Board Committees over the last four years:

	2018		2017		2016		2015	
	No.	%	No.	%	No.	%	No.	%
Board of Directors	3	20%	2	12.5%	1	6.25%	1	6.25%
Delegate Committee	0	-	0	-	0	-	0	-
Audit and Control Committee	3	60%	2	40%	0	-	0	-
Nomination Committee	1	25%	0	-	1	20%	1	20%
Remuneration Committee	1	25%	0	-	1	20%	1	20%
Sustainability Committee	0	-	0	-	1	20%	1	20%

With regard to the percentage of Independent Non-Executive Directors, the category to which all women that form part of the Board belong, this figure rose from 12.5% in 2015 to 37.5% in 2018.

% Board of **% Independent**

	Directors	Directors
2018	20%	37.5%
2017	12.5%	25%
2016	6.25%	12.5%
2015	6.25%	12.5%

Promoting diversity

The Company has a Director Selection Policy that was approved by the Board of Directors on December 16, 2015, which establishes the criteria for diversity, in the broadest sense, which must be met with regard to the composition of the Board of Directors. In accordance with this policy, Director candidates must be persons whose appointment favors diversity regarding professional experience, knowledge, nationality and gender on the Board of Directors.

The Board of Directors Regulations expressly state that the Nomination Committee must ensure that, when new vacancies arise or when new Directors are appointed, the selection procedures are not implicitly biased in such a way that could lead to discrimination of any type and that women who have the desired professional profile are deliberately sought and included among the potential candidates, and it must inform the Board of the initiatives adopted with respect thereto and the outcome.

Likewise, Article 32 of the Company Bylaws states that both the General Shareholders Meeting and the Board of Directors, performing their functions of submitting proposals to the General Shareholders Meeting and co-optation to fill vacancies, must endeavor to ensure, in relation to the composition of the Board of Directors, that professional, knowledge and experience, international and gender diversity policies are applied.

The Nomination Committee is in charge of ensuring that the Director Selection Policy favors diversity on the Board of Directors, aiming to ensure that female Directors represent at least 30% of Board members by 2020.

Accordingly, the Repsol Global Sustainability Plan establishes some challenges and specific targets for 2020, organized around the pillars of the Sustainability model: climate change, people, safe operation, the environment, innovation and technology, and ethics and transparency These targets include the aforementioned target regarding 30% female representation.

The guidelines of the Company's Ethics and Conduct Code, applicable to the Directors, also include equal opportunities, whereby discrimination based on race, ethnicity, religion, political affiliation, trade union membership, nationality, language, gender, marital status, social status, age, disability, sexual orientation or any other condition is prohibited.

In 2018, and in order to facilitate and prepare the proposals it had to submit to the General Meeting in relation to the appointment of Independent Directors, the Nomination Committee hired an external advisor specializing in the selection of candidates, which prepared and presented a list of potential candidates for the position of Director, in accordance with the guidelines established in the Director Selection Policy and, in particular, with regard to the inclusion of women who have the desired professional profile, in order to favor gender diversity on the Board. The Nomination Committee has also ensured that there is no discrimination for any other reasons, in particular, with regard to age or disability.

The shareholders at the General Meeting held on May 11, 2018 therefore approved the appointment of Carmina Ganyet i Cirera as an Independent Director, with this appointment thus contributing to gender diversity in the composition of the Board, in line with the target set in Repsol's Director Selection Policy.

Compliance with the Director Selection Policy

In compliance with the principles contained in the Director Selection Policy, throughout the year the Nomination Committee carried out an ongoing analysis of the structure, size and composition of the Board of Directors, as well as the competencies, knowledge and experience necessary on the Board.

In 2018, there were a total of four vacancies on the Board of Directors, of which two corresponded to Independent Directors and the other two to Proprietary Directors.

The first vacancy arose on February 20, 2018, following the resignation tendered by the Independent Director Mario Fernández Pelaz, and the second vacancy arose at the General Meeting of May 11, 2018, due to the expiry of the term of office of the Independent Director Artur Carulla Font, who had held the position for 12 years. In relation to these two vacancies, the Nomination Committee carried out a preliminary analysis on the needs of the Repsol Group and the competencies and skills that would be desirable to include or strengthen on the Board of Directors. In order to facilitate and prepare the proposals it had to submit to the General Meeting in relation to the appointment of Independent Directors and to have a variety of candidates that would enable their selection by the Committee, the Nomination Committee agreed to hire an external advisor specializing in the selection of candidates.

After analyzing the various profiles submitted, confirming their availability and compatibility of the position with their other professional obligations and assessing their suitability to become Directors of Repsol based on the needs of the Group and the challenges faced by the Company, the Nomination Committee agreed to propose to the Board of Directors –to subsequently be submitted at the General Shareholders Meeting–, the appointment of Carmina Ganyet i Cirera and Ignacio Martín San Vicente as Independent Directors of the Company. These appointments were approved at the General Shareholders Meeting held on May 11, 2018.

Subsequently, on September 20, 2018 two Proprietary Directors proposed by CaixaBank tendered their resignation – Jordi Gual Solé and Gonzalo Gortázar Rotaeche–, and the Committee began a new process of analyzing the composition of the Board and the competencies and skills that would be most desirable to include or strengthen on this managing body. In this regard, the Nomination Committee, at its meeting held on September 26, 2018, began to analyze two potential candidates with the appropriate characteristics with regard to knowledge and experience to cover the aforementioned vacancies. One of these candidates was Henri Philippe Reichstul, who was an Independent Director of Repsol from 2005 to 2017, with his term of office being characterized by his excellent contributions. Given that Mr. Reichstul had already been an Independent Director for twelve years, he was appointed as a Non-Executive Director.

With regard to the proposals relating to the composition of the Board of Directors that should be submitted at the General Shareholders Meeting in 2019, in view of the expiry of the terms of office of Mr. Brufau, Mr. Imaz, Mr. Croissier, Mr. Durández, Mr. Loureda and Mr. West, the Committee considered that it was especially necessary to plan ahead of time for the resolutions relating to the Chairman and the Chief Executive Officer. In this regard, the Committee agreed that Mr. Brufau and Mr. Imaz should continue in their position for a new term, due to their excellent management and results obtained, the fact they are highly regarded by investors, and their contribution to achieving the strategic objectives.

With regard to the other proposals relating to the appointment of the Directors that will hold the vacancies that will arise in 2019, upon expiry of the term of office of two Independent Directors, who this year will have held office for twelve years, the Committee agreed to begin analyzing and searching for candidates, through internal or external means, for the purpose of identifying several people that meet the criteria in the Director Selection Policy.

Subsequently, at the meeting held on October 8, 2018, the Chairman of the Nomination Committee reported on the progress made with regard to analyzing the composition of the Board of Directors and confirmed the full availability of Mr. Reichstul to be appointed Director, the compatibility of the position with his other professional obligations and his suitability as Director of Repsol. With regard to the analysis of candidates to cover the vacancies envisaged, the Chairman and the Secretary of the Committee have the power to select and potentially contract a specialized external advisor, for the purpose of having a variety of candidates, which must include women who have the desired professional profile sought in accordance with the Director Selection Policy, the Company Bylaws and the Board of Directors Regulations.

On October 22, 2018, the Nomination Committee held another meeting in which, among other matters, it resolved to: (i) propose the appointment of Henri Philippe Reichstul as Non-Executive Director and member of the Delegate Committee; (ii) continue analyzing other potential candidates for Independent Directors; (iii) propose to the Board of Directors, which in turn agrees to submit the proposal at the General Meeting, the re-election of the Chairman of the Board of Directors and the Chief Executive Officer; (iv) propose to the Board of Directors, which in turn agrees to submit a proposal at the General Meeting, reducing the number of Directors to fifteen and thus comply with recommendation 13 of the Good Governance Code for Listed Companies.

At its meeting on October 30, 2018, the Board of Directors approved the aforementioned proposals and publicly disclosed the resolutions through the corresponding material event.

The Nomination Committee verified that the Director selection and appointment procedures carried out in 2018 complied with that set forth in the Company Bylaws, the Board of Directors Regulations and the

Director Selection Policy, favoring diversity regarding professional experience, knowledge, nationality and gender on the Board of Directors, without any discrimination with regard to age or disability, among other matters.

Director selection process

The director selection process is governed by the Director Selection Policy approved by the Board on December 16, 2015[9].

1. Assessment and selection of candidates
The Nomination Committee is the body in charge of assessing the knowledge, expertise and experience required on the Board, determining the duties and skills required of the candidates who are to fill each vacancy and assessing the time and dedication necessary for them to perform their duties adequately.
2. Appointment of Directors
Board members are appointed by the General Meeting, without prejudice to the right of the Board to nominate shareholders by co-optation to fill any vacancies that arise, up to the next General Meeting. The proposals for the appointment, ratification or re-election of Directors that are submitted at the General Meeting, as well as appointments by the co-optation, will be approved by the Board: (i) upon proposal by the Nomination Committee in the case of Independent Directors, or (ii) subject to a report by the Nomination Committee in the case of other Directors. Within its powers to submit proposals at the General Meeting or appointment by co-optation, the Board may not propose as candidates or appoint as Directors any persons affected by any of the incompatibilities or prohibitions established by law, the Company Bylaws or regulations or any persons, companies or entities with a permanent conflict of interests with the Company, including its competitors or their directors, executives or employees, or any persons related to or proposed by them. In order to be considered for appointment, candidates must have recognized prestige and sufficient professional experience and expertise to perform their duties, in addition to meeting the requirements stipulated for the position by law and the Company Bylaws.

[9] To access the Director Selection Policy: https://www.repsol.com/imagenes/global/en/00-00538PO_Directors_Selection_Policy_en_tcm14-66877.pdf

Furthermore, those persons indicated in Article 13.2 of the Board of Directors Regulations may not be nominated or appointed as Independent Directors. A Director who holds a stake in the Company may be appointed as an Independent Director, provided they meet all the conditions established in the Board of Directors Regulations and inapplicable legislation, and they do not hold a significant interest.

For the purpose of assessing the independence of the Directors, the Appointments Committee takes into account the provisions of the Corporate Enterprises Act, the Good Governance Code for Listed Companies, internal regulations (Director Selection Policy and Article 13.2 of the Board of Directors Regulations), and the policies of the most significant shareholders and proxy advisors, and verifies that Independent Directors do not have any significant direct or indirect relationship with Repsol that could interfere with the independent performance of their duties and carries out the necessary materiality tests.

The Company Bylaws and the Board Regulations do not establish any age limit for Directors or set any additional limit regarding the term of office for Independent Directors other than that stipulated in applicable legislation. Likewise, no specific requirements are established to be elected as Chairman of the Board in addition to those established for the selection of Directors.

The proposals and reports on the appointment of Directors that were submitted for approval at the 2018 Annual General Meeting are available for consultation on the corporate website through the following link: https://www.repsol.com/imagenes/global/es/informes_consejo_administracion_propuestas_acuerdos_jga18_tcm13-127842.pdf

It should also be noted that in 2018 no Proprietary Directors were appointed at the request of shareholders with a stake of less than 3% in the share capital, and there were no formal requests for a place on the Board from shareholders whose stake is equal to or greater than that of others that had been appointed Proprietary Directors.

3. Re-election of Directors

Directors will hold office for a maximum of four years, after which they will be eligible for re-election for one or several periods of equal duration. Directors appointed by co-optation will hold office until the next General Meeting following their appointment, at which their appointment will be subject to ratification.

The Nomination Committee is responsible for assessing the quality of their work and dedication of the Directors proposed during their previous term in office.

4. Cessation

Directors will stand down from office upon expiry of the term for which they were appointed and in all the other cases where this is required by law, the Company Bylaws and the Board of Directors Regulations.

The Board of Directors will not propose the removal of any Independent Non-Executive Director before the end of the period for which they were appointed, except where just cause is found by the Board, based on a proposal from the Nomination Committee. In particular, such a proposal will be justified if the Director (i) has failed to discharge the duties inherent to their position; (ii) is in any of the situations described in Article 16.2 of the Board of Directors Regulations, which is reproduced in subsection "Resignation of Directors" below; or (iii) falls into any of the circumstances of incompatibility to be considered an Independent Non-Executive Director.

The removal of an Independent Non-Executive Director may also be proposed as a result of takeover bids, mergers or other similar corporate transactions which involve a change in the Company's capital structure, to the extent that such removal is necessary in order to establish a reasonable equilibrium between Proprietary Non-Executive Directors and Independent Non-Executive Directors based on the ratio of capital represented by the former to the rest of the capital.

Directors who give up their place before their tenure expires, through resignation or otherwise, should state their reasons in a letter to be sent to all other members of the Board of Directors.

Resignation of Directors

Directors must tender their resignation to the Board of Directors and, if the Board considers it appropriate, resign in the following cases:

a) When they are involved in any of the situations of incompatibility or prohibition established by law, the Company Bylaws or applicable regulations.

b) When they have been seriously reprimanded by the Nomination Committee or by the Audit and Control Committee for having breached their duties as Directors.

c) When, in the opinion of the Board, based on a report by the Nomination Committee:

i. Their remaining on the Board could jeopardize the interests of the Company or adversely affect the functioning of the Board or the standing and reputation of the Company; or

ii. When the reasons for their appointment no longer exist. Directors will find themselves in this position, particularly in the following cases:

   - Proprietary Non-Executive Directors, when the shareholder they represent or who proposed their appointment transfers its entire shareholding. They will also offer their resignation and, should the Board deem fit, step down from the Board, in the corresponding proportion, if the shareholder reduces its shareholding interest to a level requiring a reduction in the number of its Proprietary Non-Executive Directors.

   - Executive Directors, when they cease to hold the executive positions outside the Board with which their appointment as Director is associated.

Article 19 of the Board of Directors Regulations provides that Directors will notify the Board as soon as possible and keep it up to date on any situations in which they may be involved and that could harm the Company's name or reputation, to enable the Board to assess the circumstances, particularly in this regard.

In 2018, no members of the Board of Directors notified the Company that they had been indicted or tried for any of the offences stated in Article 213 of the Corporate Enterprises Act.

3.2. Competencies of the Board of Directors

The Repsol Board of Directors met on 13 occasions in 2018. Director absences were kept to a minimum, and proxies were granted with specific instructions in those cases where a Director could not attend the meeting.

No. of Board meetings **13**

- No. of meetings with attendance in person or by proxy with specific instructions of all Directors: 13
- No. of meetings with attendance in person of at least 90% of Directors: 13
- No. of meetings held without the Chairman: 0

% of total attendance at meetings **100%**

- % of attendance in person over total votes during the year: 98.46%
- % of votes issued with attendance in person and by proxy with specific instructions over total votes during the year: 100%

Attendance at Board of Directors meetings

Director	In person	By proxy	% of attendance in person in 2018
Antonio Brufau Niubó	13	--	100%
Josu Jon Imaz San Miguel	13	--	100%
Manuel Manrique Cecilia	13	--	100%
Maite Ballester Fornés	13	--	100%
Luis Carlos Croissier Batista	13	--	100%
Rene Dahan	13	--	100%
Ángel Durández Adeva	13	--	100%
Carmina Ganyet i Cirera(1)	7	--	100%
José Manuel Loureda Mantiñán	11	2	84.62%
Ignacio Martín San Vicente(2)	7	--	100%
Henri Philippe Reichstul(3)	2	--	100%
Mariano Marzo Carpio	13	--	100%
J. Robinson West	13	--	100%
Luis Suárez de Lezo Mantilla	13	--	100%
Isabel Torremocha Ferrezuelo	13	--	100%
Artur Carulla Font(4)	6	--	100%
Gonzalo Gortázar Rotaeche(5)	9	--	100%
Jordi Gual Solé(6)	8	1	88.89%
Mario Fernández Pelaz(7)	1	--	100%

(1) Ms. Ganyet was appointed Director of Repsol, S.A. on May 11, 2018.
(2) Mr. Martín was appointed Director of Repsol, S.A. on May 11, 2018.
(3) Mr. Reichstul was appointed Director of Repsol, S.A. on October 30, 2018.
(4) The term of office of Mr. Carulla as Director of Repsol, S.A. ended on May 11, 2018.
(5) Mr. Gortázar resigned from his position as Director of Repsol, S.A. on September 20, 2018.
(6) Mr. Gual resigned from his position as Director of Repsol, S.A. on September 20, 2018.
(7) Mr. Fernández resigned from his position as Director of Repsol, S.A. on February 20, 2018.

Duties of the Directors

The duties of the Directors are included in the Board of Directors Regulations. These Regulations indicate that Directors must perform their duties with the diligence of an orderly businessman and a loyal representative, working in good faith in the Company's best interest.

Articles 19 to 23 of the Board of Directors Regulations set out the obligations to be met by Directors in accordance with their duty of diligence and loyalty with regard to non-competition, use of information on corporate assets and taking advantage of business opportunities, and the requirements established in respect of related party transactions between the Company and the Directors, significant shareholders represented on the Board or persons related to them.

Voting procedures

The adoption of resolutions by the Board of Directors requires the vote in favor of the majority of the Directors attending in person or by proxy, except in those cases indicated below.

Matters that require larger majorities other than those stipulated by law

- Amendments to Articles 20 and 23 of the Board of Directors Regulations regarding the obligation of non-competition and related party transactions, respectively, requires the favorable vote of three-quarters of the Board members.
- The favorable vote of two-thirds of the members not involved in a conflict of interest is required to authorize the Directors to provide advisory or representation services to the Company’s competitors, subject to a favorable report by the Nomination Committee. The favorable vote of two-thirds of the members not involved in a conflict of interest is also required to waive the conflict of interest incompatibility in respect of a proposal put to the General Meeting or an appointment of candidates or Directors by co-optation.
- The favorable vote of two-thirds of the members not involved in a conflict of interest is also required to authorize the Company's related party transactions with Directors, significant shareholders represented on the Board or persons related to them for an amount exceeding 5% of the Group’s assets, in accordance with the most recent consolidated financial statements approved by the General Meeting, in respect of the Company's strategic assets, involving the transfer of significant technology of the Company, intended to establish strategic alliances and which are not mere agreements of action or execution of existing alliances. This is conditional upon the transaction being fair and efficient from the standpoint of the Company’s interests, the Appointments Committee having issued a favorable report after obtaining the corresponding report from an independent expert of renowned prestige in the financial community indicating that the related party transaction will be made on reasonable, arm’s length terms and if it is considered unadvisable to wait for the next General Meeting to obtain authorization, for reasons of opportunity.

Without prejudice to the Directors’ duty to attend the meetings of the bodies they belong to or, failing this, if they are unable for justified reasons to attend the meetings to which they have been called, to issue the appropriate instructions to the director who is to represent them, if any, each Board member may grant a proxy to another member, with no limit on the number of proxies that may be held by any director for attendance of Board meetings, all subject to the provisions of the applicable laws..

Proxies for absent Directors may be granted by any written means, including a letter, telegram, telex, fax or email sent to the Chairman or the Secretary to the Board.

3.3. Activities of the Board of Directors

Repsol's Board of Directors is the holder of the Company's organic representation and the governance body in charge of directing and managing the businesses and interests of the Company, unless reserved for the General Shareholders Meeting. In particular, the Board of Directors is responsible for approving the Company's strategy and the organization needed to put it into practice; overseeing and ensuring that Management meets the targets set and respects the Company's corporate purpose and interests; approving acquisitions and disposals of assets belonging to the Company or its subsidiaries that, for whatever reason and notwithstanding the involvement of the General Meeting when applicable by law, are considered especially significant.

The specific rules relating to its powers, composition, term of office, the convening of and quorum for meetings, the manner in which resolutions are passed and the distribution of positions on the Board are included in the Company Bylaws (Articles 31 to 36) and in the Board of Directors Regulations.

Main activities in 2018

In 2018 the Board examined, discussed and issued proposals and reports on those matters reserved for its competence, most notably including the following:

- Authorization for issue of the Financial Statements and Management Report for 2017.
- Approval of the Annual Financial Report for 2017 and of the Half-Yearly Financial Report for the first half of 2018.
- Approval of the quarterly financial statements for Q1 and Q3 of 2018.
- Approval of the publication of certain financial information (Trading Statement).
- Follow-up on the 2017 budget and the results of the exploratory activity in 2017.
- Information on the progress made during the year.
- 2018 Annual Budget.
- Approval of transactions carried out with significant shareholders.
- The Company's investments and transactions reserved for approval by the Board of Directors.
- Report on the tax policies applied by the Company.
- Reflection on the main strategic lines and follow up on the commitments established in the Strategic Plan.
- Updating of the 2016-2020 Strategic Plan.
- Review of corporate reports on companies in the Oil & Gas sector.
- Approval of the acquisition of the unregulated low-emissions electricity generation businesses of Viesgo as well as its gas and electricity retail business.
- Approval of the sale of the stake in Naturgy.
- Technology strategy for 2018-2022.
- Cybersecurity report.
- Follow-up on the Digitalization Project.
- Convening of the 2018 General Shareholders Meeting, preparation of the proposed resolutions and reports on these proposals, and execution of the resolutions passed.
- Annual Corporate Governance Report for 2017.
- Assessment of the Board and its Committees with external advisors.
- Annual Report on Directors' Remuneration for 2017.
- Approval of Directors' remuneration as a result of belonging to the Board and its Committees and, in the case of Executive Directors, for performing their executive duties.
- Approval of the termination of the 2014-2017 Long-Term Incentive and proposal of the 2018-2021 Long-Term Incentive.
- Execution of the Repsol Flexible Dividend Program.
- Execution of the 2019 Share Acquisition Plan.
- Approval of the changes in the organizational structure.
- Appointment and re-election of the trustees of the Repsol Foundation.
- Appointment of the members of the Board of Directors Committees.
- Follow-up on projects financed with the issue of the green bond.
- Analysis of legislative changes related to climate change.
- Report on Repsol's 5th Sustainability Day held and the ESG (Environmental, Social and Governance) roadshow

3.4. Functioning of the Board of Directors

There is a working environment of open dialogue on the Board that enables Directors to freely express and adopt their positions.

The matters to be discussed at the meetings of the Board and the Committees are planned prior to the beginning of each year by the Chairman of the Board and by the Committee Chairs, who encourage the participation of the Directors, per the definition thereof, along with Company Management.

Main responsibilities of the Chairman	Main responsibilities of the Chief Executive Officer
Antonio Brufau Niubó, the Non-Executive Chairman of the Board of Directors, is the maximum authority responsible for the efficient functioning of this body and as such is responsible for carrying out the following specific duties: · Call and chair the meetings of the Board of Directors and the Delegate Committee, setting their agenda and leading the discussions and debates, in order to ensure that all matters are given sufficient time for discussion, encouraging the active participation of Directors at the meetings, taking into account their skills, experience, knowledge and, where applicable, independence; · Ensure that the Board has effective decision-making processes, in particular in relation to proposals of greater scale; · Ensure that prior to the meeting the Directors receive the appropriate information necessary to discuss the items on the agenda; · Ensure that the Board committees are adequately structured and have appropriate rules of operation; · Regularly review and agree on with each Director their training and development needs; · Ensure that the actions of the Board and its Committees are assessed at least once a year, and take action based on the results of this assessment; · Maintain regular communication with the chief executive, providing the appropriate support, and report to the Board of Directors on their activity and performance. · Chair the General Shareholders Meeting, in accordance with applicable regulations.	Josu Jon Imaz was appointed Chief Executive Officer and a member of Repsol's Delegate Committee, by resolution of the Board of Directors dated April 30, 2014, with such appointment being subsequently ratified. He was reelected by the General Shareholders Meeting on April 30, 2015. Mr. Imaz has been delegated all functions of the Board of Directors, except for those that cannot be delegated by law or under the bylaws, is the Company's chief executive and is responsible for the management of the businesses and the Company.

Information provided to Directors

The Chairman, assisted by the Secretary to the Board, ensures that the Directors are provided with the information necessary, and sufficiently in advance, in order to effectively carry out their responsibilities and adequately prepare for the meetings.

The call notices for Board and Committee meetings will be sent at least 48 hours prior to the meeting and include any documentation related to the agenda and minutes of the previous meeting. Since November 2018, and as a result of the proposals submitted by the Directors in their assessment of the Board for 2017, the Company has continued to work towards the digitalization of the functioning of the Board and the Committees and has implemented the Director Portal, which is a specific computer application that facilitates the performance of the Directors' duties and the exercise of their right to information. This Portal includes the documentation and information deemed suitable for preparing the Board and Committee meetings in accordance with the agenda, including all presentations given, as well as any training materials aimed at Directors and any other information that may be of interest to them.

All Directors will also be provided with the minutes for all Committee meetings, which are also made available on the Director Portal.

Directors have access to all the Company's services and may obtain, with the broadest possible powers, the information and advice they need to perform their functions. The right to information is channeled through the Chairman or the Secretary to the Board of Directors, who respond to Directors' requests and directly furnish them with the information, offering them access to appropriate sources or taking all necessary measures to answer questions.

Interaction of the Board of Directors with executive personnel

The Board of Directors has a direct and ongoing relationship with the members of the Company's Senior Management. Key executives attend Board and Committee meetings with sufficient frequency so as to report on the matters within their competence, and on any other matter that may affect the Company's performance.

When executives are required to attend Board and Committee meetings, they will remain only for those specific items on the agenda where their presence is required.

Likewise, the Chairmen of the various Board Committees will meet on a regular basis with the heads of various corporate and business areas.

Director training

Repsol offers ongoing training programs and refresher courses on subjects in which the Directors have shown an interest. Among other matters, in 2018 training and information sessions were carried out in relation to the following content:

Board of Directors	Tax policies applied to the Company, cybersecurity, technology strategy, energy transition and climate change.
Audit and Control Committee	New accounting standards (IFRS 9, IFRS 15 and IFRS 16), risk management in projects with partners, new methods for the depreciation of exploratory assets, and a specialized meeting on the reserve control system.
Sustainability Committee	Energy transition, recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), culture of safety, natural capital, advances in energy and climate change, community relations and human rights, and the principal international standards on sustainability and corporate responsibility.

The Company also has an induction process for new Directors so that they are able to rapidly acquire sufficient knowledge of the Company and its corporate governance rules.

Orientation Program for New Directors		
Information pack	**Training sessions**	**Specific meetings**
▪ General information on the Company and its strategic plan ▪ Presentation of the Company's governance bodies and organizational structure ▪ Ethics and Conduct Code ▪ Company Bylaws ▪ Regulations of the General Shareholders Meeting ▪ Board of Directors Regulations ▪ Internal Code of Conduct relating to the Securities Market	▪ Functioning of Repsol's main businesses and corporate areas: Exploration and Production, Refining, Chemistry and Marketing ▪ Economic and energy environment	▪ Specific sessions with the various heads of the Company's business and corporate areas ▪ Visits to the Company's various facilities

External advisory services

The Directors have the power to propose to the Board of Directors, by majority vote, the contracting at the Company's expense of legal advisers, accountants, technical, financial, and commercial experts, and experts of any other kind they consider necessary to the Company's interests, to provide assistance in the performance of their functions with regard to specific problems of particular importance and complexity relating to their positions.

The proposal must be submitted to the Chairman of the Company through the Secretary to the Board. The Board of Directors may veto their approval on the grounds that they are unnecessary to the performance of the assigned functions, with regard to their cost (disproportionate in relation to the importance of the problem and the Company's assets and income), or if the technical assistance in question could be adequately provided by experts within the Company.

Assessment of the Board of Directors

In accordance with the provisions of Article 45 quater of the Company Bylaws and Article 11 of the Board of Directors Regulations, at least once a year the Board will assess its performance and the quality and efficiency of its work. It also annually assesses the work of its Committees, based on the reports they submit. The Chairman organizes and coordinates the periodic assessments of the Board with the Committee Chairs. At least once every three years, the Board of Directors is assisted in the assessment process by an external consulting firm.

The assessment for 2018 was carried out through questionnaires that include, among others, various matters related to the composition of the Board of Directors and the Committees, their organization and functioning, and the performance of their responsibilities, as well as the performance of the Chairman of the Board, the Chief Executive Officer and the other Directors.

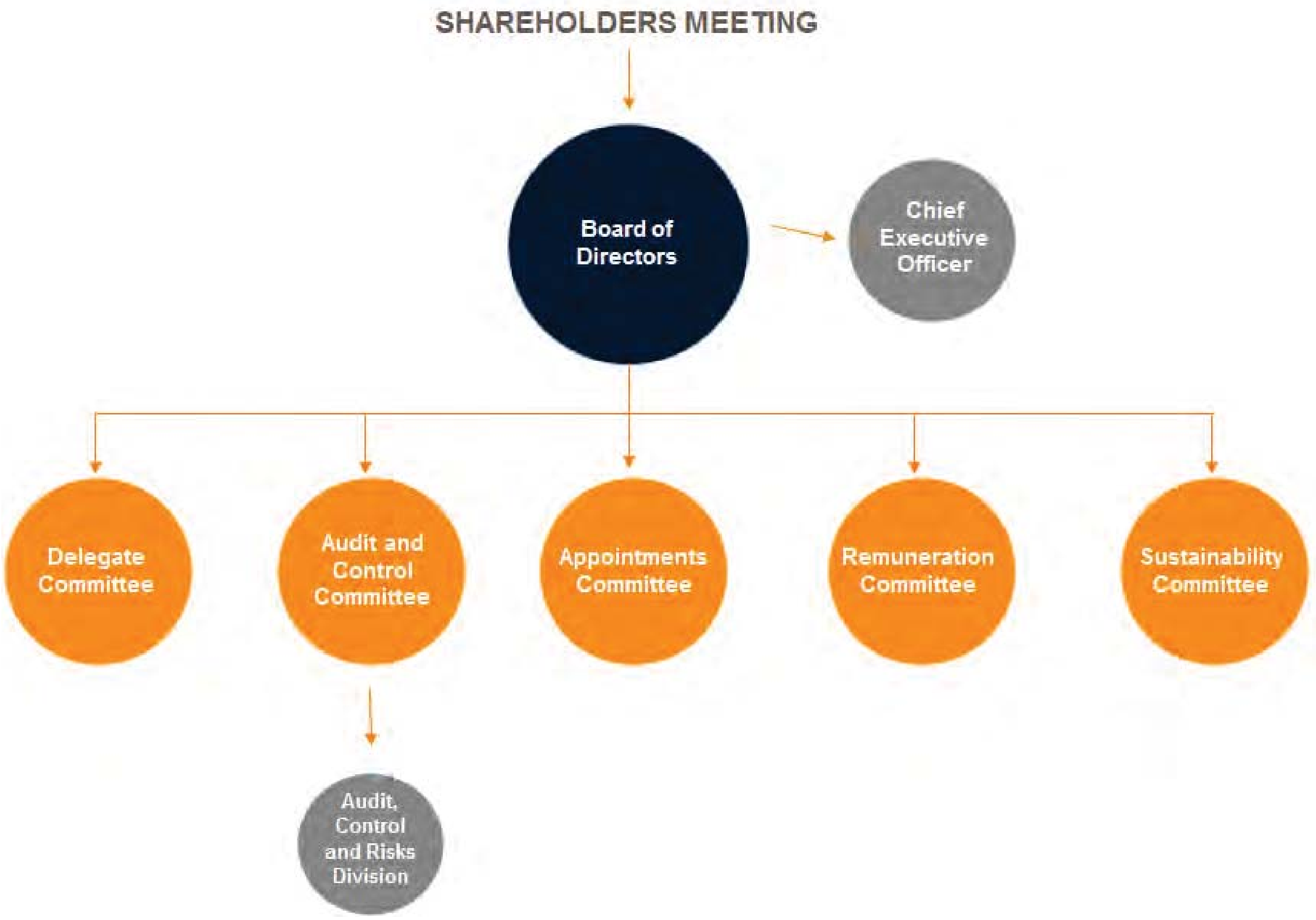
In the assessment for 2018, the Directors showed a high level of satisfaction with regard to the functioning and effectiveness of the Board and its committees and on the role carried out by the Chairman of the Board, the Chief Executive Officer and the General Secretary Director. Specifically, the atmosphere of open dialogue on the Board of Directors, on the quality of the discussions, the reporting by the Committees, the information made available thereto, the strategic discussions and interaction with executive personnel are noteworthy of mention.

The assessment process was completed with the approval of the conclusions report at the Board of Directors meeting on February 27, 2019.

With regard to implementing the actions considered in the work plan of the assessment for 2017, the Company has continued to work towards the digitalization of the functioning of the Board and the Committees by implementing the specific computer application of the Director Portal, through which documentation related to the Board and Committees meetings, as well as training materials and other information of interest to the Directors, are made available electronically to the Directors.

4. Committees of the Board of Directors

Without prejudice to the Board's capacity to create other Committees in accordance with the Bylaws, the Company currently has a Delegate Committee, Audit and Control Committee, Nomination Committee, Remuneration Committee and Sustainability Committee.



Regulation

The composition, functioning and competencies of the Committees of the Board of Directors are governed by the provisions of Articles 37 to 39bis of the Bylaws and Articles 32 to 37 of the Board of Directors Regulations.

Functioning

The Committees will be considered validly convened when one half plus one of its members attend the meeting in person or by proxy.

The members of the Committees will be relieved of their duties once their tenure as Director ceases or when agreed by the Board. Any vacancies that arise will be promptly filled by the Board of Directors.

The Committees will meet as and when called by the Chairman or requested by the majority of its members.

In order to better carry out its duties, this Committee may seek out advice from lawyers and other external professionals, in which case the Secretary to the Board, at the request of the Chairman of the Committee, will take whatever action necessary to engage the services of such lawyers or other professionals, which will be provided directly to the Committee.

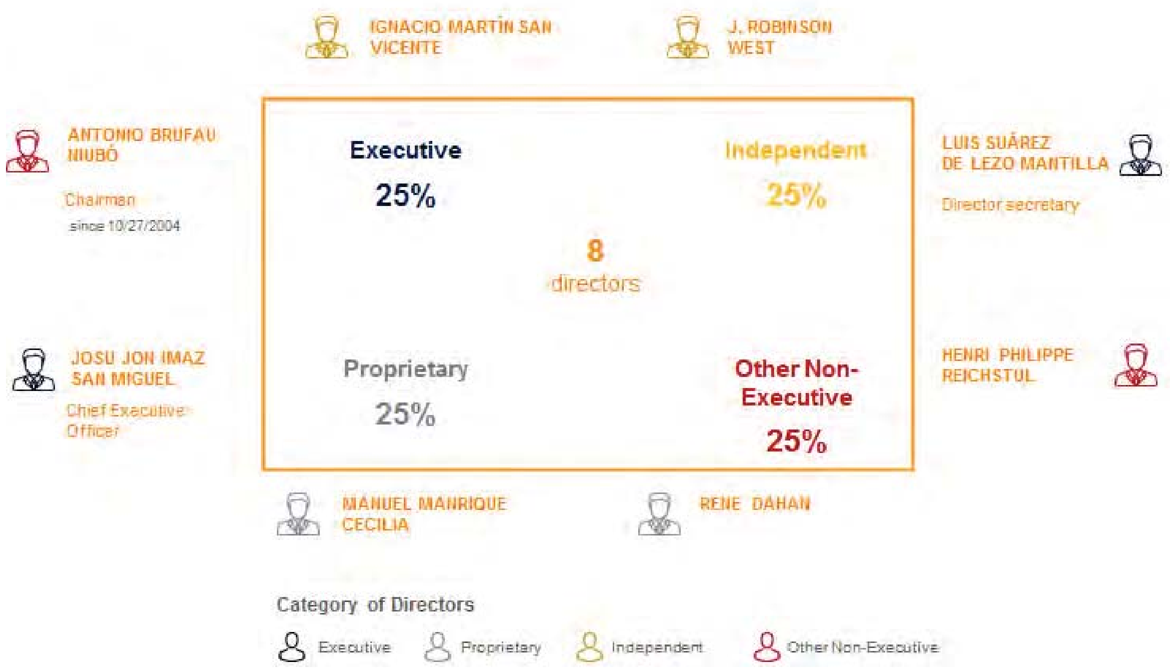
The Committees establishes an annual calendar of meetings, as well as an Action Plan for each year.

4.1. Delegate Committee

Composition

In accordance with the Board of Directors Regulations, the Committee will be composed of the Chairman of the Board of Directors and a maximum of eight Directors belonging to different categories, while maintaining a similar proportion to that of the Board of Directors. The Delegate Committee reflects the percentage on the Board of the various Directors by category. Committee members are appointed with a vote in favor of at least two-thirds of the current Board members. The Chairman and the Secretary of the Delegate Committee will be those of the Board of Directors.

The current composition of the Delegate Committee is as follows:



Competences and activities in 2018

All powers of the Board are permanently delegated to the Delegate Committee, except those that may not be delegated by law or under the Board Regulations. Whenever considered advisable owing to the importance of the business, in the opinion of the Chairman or three members of the Delegate Committee, or when required by the Board of Directors Regulations, the resolutions will be submitted to the Board in plenary session for ratification. The same will be applicable with regard to any matters referred by the Board to be studied by the Delegate Committee, which reserves the right to make the final decision on such matters. In all other cases, the resolutions passed by the Delegate Committee will be valid and binding with no need for subsequent ratification by the Board in plenary session.

No. of meetings in 2018 **8**

Main activities

- Approval of investment projects for amounts over EUR 40 million.
- Analysis and monitoring of relevant projects for the Company.
- 2018 Annual Budget.
- Reflection on the main strategic lines.
- Updating of the 2016-2020 Strategic Plan.
- Report on Venezuela.
- Report on technologies related to climate change.

Attendance at Delegate Committee meetings

Director	In person	By proxy	% of attendance in person in 2018
Antonio Brufau Niubó	8	--	100%
Josu Jon Imaz San Miguel	8	--	100%
Gonzalo Gortázar Rotaeche(1)	5	--	100%
Manuel Manrique Cecilia	8	--	100%
Artur Carulla Font(2)	4	--	100%
Rene Dahan	8	--	100%
Ignacio Martín San Vicente(3)	4	--	100%
Henri Philippe Reichstul(4)	1	--	100%
J. Robinson West	8	--	100%
Luis Suárez de Lezo Mantilla	8	--	100%

(1) Gonzalo Gortázar Rotaeche resigned from his position as Director on September 20, 2018.
(2) The term of office of Mr. Carulla as Director ended on May 11, 2018.
(3) Mr. Martín was appointed member of the Delegate Committee on May 11, 2018.
(4) Henri Philippe Reichstul was appointed member of the Delegate Committee on October 30, 2018.

4.2. Audit and Control Committee

This Committee was voluntarily set up on February 27, 1995, and became mandatory for listed companies in 2002. It is an internal body for information and advisory purposes created by the Board of Directors, without executive functions, but with information, advisory and proposal powers within its area of activity.

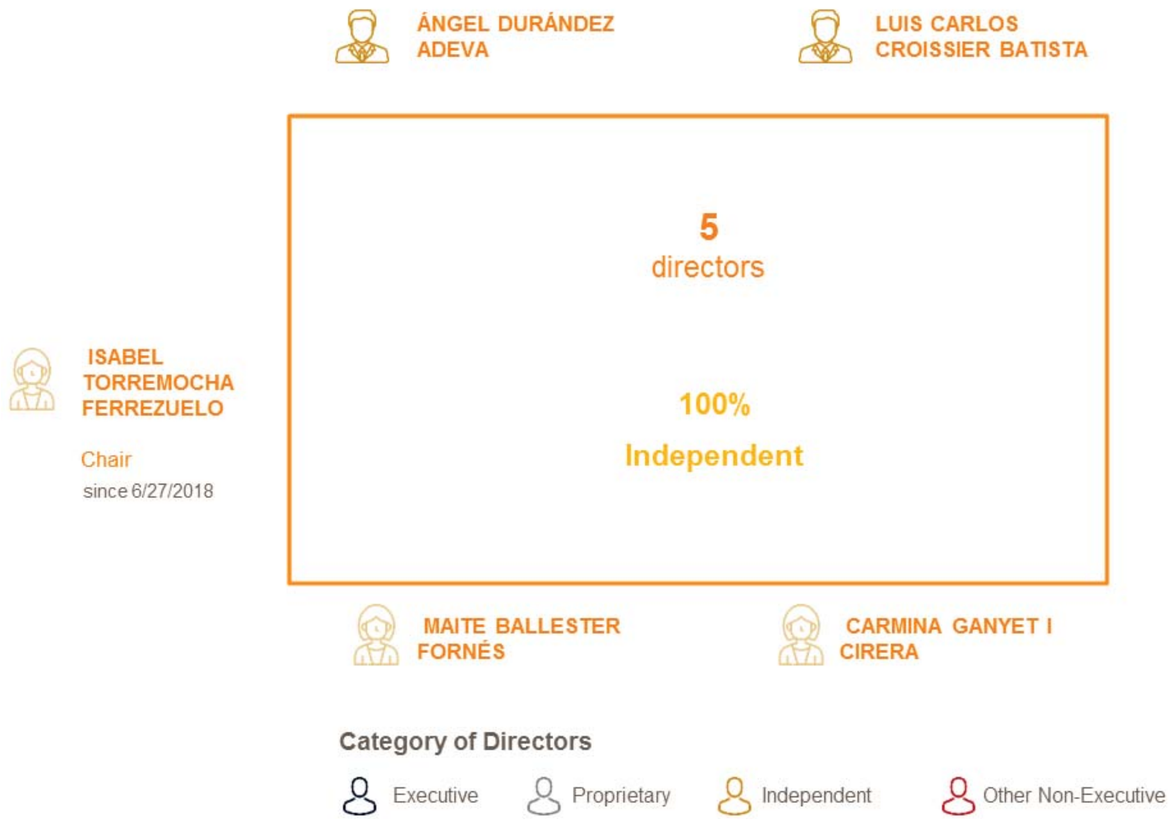
On June 27, 2017, the CNMV published Technical Guide 3/2017 on Audit Committees of Public Interest Entities, which includes additional good practices and criteria on the scope of the functions and responsibilities of audit committees, which the Committee has analyzed, implementing those considered most appropriate.

The Committee will also prepare an annual Activities Report that includes all matters discussed by the Committee. This document is made available to shareholders on the corporate website along with the call notice for the Annual General Meeting.

Composition

In accordance with the Board of Directors Regulations, the Audit and Control Committee will consist exclusively, and no fewer than three, of Independent Non-Executive Directors. Its members are appointed by the Board of Directors for a period of four years, taking into account their expertise and experience in accounting, auditing or risk management. Without prejudice to one or more re-elections, they will be relieved of their duties at the end of the term, when their tenure as a Director ceases, when they are no longer considered Independent, or when agreed by the Board of Directors, subject to a prior report by the Nomination Committee. The Chairman will be appointed from among its members and will hold office as such for a maximum of four years, after which they may not be re-elected until one year has passed, without prejudice to their continuation as a member of the Committee. The Secretary will be the Secretary to the Board of Directors.

The current composition of the Audit and Control Committee is as follows:



The Audit and Control Committee is composed of 60% women and all its members have knowledge and experience in accounting, auditing or risk management, as well as various other competencies related to the sectors of telecommunications, information technologies, private equity, finance, risk control and management, energy or the securities market.

In accordance with the Board Regulations, the two Directors that have been Chairs of the Audit and Control Committee in 2018 – Ángel Durández Adeva and Isabel Torremocha Ferrezuelo– have experience in business and risk management and knowledge of accounting procedures.

Directors appointed based on their expertise and experience in accounting, auditing or both	▪ Isabel Torremocha Ferrezuelo ▪ Ángel Durández Adeva ▪ Luis Carlos Croissier Batista ▪ Maite Ballester Fornés ▪ Carmina Ganyet i Cirera

Competences and activities in 2018

The Committee supports the Board of Directors in its supervisory duties, by regularly reviewing the preparation of economic and financial reporting, the efficacy of internal controls, and the independence of the Auditor, as well as verifying compliance with all the legal provisions and internal regulations applicable to the Company. The Committee is in charge of submitting proposals regarding the appointment, renewal and removal of the External Auditors, as well as proposals on the terms of their contract, monitoring and reviewing the internal control and information systems, and overseeing the independence and effectiveness of the internal audit function. Before they are presented to the Board and with the necessary requirements to check they are correct, reliable, sufficient and clear, the Committee also analyzes the financial statements of the Company and its consolidated Group, as well as any other financial information that the Company is obliged to publish as a listed company, reviews the relevant changes regarding the accounting policies used and ensures that the Board of Directors submits the financial statements at the General Meeting without reservations or qualifications in the auditor's report.

No. of meetings in 2018 **10**

Main activities

- Monitoring of the financial information.
- Approval of the services contracted from external auditors, issuance of the report on the independence of the external auditor and fee proposal.
- Monitoring of the information and internal risk control systems.
- Analysis of communications received regarding accounting, internal accounting and auditing controls.
- Monitoring of the tax policies applied by the Company.
- Monitoring of the activity of the Chief Compliance Officer and the Ethics and Compliance Committee.
- Monitoring of the reserves control.
- Monitoring of discretionary treasury share transactions.
- Review of the Risk Map, as well as emerging and climate change risks.
- Review of the reports and recommendations issued by Internal Audit.
- Analysis of new accounting standards.

Attendance at Audit and Control Committee meetings

Director	In person	By proxy	% of attendance in person in 2018
Isabel Torremocha Ferrezuelo	10	--	100%
Maite Ballester Fornés	10	--	100%
Luis Carlos Croissier Batista	10	--	100%
Ángel Durández Adeva	10	--	100%
Mario Fernández Pelaz (1)	1	--	100%
Carmina Ganyet i Cirera (2)	6	--	100%

(1) Mario Fernández Pelaz resigned from his position as Company Director on February 20, 2018.
(2) Carmina Ganyet i Cirera was appointed member of the Audit and Control Committee on May 11, 2018.

Without prejudice to the functions described above, the Audit and Control Committee will study any other matter that is submitted by the Board in plenary session, by the Delegate Committee or by the Chairman of the Board of Directors.

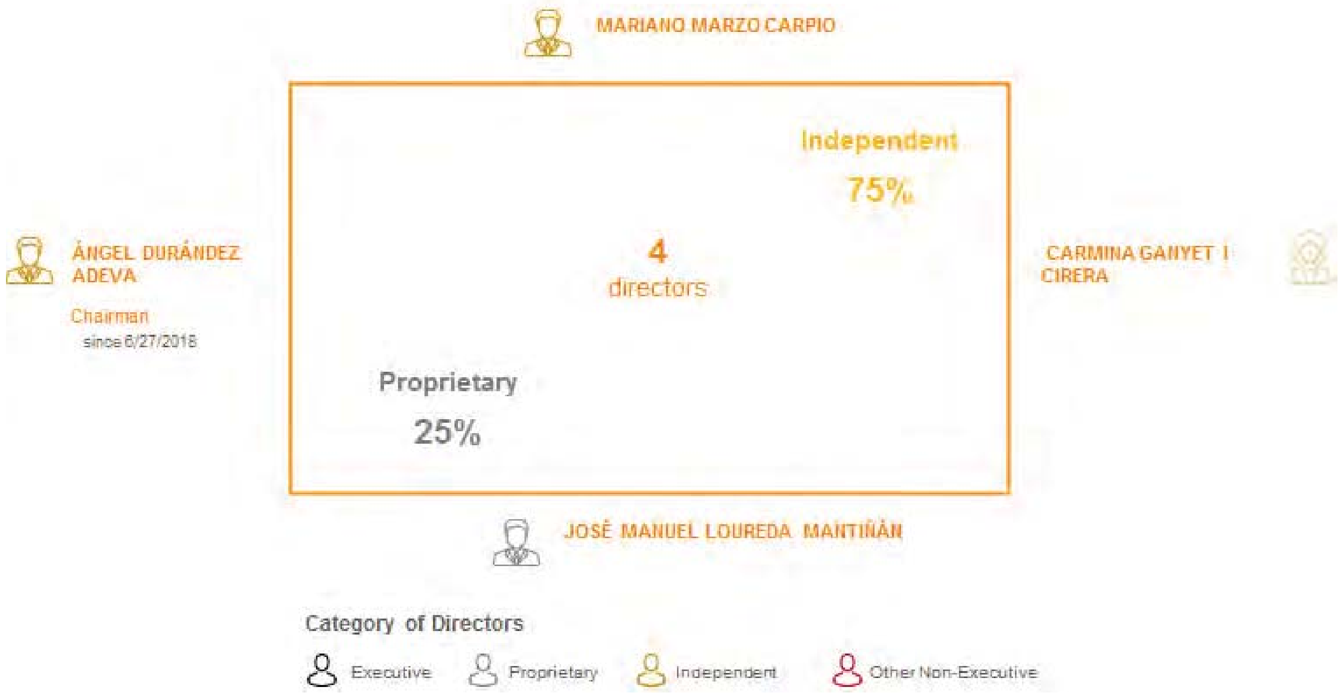
4.3. Nomination Committee

This Committee was created by the Board of Directors, with information, advisory and proposal powers within its area of activity.

Composition

In accordance with the applicable rules, the Nomination Committee consists of no fewer than three Non-Executive Directors, the majority of which must be Independent. Its members are appointed by the Board of Directors for a period of four years, taking into account the expertise, skills and experience of the Directors and the duties of the Committee. Without prejudice the possible re-elections, they will be relieved of their duties at the end of the term, when their tenure as a Director ceases, when they are no longer considered Independent, or when agreed by the Board of Directors, subject to a prior report by the Audit and Control Committee. The Chairman of this Committee will be one of its members, who must be an Independent Director, and the Secretary will be the Secretary to the Board.

The current composition of the Nomination Committee is as follows:



Competences and activities in 2018

The duties of this Committee include, among others, submitting proposals and reporting to the Board of Directors on the selection, appointment, re-election and removal Directors, establishing a representation target for the less well-represented gender on the Board, preparing guidelines on how to reach this target, reporting on the proposed appointment and removal of Senior Managers of the Group, reporting to the Board on compliance by Directors with the corporate governance principles and other obligations, and on matters relating to the non-competition obligations of the Directors and related party transactions.

No. of meetings in 2018 **11**

Main activities

- Analysis of the competencies and skills required on the Board of Directors based on the needs of the Group.
- Proposals on the composition of the Board of Directors.
- Verification of compliance with the Director Selection Policy.
- Verification of the status of each Director.
- Assessment of the functioning of the Board of Directors and its Committees.
- Analysis of related transactions with significant shareholders.
- Change in organizational structure.
- Analysis of the proposed Technical Guide of the Spanish National Securities Market Commission on Appointments and Remuneration Committees.

Attendance at Nomination Committee meetings

Director	In person	By proxy	% of attendance in person in 2018
Artur Carulla Font [(1)]	4	--	100%
Ángel Durández Adeva [(2)]	7	--	100%
Mario Fernández Pelaz [(3)]	N.A	N.A.	N.A.
Carmina Ganyet i Cirera [(4)]	7	--	100%
José Manuel Loureda Mantiñán	10	1	90%
Mariano Marzo Carpio	11	--	100%
Jordi Gual Solé [(5)]	4	2	66.67%

(1) The term of office of Mr. Carulla as Director ended on May 11, 2018.
(2) Ángel Durández Adeva was appointed member of the Nomination Committee on May 11, 2018.
(3) Mario Fernández Pelaz resigned from his position as Company Director on February 20, 2018.
(4) Carmina Ganyet i Cirera was appointed member of the Nomination Committee on May 11, 2018.
(5) Jordi Gual Solé resigned from his position as Company Director on September 20, 2018.

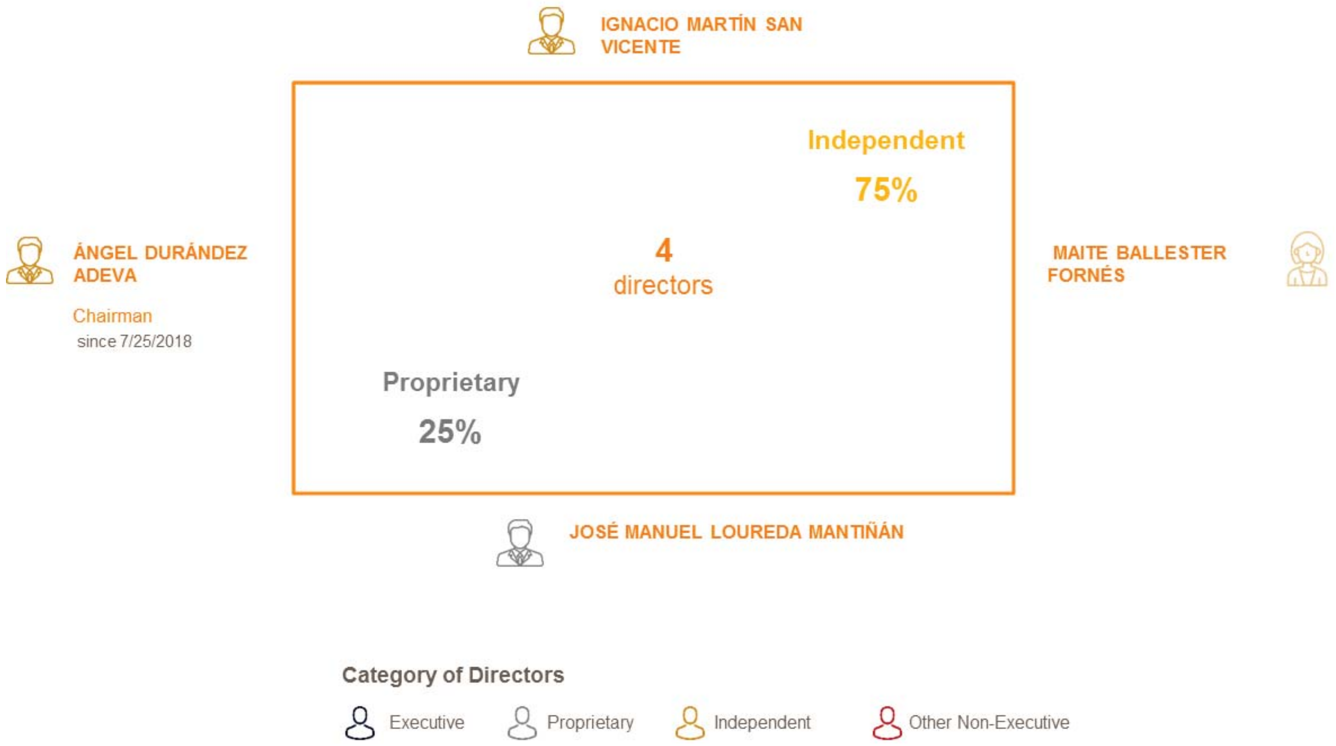
4.4. Remuneration Committee

This Committee was created by the Board of Directors, with information, advisory and proposal powers within its area of activity.

Composition

The Remuneration Committee consists of no fewer than three Non-Executive Directors, the majority of which must be Independent. Its members are appointed by the Board of Directors for a period of four years, taking into account the expertise, skills and experience of the Directors and the duties of the Committee. Without prejudice to one or more re-elections, they will be relieved of their duties at the end of the term, when their tenure as a Director ceases, when they are no longer considered Independent, or when agreed by the Board of Directors, subject to a prior report by the Audit and Control Committee. The Chairman of this Committee will be one of its members, who must be an Independent Director, and the Secretary will be the Secretary to the Board.

The current composition of the Remuneration Committee is as follows:



Competences and activities in 2018

The duties of this Committee include, among others, submitting proposals and reporting to the Board of Directors on the remuneration policy for Directors and Senior Management and its application , including the share- based remuneration systems, on the standard terms of the contracts of Senior Management, verifying compliance with the remuneration policy established by the Company, ensuring that any potential conflicts of interest do not impair the independence of the external advisory services provided the company, verifying the information on remuneration contained in the various corporate documents or reporting on the use of company information and assets for private purposes.

No. of meetings in 2018 **4**

Main activities

- Report on the proposal for the termination of the 2014-2017 Long-Term Incentive Program and proposal of the 2018-2021 Long-Term Incentive Program.
- Proposed remuneration for belonging to the Board of Directors and its Committees for 2018.
- Proposed additional remuneration for Directors that discharge executive functions.
- Annual report on directors' remuneration for 2017.
- Verification of information on remuneration of Directors and Senior Managers included in the notes to the consolidated financial statements for 2017.
- Proposals and reports for the General Shareholders Meeting relating to:
    - 2019-2021 Share Acquisition Plan.
    - Voluntary report on directors' remuneration for 2017.
- Report on the remuneration structure of Executives.
- Analysis of the proposed Technical Guide of the Spanish National Securities Market Commission on Appointments and Remuneration Committees.

Attendance at Remuneration Committee meetings

Director	In person	By proxy	% of attendance in person in 2018
Artur Carulla Font (1)	2	--	100%
Maite Ballester Fornés (2)	4	--	100%
Ángel Durández Adeva	3	1	75%
Mario Fernández Pelaz (3)	N.A.	N.A	N.A
Gonzalo Gortázar Rotaeche (4)	3	--	100%
José Manuel Loureda Mantiñán	4	--	100%
Ignacio Martín San Vicente (5)	2	--	100%

(1) The term of office of Mr. Carulla as Director ended on May 11, 2018.
(2) Ms. Ballester was appointed member of the Remuneration Committee on May 11, 2018.
(3) Mario Fernández Pelaz resigned from his position as Company Director on February 20, 2018.
(4) Mr. Gortázar resigned from his position as Director on September 20, 2018.
(5) Mr. Martín was appointed member of the Remuneration Committee on May 11, 2018.

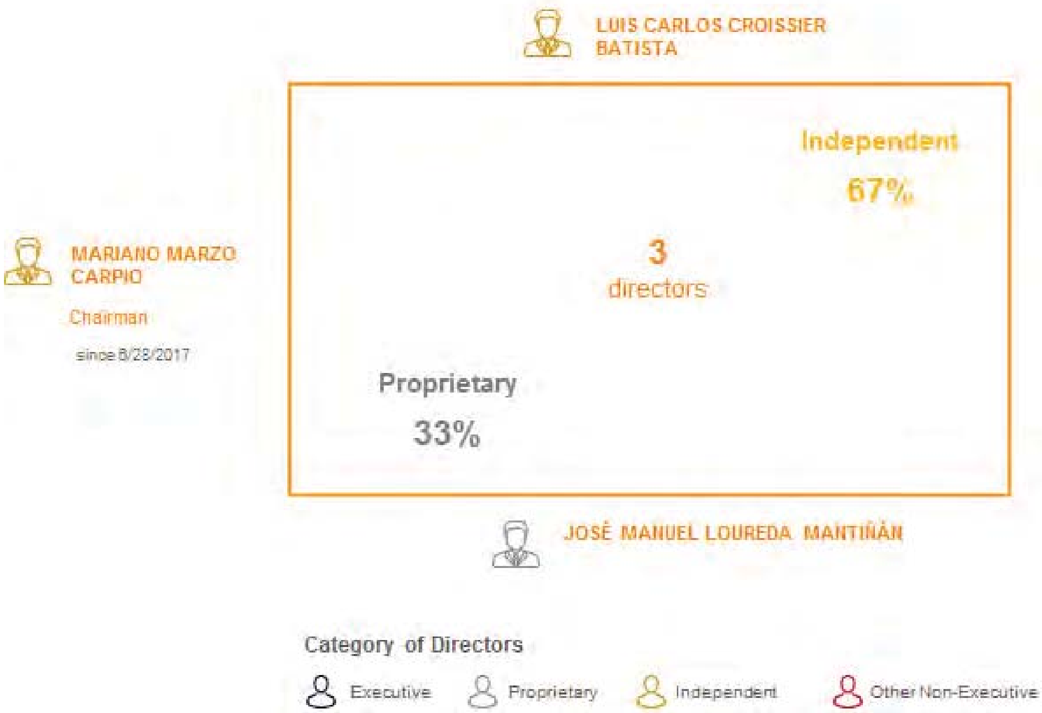
4.5. Sustainability Committee

This Committee is an internal body for information and advisory purposes created by the Board of Directors, without executive functions, but with information, advisory and proposal powers within its area of activity.

Composition

The Committee consists of no fewer than three Directors, the majority of which must be Non-Executive. Its members are appointed by the Board of Directors, taking into account the expertise, skills and experience of the Directors and the duties of the Committee. Members will be appointed for a term of four years. Without prejudice to one or more re-elections, they will be relieved of their duties at the end of the term, when their tenure as a Director ceases, or when agreed by the Board of Directors, subject to a prior report by the Nomination Committee. One of the members of this Committee will be appointed Chairman and the Secretary will be the Secretary to the Board.

The current composition of the Sustainability Committee is as follows:



Competences and activities in 2018

The duties of this Committee include, among others, being familiar with and shaping the Group's policies, objectives and guidelines on environmental, safety and social responsibility matters, analyzing and reporting to the Board of Directors on the expectations of the Company's various stakeholders and supervising the relations with them, proposing to the Board of Directors the approval of a Sustainability Policy and reviewing and evaluating the management and control systems for non-financial risks.

No. of meetings in 2018 **4**

Main activities

- Monitoring of non-financial information: 2017 Integrated Management Report.
- Monitoring of the Company's sustainability strategy: proposal of the 2018 objectives and monitoring, assessment and closing of the 2017 objectives.
- Global sustainability plan.
- Sustainability risk map.
- Sustainability communication plan.
- Culture of safety at Repsol.
- Strategic reflection on security and the environment for 2025.
- Establishment of emission reduction targets for 2025.
- Analysis and monitoring of performance in:
    - Security: accident rate and indicators scorecard.
    - Energy and climate change.
    - Community relations and human rights.
- Analysis of international benchmark standards regarding sustainability.
- Training module on energy transition.
- Analysis of the Task Force on Climate-related Financial Disclosures.

In addition, all matters related to climate change were reviewed at all Committee meetings held in 2018.

Attendance at Sustainability Committee meetings

Director	In person	By proxy	% of attendance in person in 2018
Mariano Marzo Carpio	4	--	100%
Luis Carlos Croissier Batista	3	1	75%
José Manuel Loureda Mantiñán	3	1	75%
Jordi Gual Solé (1)	1	1	50%

(1) Jordi Gual Solé resigned from his position as Company Director on September 20, 2018.

5. Remuneration of Directors and Senior Management

(*thousand of euros*)

14,162	4,744	0
Remuneration accrued in 2018 by the Board of Directors	Amount of accumulated pension rights of current Directors	Amount of accumulated pension rights of former Directors

11,947*

Total remuneration of Senior Management in 2018

Breakdown of the members of Senior Management in 2018 that are not Executive Directors

Luis Cabra Dueñas	EMD of Technological Development, Resources and Sustainability
Begoña Elices García	EMD of Communication and Chairman's Office
Arturo Gonzalo Aizpiri	EMD of People and Organization
Miguel Klingenberg Calvo	EMD of Legal Affairs
Antonio Lorenzo Sierra	EMD of CFO
Miguel Martínez San Martín	EMD of CFO (until October 1, 2018)
Isabel Moreno Salas	D. Audit, Control and Risks
Fernando Ruiz Fernández	D. Sustainability (1)
María Victoria Zingoni	EMD of Commercial Businesses and Chemistry
Tomás García Blanco	EMD of Exploration and Production (until September 15, 2018)
Juan Antonio Carrillo de Albornoz Tejedor	ED of Industrial Businesses and Trading (since December 19, 2018)

(1)Mr. Ruiz was directly in charge of the CEO until September 14, 2018, when he became hierarchically dependent on Mr. Cabra, following the organizational evolution agreed by the Board of Directors.

Termination benefits, guarantee or golden parachute clauses agreed between the Company and its directors, executives or employees

The Company has established a single legal statute for executive personnel, comprised of 7 Managing Directors (excluding Executive Directors) and another 242 Directors (the "Directors").

This legal statute is specified in the *Executive Contract*, approved by the Board of Directors, which governs the indemnity terms applicable in cases where the employment relationship is terminated and which considers grounds for termination to be those envisaged in current legislation. In the case of

* The amount indicated in this section does not include the amounts paid to the Senior Management that has terminated in compensation for termination of contract and compensation for the non-compete agreement amounting to 14.78 million euros.

Managing Directors, these grounds for termination include the resignation of the executive as a result of a takeover of the company or a major change in its ownership, leading to a renewal of its governance bodies or the content of and approach to its main business activity.

The amount of severance pay for the Managing Directors and the rest of the executives appointed before December 2012 is calculated according to the age, seniority and salary of each executive. In the case of executives appointed after that date, the amount is calculated based on their salary and years of service, within a range between 12 and 14 months, or the amount stipulated by law if higher.

Further compensation is set for a post-contractual non-competition obligation equal to one year’s total remuneration in the case of the Managing Directors (six months in the case of one of them) and one year’s total or fixed remuneration for other executives, depending on the years of service. The contracts of executives in certain countries do not include the post-contractual non-competition obligation or do not establish any compensation in this regard.

Accordingly, deferred economic compensation is contemplated for Executive Directors in the event of termination of their relationship with the Company, provided it does not occur as a result of a breach of their obligations or at their own will without one of the justifying causes contemplated in their contract. The details of such deferred economic compensation are set out in the Annual Report on Directors' Remuneration.

6. Related party and intra-group transactions

Mechanisms to detect, determine and resolve conflicts of interest

The Regulations of the Board of Directors require the Directors to adopt the necessary measures to avoid incurring in situations in which their interests, whether on their own behalf or on behalf of others, may conflict with the corporate interest and with their duties towards the Company. to the Board of Directors, through its Chairman or Secretary, any situation of conflict, direct or indirect, that they or persons linked to them may have with the interest of the Company and, in the event of such conflict, refrain from participating in the deliberation and voting of the corresponding agreements.

Directors must inform the Nomination Committee of any other professional obligations and remunerated activities of any kind, as well as any material change in their professional situation or any changes that affect the nature or condition by virtue of which they have been appointed Director.

Finally, Directors must tender their resignation and step down from the Board, should the latter deem fit, whenever they incur in any of the events of incompatibility or disqualification established by law, the Bylaws or regulations.

The Repsol Group's Internal Code of Conduct relating to the Securities Market, applicable to the Directors, Senior Management and Executives of certain divisions and areas with access to privileged information of the Company and its Group or that carry out activities related to be Securities Market, includes mechanisms for preventing and resolving conflicts of interest.Finally, the Repsol Group's Ethics and Conduct Code, which applies to the Board members and all Repsol employees, also defines and regulates the action procedure in situations where a potential conflict of interest may arise.

Competence for approving related party transactions

Pursuant to Article 22 bis of the Company Bylaws and Article 23 of the Board of Directors Regulations, any transactions that the Company performs directly or indirectly with Directors, significant shareholders represented on the Board or persons related thereto (i) that are for a sum exceeding 5% of the Group's assets according to the latest consolidated financial statements approved by the General Meeting; (ii) that involve strategic assets; (iii) that involve the transfer of significant technology of the Company; or (iv) that are intended to establish strategic alliances and are not mere agreements of action or execution of existing alliances, can only be performed if they meet the following conditions:

a) the transaction is fair and efficient from the standpoint of the Company's interests;

b) after obtaining the corresponding report from an independent expert of renowned prestige in the financial community indicating that the related party transaction will be made on reasonable, arm's length terms, the Nomination Committee issues a report assessing fulfillment of the requirement indicated in (a) above; and

c) the General Meeting authorizes the related party transactions with a vote in favor of 75% of the share capital attending in person and by proxy. However, if it is considered unadvisable to wait for the next General Meeting to obtain authorization, for reasons of opportunity, and provided the value of the transaction does not exceed 10% of assets, the transaction may be approved by the Board of Directors, provided (i) the report from the Nomination Committee indicated in (b) above is favorable for the transaction, and (ii) the resolution is passed with the favorable vote of at least two-thirds of the Board members not affected by a conflict of interest. In this case, the Board will inform shareholders at the next General Meeting of the terms and conditions of the transaction.

When calling the General Meeting to discuss or be informed on the authorization of the related party transaction, the Board of Directors will make available to shareholders the reports issued by the Nomination Committee and the independent expert contemplated in (b) above and, should it so deem fit, its own report on the matter.

Other related party transactions must be authorized by the Board of Directors after obtaining a report from the Nomination Committee. On an exceptional basis, and for reasons of urgency, related party transactions that would normally require approval by the Board may be authorized by the Delegate Committee, subject to subsequent ratification by the Board in plenary session.

This authorization is not needed for related party transactions that meet all three of the following conditions:

a) they are performed under contracts with standard terms and conditions which are applied across the board to a large number of clients;

b) they are performed at prices or rates generally established by the person acting as supplier of the good or provider of the service in question or, if refers to goods or services for which there are no prices established, on arm’s length terms, similar to those applied in commercial relations with clients of a similar nature; and

c) the amount of the transaction does not exceed 1% of the Company’s annual income.

Related party transactions are assessed from the point of view of equal treatment and arm’s length terms and are described in the Annual Corporate Governance Report and the regular public information on the terms set out in the applicable laws and regulations.

Significant related party transactions due to their amount or importance

Between the Company or Group entities with the Company's significant shareholders.

Repsol related party transactions are assesed from the point of view of equal treatment and arm's length terms. There are related parties: i) significant shareholders that have that condition (at December 31st Sacyr S.A. and Temasek Holdings (Private) Limited) ii) Directors and Senior Management and (iii) Persons, Companies and Group entities (if there are transactions which are not eliminated during the consolidation process).

In Note 28 of the Consolidated Group Financial Statements are detailed the incomes, expenses, other transactions and registered balances at December 31st with related parties.

List of any transactions (incomes, expenditures and other transactions[10]) with significant shareholders:

Name of controlling shareholder	Name of company or group Company	Relationship	Type of transaction	Amount (thousand euros)
SACYR, S.A.	REPSOL GROUP	Contractual	Operating lease contracts	1,085
SACYR, S.A.	REPSOL GROUP	Commercial	Receipt of services	19,039
SACYR, S.A.	REPSOL GROUP	Contractual	Purchase of goods finished or not	91
SACYR, S.A	REPSOL GROUP	Commercial	Rendering of services	4,982
SACYR, S.A	REPSOL GROUP	Commercial	Sale of goods finished or not	8,721
SACYR, S.A	REPSOL GROUP	Commercial	Others	28,416
SACYR, S.A	REPSOL GROUP	Commercial	Purchase of property and equipment	84,024
SACYR, S.A	REPSOL GROUP	Contractual	Guarantees & bonds	7,874
SACYR, S.A.	REPSOL GROUP	Corporate	Dividends and other distributed profits	57.309
CAIXABANK ,S.A.	REPSOL GROUP	Contractual	Interest paid	7,361
CAIXABANK ,S.A.	REPSOL GROUP	Contractual	Interest accrued but not paid	37
CAIXABANK ,S.A.	REPSOL GROUP	Commercial	Receipt of services	806
CAIXABANK ,S.A.	REPSOL GROUP	Commercial	Contributions to pension plans and life insurance	6.397
CAIXABANK ,S.A.	REPSOL GROUP	Contractual	Interest charged	3,735
CAIXABANK ,S.A.	REPSOL GROUP	Commercial	Rendering of services	856
CAIXABANK ,S.A.	REPSOL GROUP	Commercial	Sale of goods finished or not	11
CAIXABANK ,S.A.	REPSOL GROUP	Contractual	Guarantees & bonds	44,862
CAIXABANK ,S.A.	REPSOL GROUP	Corporate	Dividends and other distributed profits	34,553
CAIXABANK ,S.A.	REPSOL GROUP	Contractual	Others	51,229
TEMASEK HOLDINGS	REPSOL GROUP	Commercial	Sale of goods finished or not	170,829

[10] The list do not considers Repsol's balances for accounts receivable and payable that Repsol had at December 31st 2018 with significant shareholders. The balances with Sacyr Group at December 31st 2018 were 2 million and 9 million of euros respectively.

(PRIVATE) LIMITED				

(1) The amounts are expressed in absolute values.
(2) The transactions identified as "Others" with Caixabank Group refer mainly to amortizations and cancellations are included mainly in the period of loans and guarantees issued with the Caixa as guarantor.
(3) The transactions identified as "Others" with Sacyr, S.A. refer primarily to purchase commitments in effect.

Repsol related transactions with its group of companies, and transactions among them correspond to the normal business of the Company.

For related party transactions in 2018 of Repsol,S.A. with Group companies[11] established in tax havens or territories considered tax havens[12], are limited to a payment of 38,777 thousand euros to OCP Limited, a resident entity in the Cayman Islands. Repsol SA issued, in the past, a guarantee in favor of its ecuadorian subsidiary Repsol Ecuador, S.A. to ensure compliance with the contractual obligations in accordance with the transport agreement signed between Repsol Ecuador, S.A. and Oleoducto de Crudos Pesados (OCP) Ecuador, S.A (ISTA, Initial Shipper Transportation Agreement). By virtue of this guarantee, in 2017 the entity has recognized payment obligations to the entity beneficiary of the guarantee (OCP Limited) that have been liquidated in 2018 with said payment.

Between the Company or Group entities with the Company's directors are executives.

In The Note 28 and 30 of the Consolidated Annual Accounts and in the Remunerations Reports is informed the remunerations with Directors and Senior Management, below are identified:

Name of directors or executives	Name of related party	Relationship	Nature of the transaction	Amount (thousand euros)
Company executives	Repsol Group	Contractual	Financing agreements: loans	367

7. Financial reporting and audits

7.1. Required financial reporting

The Company's separate and consolidated financial statements that were submitted to the Board of Directors for authorization for issue are first certified by the Chief Executive Officer, Josu Jon Imaz San Miguel, and by the CFO, Antonio Lorenzo Sierra.

The Board of Directors has established mechanisms to prevent the separate and consolidated financial statements prepared from being submitted to the General Meeting with a qualified auditor's report.

[11] For related party transactions with group companies established in tax havens or territories considered tax havens, the transactions carried out by Repsol with such companies are reported, broken down by the amounts corresponding to the individual companies, without considering eliminations for consolidation.
[12] We have considered those transactions with group companies whose tax domicile is established within any of the territories on the list of tax havens contained in RD 1080/1991, excluding those with which there is double taxation treaty in place with Spain that includes a clause for sharing tax information in which it is explicitly stated that they are not considered tax havens

To that effect and as mentioned above in section B.4.2. the Audit and Control Committee regularly reviewthe preparation of economic and financial reporting, its internal controls and the independence of the external auditor, supervision of Internal Audit, and the compliance with all the legal provisions and internal regulations applicable to the Company.

For that, the Committee regularly receives information from the External Auditor on the audit plan and results of their work, and checks that executive personnel are acting on its recommendations. At least once a year, the External Auditor is also required to assess the quality of the Group's internal control systems regarding financial information. The Committee is also responsible for being informed of any situations requiring adjustments that may be detected over the course of the external auditor's work whenever they are significant, and consideration as such will be left to the discretion of the External Auditor, who, if there is any doubt, must opt to report the issue and notify the Chairman of the Committee as soon as it becomes aware of the situation in question. The Committee must also be informed of the degree of fulfillment by the audit units of the corrective measures recommended by Internal Audit and will be informed of any significant irregularities, anomalies or breaches, provided they are considered significant, detected by Internal Audit in the course of its work.

For such purpose, the members of the Audit and Control Committee have the dedication, skills and experience necessary to carry out their duties; and the Committee's Chairman must have experience in business and risk management and expertise in accounting procedures Additionally, at least, one of its members must have the financial experience that may be required by the bodies regulating the securities markets on which the Company's shares or securities are listed.

7.2. Audits

External auditor

In 2018 the Company has substituted Deloitte,S.L. for PricewaterhouseCoopers, S.L.as its external auditor without disagreements with the outgoing auditor. The new auditor was appointed for 2018, 2019 and 2020, being year 2018 the first year that this firm audits the Company.

Mechanisms to preserve independence of the Externa Auditor

One of the duties of the Audit and Control Committee consists of ensuring the independence of the External Auditors, in two ways:

a) Avoiding any factors that may compromise the warnings, opinions and recommendations of the Auditors, and

b) Overseeing any incompatibilities between auditing services and any others, the limits on concentration of the Auditor's business and, in general, all other rules established to guarantee the Auditor's independence.

The Audit and Control Committee has established a procedure for preliminary approval of all services, auditing or otherwise, provided by the External Auditor, whatever their extent, scope and nature. This procedure is regulated in an Internal Rule that is mandatory for the entire Repsol Group.

Likewise, the Committee must receive annual written confirmation from the External Auditor of its independence towards the Company or entities directly or indirectly related thereto, as well as information on additional services of any kind provided to these entities by the Auditors or by individuals or entities related to them and the fees charged, in accordance with the regulations governing the activity of auditors.

The Committee will issue, prior to the delivery of the auditor's report, an annual report expressing an opinion on the independence of the External Auditor. This report must contain a reasoned assessment of any non-auditing services rendered, considered both individually and as a whole, in relation to the rules governing independence or the regulations of the auditing profession.

On the other hand, part of the meetings with the auditor takes place without the presence of the entity's management, so that the specific issues arising from the reviews carried out can be discussed exclusively with them.

Other work for the Company carried out by the external auditor

The audit firm carried out other non-audit work for the Company and/or its Group. The amount of the approved fees (1) for this work and the percentage they represent of the approved fees to the Company and/or its Group, for the year 2018:

	Company	Group companies	Total
Amount of non-audit work (thousands of euros)	414	421	835
Amount of non-audit work / Amount of audit work (%)	13%	10%	11%

(1) Amounts approved by the Audit Committee and Control for the year 2018.

(2) Includes the amount of other services related to the audit (verifications and certifications for partners and official bodies, reports for the issuance of obligations and other negotiable securities (Comfort letters), as well as verification of the non-financial information in the management report consolidated), and other services (mainly advisory work in the field of information technology).

Reservations or qualifications in the auditor's report

The auditor's report on the financial statements for 2018 presented by the External Auditor has been presented without qualifications.

Number of consecutive years that the auditors have been carrying out the audit

	Separate	Consolidated
No. of consecutive years	1	1
No. of years audited by current audit firm / No. of years that the Company or its Group has been audited (%)	3.45%	3.45%

8. Risk control and management

8.1. Risk Control and Management Systems

The information requested in sections E.1, E.2, E.3, E.4, E.5 and E.6 of Circular 2/2018 is included in Annex II: Risks of the Consolidated Management Report 2018 of Repsol, of which this Annual Corporate Governance Report forms part as Annex VII.

8.2. Systems of Internal Control over Financial Reporting (ICFR)

Control environment

Bodies responsible

In accordance with the Company Bylaws, the Board of Directors of Repsol, S.A. is the body in charge of governing, directing and managing the businesses and interests of the Company, unless reserved for the General Shareholders Meeting. It focuses on the general function of supervision and the consideration of especially important issues for the Company.

The Board of Directors Regulations define the powers reserved for the Board, such as drafting the separate and consolidated Financial Statements and Management Report and submitting them to the General Shareholders' Meeting. The Board must draw these documents up in clear, precise terms. It must also make sure they give a true and fair view of the equity, financial position and results of the Company and the Group, as stipulated in law. Approval of the risk management and control policy, including tax risks, supervision of internal reporting and control systems, the determination of the Group's fiscal strategy, the definition of the corporate structure and approval of the financial information which Repsol, as a publicly listed company, is obliged to publish regularly, are also reserved for the Board of Directors.

The Regulations also establish the Board's responsibility for approving the company's ethics and conduct codes, its own organization and functioning and that of the Senior Management, as well as specific duties referring to the Company's activity on the securities market.

The Board of Directors has a direct relationship with the members of Senior Management and the Company's auditors, respecting their independence at all times.

Section B.3.1 of this Report contains information on the structure and composition of the Board of Directors.

The Board of Directors has appointed members to sit on several Committees, such as the Audit and Control Committee, whose main purpose according to the Board of Directors Regulations is to support the Board in its supervisory duties, by regularly reviewing the preparation of economic and financial reporting, the effectiveness of its executive controls and the independence of the external auditors, as well as checking fulfillment of all applicable laws and internal regulations.

All members of the Audit and Control Committee are Independent Non-Executives Directors with accounting, auditing and/or risk management expertise and experience. The Committee Chair also has extensive experience in business, risk and financial management and sound knowledge of accounting procedures. The structure and functioning of this Committee are included in section B.4.2 of this Report, which expressly refers to the system for appointing the Chairman of this Committee.

As established in the Board of Directors Regulations regarding internal control and reporting systems, the Audit and Control Committee is responsible, among other duties, for regularly reviewing the efficacy of the internal control, internal audit and risk management systems, including tax risks, ensuring that the principal risks are identified, managed and reported adequately.

Moreover, according to these Regulations, the Audit and Control Committee is responsible for the following duties related to financial reporting process:

- Supervise the preparation and presentation of mandatory financial reporting on the Company and the Group and its integrity, compliance with legal requirements, adequate definition of the consolidated group and correct application of the accounting principles.

- Before they are presented to the Board and with the necessary requirements of checking that they are correct, reliable, sufficient and clear, analyze the Financial Statements of the Company and its consolidated Group contained in the annual, half-year and quarterly reports, and any other financial information which, as a listed company, the Company is obliged to publish regularly, obtaining all the necessary information with the level of aggregation it considers appropriate, for which it will receive the necessary support from the Group's executive management.

- Ensure that the Financial Statements to be presented to the Board of Directors to be authorized for issue are certified as required by the internal or external regulations applicable from time to time.

- Check all significant changes in the accounting principles used and the presentation of the financial statements and make sure they are adequately publicized.

- Ensure that the Board of Directors submits the financial statements at the General Meeting without any reservations or qualifications in the auditor's report and that in those exceptional cases where there are qualifications, both the Chairman of this Committee and the auditors provide the shareholders with a clear explanation of the scope and contents of the reservations or qualifications.

- Examine draft ethics and conduct codes and modifications thereto, as prepared by the corresponding department of the Group, and issue its prior opinion on the proposals that are to be put to the corporate bodies.

- Take particular care in ensuring compliance with the applicable market conduct regulations and overseeing the actions of the Company's Internal Transparency Committee.

- Supervise the sufficiency, adequacy and efficient functioning of the recording and internal control systems and procedures in the measuring, valuation, classification and accounting of the hydrocarbon reserves of the Repsol Group, ensuring that they are included in the Group's regular financial reporting in accordance with sector standards and applicable laws and regulations.

- Protect the independence and efficacy of internal auditing; and that it has the training and adequate means to perform its functions in the Group; analyze and approve, if appropriate, the annual planning of the Internal Audit Department and obtain information on the extent to which the audited units have implemented the corrective measures recommended by the Internal Audit Department in previous inspections. The Audit and Control Committee reports to the Board any situations that may entail a substantial risk for the Group.

Elements of the process of preparing financial information

- Departments and/or mechanisms responsible for designing and reviewing the organizational structure and defining the lines of responsibility

The internal regulations assign to the People and Organization Executive Department the duties and responsibilities associated with the study, design, approval and implementation of organizational structures and sizing in the company.

In accordance with these regulations, the organizational structure establishes the hierarchical and functional level for the normal development of the Group's various areas of activity and determines the levels of responsibility, decision and functions of each of the organizational units.

The organizational structure is represented by means of an organization chart and the sizing defined. Approval of a structure requires two approving roles, the line approver and the People and Organization Executive Department, according to the levels established in the regulations.

The organizational principle that governs structure approval is based on the premise that a structure cannot be approved by the person who is directly responsible for it, but rather by their hierarchical superior.

There is also an organizational unit responsible for inputting the approved organizational changes in the computer system, according to the implementation plan defined, which makes it possible to ensure compliance with the requirements established as regards internal control.

- Ethics and Conduct Code and body responsible for ensuring the monitoring and compliance

Repsol has an Ethics and Conduct Code, approved by the Board of Directors, based on the favorable report of the Audit and Control Committee, the Sustainability Committee and the Ethics and Compliance Committee, which applies to all directors, executives and employees of the Repsol Group. The Code establishes the minimum conduct guidelines that should govern the behavior of all employees when performing their professional duties and the penalty regime applicable in the event of failure to comply with those rules.

The Code contemplates, among others aspects, the basic principles of performance in relation to integrity and conduct, reliability of information and control of records, as well as the processing of sensitive information and intellectual property. It also specifies obligations in relation to human rights, community relations, measures against bribery, corruption, and money laundering and the commitment to carry out activities in accordance with prevailing legislation in all the areas of performance and countries.

The people who join the Company have a Welcome Plan with the aim of achieving their quick adaptation to the team. This Plan includes information on the essential regulations that that every employee should know and respect when they join, regardless of the area or business they will be working in, including a direct channel for employee consultations. The framework of this regulation is the Ethics and Conduct Code.

In addition, employees are involved in communication campaigns and attend training courses on the Ethics and Conduct Code, to strengthen their knowledge and compliance with its contents. Specifically, a new training activity on the Ethics and Conduct Code was carried out in 2018 for all employees, based on a dynamic game, the purpose of which was to consolidate the knowledge already acquired in previous years and achieve a higher level of understanding of expected behaviors.

Furthermore, Company executives agree to comply with the Executive Personnel Statute attached to their employment contracts. This Statute refers to the principles on which their professional actions must be based, as well the Company’s principles of conduct and standards, with special emphasis on the Ethics and Conduct Code.

There is a communications channel, the "Repsol Ethics and Compliance Channel", that allows Company employees and any third party to make consultations or to communicate, among others, possible breaches of the Ethics and Conduct Code and Crime Prevention Model, confidentially and without fear of reprisal. The channel is managed by an independent company and is available 24 hours a day, 7 days a week, by phone and online.

The Ethics and Compliance Committee oversees and monitors compliance with the Code and is responsible for resolving on the communications considered relevant that are received through the channel.

According to the provisions of the Regulations of the Ethics and Compliance Committee, this is multidisciplinary and made up of representatives of the General Division of the General Secretariat and Board of Directors, the People and Organization Executive Department, the Audit, Control and Risks Division, the Legal Services Corporate Division and CCO, and the Legal and Employment Affairs Management and Occupational and Health Division.

Eleven policies compose Repsol’s regulatory corpus within the framework of its Ethics and Conduct Code. These policies define its public commitment and management fundamentals, establishing principles and guidelines for all Repsol employees for the purpose of fostering relationships, processes and decision-making that align with the Company's values.

These policies include the "Anti-corruption Policy" reiterating Repsol's commitment to strict compliance with legislation on the prevention and fight against corruption, rejecting any form of corruption and extending its compliance not only to all employees of the companies in which the Repsol Group exercises direct or indirect management control, but also to our Business Partners.

Likewise, in its "Third-Party Commercial Relationships Policy", Repsol agrees to ensure that its commercial and business relationships with partners, suppliers, contractors and customers are legal and based on Repsol's ethical principles and values.

Furthermore, Repsol also has a mandatory "Tax Policy" for all of its employees and Group companies that includes various commitments aimed at ensuring that tax matters are managed according to best tax practices and acting with transparency, including responsible and efficient payment of taxes, the fostering of cooperative relationships with governments and the firm intention to strive to avoid significant risks and unnecessary conflicts.

In addition, there is a "Repsol Group Internal Code of Conduct in relation to the Securities Market", approved by the Board of Directors, with the prior favorable report of the Audit and Control Committee, containing aspects such as the rules of conduct, for people affected by this Regulation, relating to transactions with financial securities and instruments issued by the Group that are traded on securities markets, treatment and communication of insider information, own-share transactions, prohibitions against manipulating stock prices and the treatment and management of conflicts of interest. The Company has formally established mechanisms in those regulations to promote its communication and compliance with its provisions. For these purposes, and pursuant to these Regulations, the Audit and Control Committee is responsible for supervising and the obligations established therein, whereby any failure to comply with its provisions will be considered an act of professional misconduct, the seriousness of which will be determined in the proceedings that follow in accordance with current legislation, without prejudice to any infringement that may arise as a result of contravening any securities market regulations or to any third-party or criminal liability to which the infringing party may be subject.

Finally, in the field of Spanish companies and under the framework of Spanish regulations on the criminal liability of legal entities, the Ethics and Compliance Committee has been appointed as the Crime Prevention Body. Likewise, there is a rule for "Management of the Crime Prevention Model" and another for "Internal Investigations of the Ethics and Compliance Committee", which structures the prevention model and the mechanism to respond to data on or indications of potential crimes committed with regard to the Repsol Crime Prevention Model or suspected breaches of this Model. In addition, Repsol has a Crime Prevention Manual designed to improve the understanding of criminal risks and the actions and conduct expected of employees, with a plan for disseminating the manual that began in 2017. This plan included carrying out new classroom-based training sessions in 2018 for Repsol's executives and directors, as well as an online course for those responsible for managing the controls of the Model.

- Ethics and Compliance Channel

In accordance with the Board of Directors Regulations, the Audit and Control Committee is responsible for establishing a mechanism that allows employees to report confidentially and, if possible, anonymously, irregularities of potential significance, especially of a financial and accounting nature.

In this sense, the Company has an "Ethics and Compliance Channel" through which Company employees and any third party may communicate confidentially and, if possible according to the different jurisdictions, anonymously, any matters related to accounting, internal control and audit. The channel is managed by an independent company and is available 24 hours a day, 7 days a week, by phone and online.

- Training programs and regular refresher courses

Training in Repsol is geared towards developing the professional capacities required for effective performance of the employees' work, supplemented with further training to support and foster progression in their careers. It is based on initiatives intended to structure knowledge, develop skills and foster employees' commitment to the Company's plans, culture and values throughout their careers.

To achieve this, the Company has a broad selection of training activities covering issues ranging from technical aspects, organized specifically for given groups, to other more general aspects, such as management, safety awareness.

Through collaboration between the Repsol Training Center and each of the units of the Group, Repsol ensures the acquisition and updating of essential knowledge to perform the economic administrative, risks management and internal audit and control duties. The training needs are planned to meet both short and medium-term requirements and the corresponding annual plan is drawn up, identifying and paying attention not only to the form of training best suited to each group but also time enabling the Company to monitor the stated objectives and the quality of training given to each employee. As part of this plan, there are actions designed to distribute the internal control models, in particular the System of Internal Control over Financial Reporting (ICFR), to the different people and areas affected by these models.

These needs are met by both internal resources, with training activities designed and given by its own personnel with experience and references in their respective fields, and by reputed firms contracted for their quality and specialization. Other resources are also used, such as conferences, talks, discussion forums, workshops and virtual libraries.

Risk assessment in financial reporting

Features of the risk identification process, including risks of error or fraud

- Risk identification process

The Repsol Group has an integrated risk management process as indicated in section 8.1 of this Report. This process establishes a homogenous methodology of risk identification and assessment by all responsible divisions in the organization. As a result of the described process, the Repsol Group Risk Map was created, which includes financial reporting risks.

The identification of the principal risks that could affect the financial reporting objectives related to existence or occurrence, integrity, valuation and assignment, presentation and disclosure of operations, rights and obligations and which could therefore have a material impact on the reliability of the financial reporting leads to the development of a Risk Map of Financial Reporting, in which the various risks are grouped into the following categories:

- Definition of the general control environment
- Regulatory changes and monitoring
- Valuations subject to analysis and complex estimates
- Identification and recording of business transactions
- Preparation of consolidated financial statements
- Financial reporting

The risk of fraud in financial reporting, which is part of the inventory of financial reporting risks in the category of "General Control Environment" is analyzed precisely because of its relevance to the design, implementation and evaluation of the internal control model. This analysis is made taking account mainly of the references to consideration of fraud in risk assessment established within COSO 2013 ("Assesses Fraud Risk" Principle 8) and by the American Institute of Certified Public Accountants (AICPA) in its document "Consideration of Fraud in a Financial Statement Audit", Section 316 (Standard Auditing Statement 99). To this end, the following categories of financial reporting fraud risk have been defined:

- Management's ability to elude internal controls
- Intentional error on the financial statements
- Inappropriate use of assets

- Scope and updates

The process of identifying and evaluating financial reporting risks covers all financial reporting objectives related to existence or occurrence, integrity, valuation and assignment, presentation and disclosure of operations, and rights and obligations, that may have a significant impact on the reliability of the financial reporting.

Each of the aforementioned risk categories consists, in turn, of one or more specific risks, which are linked to the corresponding headings of the financial statements, the respective processes and to the different companies of the Group.

Lastly, the potential impact of each of the financial reporting risks is assessed, as well as the probability of their occurrence. From these two factors, the severity of each of the risks is established.

The risk inventory and the assessment of these risks in terms of impact and probability is reviewed on an annual basis in accordance with the Repsol Group's integrated risk management process, as indicated in Annex II regarding risks of the 2018 Consolidated Management Report.

- Process for identifying the scope of consolidation

There is a process in place for identifying changes in shareholding structure of Group companies. Once the changes are reported, the control structure is analyzed on the basis of the applicable accounting standards and principles in order to determine which consolidation method should be used for that company.

From the scope of consolidation and in coordination with the process of identification and regular updating of the inventory of financial reporting risks, a ICFR Scope Model is determined, along with the and companies that should be included in the scope on account of their relevance and materiality. This identification is made on the basis of both quantitative and qualitative criteria.

The determination of companies that are part of the model takes into account those in which control is exercised directly or indirectly. For these purposes, an investor is deemed to control an investee when it is exposed, or has rights, to variable returns from its involvement in the Group and has the ability to affect those returns through its power over the investee. Therefore, companies in which there is joint control are not included in the model, since the strategic decisions require the unanimous consent of the parties sharing control. However, controls are established in the model to ensure the homogeneity, validity and reliability of the financial information validated by them for incorporation into the consolidated financial statements.

- Other types of risks

In the process of identifying and evaluating financial reporting risk, the Repsol Group considers other types of risk that could have a relevant impact on the attainment of the organization's operational and strategic goals, such as compliance, insofar as these may have a significant effect on the preparation of financial statements.

- Body in charge of supervising the process

The Board of Directors reserves the power to approve the risk management and control policies, including financial reporting and tax risks, and to supervise internal information and control systems.

In accordance with the Board of Directors Regulations of Repsol, the Audit and Control Committee periodically reviews the efficiency of internal control, internal audit and risk management systems, including tax risks, so as to identify, manage and properly communicate the main risks.

The Executive Committee approves the governance elements required within the area of risk management, oversees their correct application and monitors the Company's performance in respect of risks.

The Internal Audit Unit is responsible for evaluating the design and operation of the Group's risk management systems.

Control activities

Procedures for reviewing and authorizing the financial information and description of the ICFR system

The Repsol Group has a system of Internal Control over Financial Reporting (ICFR) that allows it to meet the requirements established by the applicable regulations for listed companies and that is described in the Annual Corporate Governance Report.

The ICFR model is defined from the COSO (2013) methodological framework (Committee of Sponsoring Organizations of the Treadway Commission) contained in its report, Internal Control-Integrated Framework, for the purpose of ensuring that all transactions are properly accounted for in accordance with the accounting framework, providing reasonable assurance of the prevention or detection of errors that could have a material impact on the information in the consolidated financial statements. This financial reporting internal control model is organized around an integrated process that includes the five components developed in seventeen principles, as established in the COSO 2013 framework.

1. The existence of an adequate **control environment.**

2. The identification, analysis and **assessment of risks**

3. The definition and implementation of **control activities** to mitigate the identified risks.

4. **Reporting and communication** to facilitate understanding and the assumption of risk control responsibilities.

5. **Supervision of system operations** in order to evaluate their design, performance quality, adaptation, implementation and effectiveness.

The ICFR system is integrated in the organization through the establishment of structure of roles and responsibilities for the different bodies and functions, which are described in procedures that have been duly approved and distributed within the Group. In addition to what's indicated above regarding the processes for checking and authorization of financial reporting by the Board of Directors and the Audit and Control Committee, below are detailed the other **governance bodies and organizational units of the Group assigned relevant roles on this matter**:

- ***Chief Executive Officer (CEO) and Chief Financial Officer (CFO).***

All owners of the controls comprising the ICFR system, in relation to compliance with the requirements established in terms of internal control, certify that all controls associated with processes and risks, of which they are owners, are in force at the closing of the fiscal year and operate properly on that date. This is an annual certification process that concludes with a certificate issued by the Chief Executive Officer (CEO) and Chief Financial Officer (CFO).

- ***Internal Transparency Committee:***

The purpose of the Internal Transparency Committee is to promote and strengthen the policies necessary to ensure that the information provided to shareholders, the markets and regulatory authorities is true and complete, adequately reflects the Company's financial position and the results of its operations and is presented in a timely manner and in accordance with the other requirements established in the standards and general principles for markets and good governance applied by the Company. This Committee provides support and assistance to the Chairman of the Board of Directors and the Chief Executive Officer.

According to the Regulations on the Internal Transparency Committee, it is assigned the following duties, among others:

- Supervising the establishment and maintenance of procedures for compiling the information to be published by the Company according to the applicable laws and regulations or which it reports generally to the markets, and all controls and procedures established to make sure that (i) the information is promptly and accurately recorded, processed, summarized and reported, and (ii) the information is compiled and reported to the Group's Senior Management, enabling them to decide in advance on the information that should be published, proposing such improvements as they may deem fit.

- Checking and assessing the accuracy, reliability, adequacy and clarity of the information contained in the documents to be presented publicly, especially any disclosures to be made to the regulating authorities and brokers on the securities markets in which the Company's shares are traded.

The Internal Transparency Committee is made up of the heads of the units responsible for the economic, tax, legal, communication, strategy, audit and control, investor relations, corporate governance, reserves control, management control and planning, people and organization and the different business areas.

- ***Business Units and Corporate Areas identified as "owners of the controls":***

Within the Group, the different Business Units and Corporate Areas identified as "owners of the controls" are those responsible for ensuring the validity, execution and adequate functioning of the controls associated therewith. Of these, the Units with an especially important role in the development, maintenance and functioning of the ICFR system are:

- The Unit that prepares the financial statements and economic-financial reporting, the inventory of controls and processes of the ICFR system required to guarantee the reliability of the financial information, coordinating with the Audit, Control and Risks Division, as a result of its process of defining and assessing the Group ICFR system.

- The Unit that guarantees fulfillment of tax obligations, tax counseling, monitoring, evaluation and implementation of changes in law and regulations, identification, control, monitoring, assessment and management of tax risks, and tax information for the financial statements. Moreover, according to the

Code of Best Tax Practices (Repsol signed the Code of Best Tax Practices on 23 September 2010), Law 31/2014, which amended the Corporate Enterprises Act for enhanced corporate governance, and the Repsol's Group Tax Policy, the Board of Directors, as part of its powers that may not be delegated regarding tax matters, verifies that the Company's tax policies are being properly applied on a yearly basis.

- The Unit that monitors, analyzes, reviews and interprets the accounting standards contained in the different regulatory frameworks applicable to the Group.

- The Units that guarantee the efficient use of financial resources, optimization of financial earnings and an adequate monitoring and control of financial, market and credit risks so as to ensure the continuity and development of business plans.

- The Unit that establishes the criteria for defining the organizational structure and sizing of the Group and sets the guidelines and criteria governing development of the internal regulatory framework and defines the Annual Training Plan.

- The Unit that ensures that the estimates of the Group's proven reserves of hydrocarbons conform to the regulations issued by the different securities markets on which the Company's shares are listed, makes the internal audits of reserves, coordinates the certificates of the external auditors of reserves and assesses the quality controls regarding information on reserves.

- The Units responsible for legal and tax affairs in the Group, which provide legal counseling, legal defense and handling of its legal affairs in all contentious proceedings and processes, providing legal support for the Group's actions, rights and expectations with a view to giving them legal security and efficacy and minimizing possible legal risks.

- The Units that define the guidelines, criteria and indicators of management control monitors the business activities and the approved investments and oversees compliance with the commitments assumed, proposing corrective measures as needed.

- ***Processes, activities and controls***

The ICFR system documents basically comprise the following:

- Financial reporting risk map
- Scope model
- Descriptive documentation for processes through the ICFR system
- Inventory of controls identified in the different processes
- Outcome of assessing the design and functioning of the controls
- Certificates of validity and effectiveness of the controls issued for each financial year

The ICFR model is supported by a set of standards and procedures and is described in the Internal Control over Financial Reporting Manual.

The system of internal control over financial reporting is articulated through a process which, based on the identification and evaluation of financial reporting risks, defines a scope model that includes the most important headings in the financial statements, the companies affected, the relevant processes involved in preparing, reviewing and subsequently distributing the financial information and the control activities intended to prevent and detect potential errors, including fraud.

In order to define the companies involved, the first step is to update the list of consolidated companies. As has been explained when talking about the characteristics of the risk identification process of this Report, there is a process for updating the list of consolidated companies based on changes in shareholdings and the effects of these changes on the control structure of investees according to applicable accounting standards. The ICFR includes operating controls for those companies that are directly or indirectly controlled by Repsol. For all other relevant non controlled companies not included in the scope of consolidation, it also includes controls designed to protect the homogeneity, validity and reliability of the financial information submitted by the companies for inclusion in the consolidated financial statements.

For each one of the relevant processes and companies included on the consolidation list, the significant financial reporting risks are identified along with the control activities to mitigate those risks.

The following types of controls are distinguished in the ICFR system:

- **Manuals**: those carried out by human actions, using computerized tools or applications.

- **Automatic**: those carried out with computerized tools or applications.

- **General computer controls**: those that reasonably guarantee the reliability, integrity, availability and confidentiality of the information contained in applications relevant to the financial reporting.

As well, these three types of controls are characterized as:

- **Preventive**: created to prevent errors or cases of fraud that could result in an error in the Repsol Group's financial reporting.

- **Detective:** their goal is to detect existing errors or cases of fraud that could result in an error in the Repsol Group's financial reporting.

- ***Relevant judgements, estimates, valuations and forecasts***

The financial reporting process sometimes requires making judgements and estimations e, which may affect the amount of assets and liabilities recognized the presentation of contingent assets and liabilities and the recognized income and expenses. These estimates may be affected, among other causes, by changes in competitive, economic, political, legal, regulatory, social, industrial, business and financial conditions.

In this regard, the Group's methodology is designed to identify the areas responsible and establish homogeneous criteria for judgements, estimates and valuations in the processes considered important for the preparation of financial reporting. Specifically, and in accordance with that set forth in Note 3 "Estimates and judgements" of the Repsol Group's Consolidated Financial Statements for 2018, they include those relating to reserves of crude oil and gas, business combinations, assessment of the investments in Venezuela, provisions for litigation, decommissioning and other contingencies, calculation of income tax and deferred tax assets and liabilities, impairment tests and the recoverable value of assets, and the market value of financial instruments. The results of these estimates are reported to the management and governance bodies of the Group.

In addition, the aforementioned bodies are regularly informed of any business affecting its business development and which could have a material effect on the Group's financial statements. It also periodically monitors the main variables which have or may have an impact, directly or through estimates and judgements, in quantifying assets, liabilities, income and expenses of the Group.

Internal control policies and procedures for financial information systems that support the relevant processes for the preparation and publication of the financial information.

The Repsol Group has a specific body of regulations in its IT Systems area based on ISO 27001, laying down the general principles for the different processes in that area.

Considering that the Group's transaction flows are mainly made through IT Systems, an Information Systems Control Framework, consisting of a set of controls called "general computer controls", has been established which reasonably guarantee the trustworthiness, integrity, availability and confidentiality of the information contained and processed in the relevant applications for financial reporting.

The systems linked to the process of preparing financial information conform to the security standards established in the regulations and are audited to ensure proper functioning of the Information Systems Control Framework by validating its constituent general computer controls.

These general computer controls grouped into the areas of: access security, life cycle systems, and process of assuring the validity of data and assurance operations, help to guarantee that several control targets are obtained within the ICFR system assessment, since they have the following features:

- Contribute towards ensuring the precision, accuracy and validity of the transactions executed in the applications, since they are integrated in the logics of those applications in order to prevent and/or detect unauthorized transactions.

- They are applied to the interfaces with other systems, in order to check that information input is complete and precise, and that output is correct.

The scope of the general computer controls covers applications relevant for financial reporting and infrastructure elements that serve these applications (e.g. technical platforms, servers, databases, data processing centers, etc.).

The Repsol Group has developed a segregation of duties model in the systems for preventing and reducing the risk of errors (intentional or otherwise), especially the fraud factor in the financial reporting process. Incompatibility matrices have been installed in the applications used by the relevant processes covered by the ICFR system, with which it is possible to monitor conflicts continuously and detect cases in which the functions are not exercised according to defined profiles.

Internal control policies and procedures for supervising management of the activities subcontracted to third parties and any aspects of assessment, calculation or valuation outsourced to independent experts,that may affect materially to the financial statements

The Repsol Group has a procedure for identifying, establishing control criteria and supervising the activities of third party subcontractors in different business processes. According to this procedure, the group analyzes the types of activities carried out by these suppliers and their impact and draws conclusions as to whether the activities have a material impact on the financial statements from the following perspectives:

- Significant transactions for the Group's financial statements.
- Manual or automated procedures for initiating, recording, processing or reporting significant transactions from the beginning until they are included in the financial statements.
- Manual or automatic accounting records that support the collection, recognition, processing and reporting of specific transactions, information or accounts on the Group's financial statements.
- Relevant information systems for capturing significant events and conditions for inclusion in the operating results and preparation of the financial statements.
- Financial reporting process used to prepare the financial statements, including the accounting estimates and the disclosure of significant information.

Once the subcontracted activities that can have a material effect on the financial statements have been identified, the internal controls of the services rendered are supervised to ensure their adequacy. In this regard, in accordance with the COSO 2013 methodology and ISA 402 (International Standard on Auditing), the Repsol Group adapts based on the characteristics of the supplier or third party subcontracted, carrying out supervision tasks based on the following approaches:

- Requesting independent auditors' reports from third party subcontractors to obtain relevant information on their internal control systems. Some examples of the reports include SOC (Service Organization Control) under Standard SSAE 16 of the American Institute of Certified Public Accountants (AICPA) or standard ISAE 3402 (International Standards on Assurance Engagements 3402).
- Understanding on the part of the user of the service of the nature of the service and identification of mitigating controls within the financial reporting process of the Repsol Group.

- Conducting independent evaluations of the supplier's internal control systems.

Information and communication

Units responsible for the accounting policies

The Group has a Unit responsible for monitoring, analyzing and reviewing the accounting principles and policies established in the regulatory framework that applies to the preparation of financial statements, analyzing and answering consultations on their interpretation and adequate application. The organizational units involved in preparing financial information are periodically informed of any new aspects of accounting techniques and regulations and the outcome of the different analyzes made.

There are also accounting principles manuals, which establish the accounting standards, policies and principles applied by the Group. These manuals are revised and updated periodically and whenever there is a material change in the applicable regulations. The manuals are available on the internal communication network.

In 2018, the Group's accounting manuals were updated as a result mainly of changes in International Financial Reporting Standards adopted by the European Union and of mandatory application from 1 January 2018.

Mechanisms for collecting and preparing financial information

The Group has integrated IT systems for both recognizing transactions in the accounts and preparing the separate and consolidated financial statements. It also has processes for centralized coding and parameterization processes which, together with the accounting principles manuals, guarantee the integrity and homogeneity of the information. Finally, there are also tools used for processing the information in order to obtain and prepare the breakdowns provided in the notes to the financial statements. The systems linked to the preparation and reporting of financial information meet the security standards established by the general computer controls defined for IT systems. (See section 8.2. of this report regarding the internal policies and procedures over information systems).

Supervision of the functioning of the system

Role of the Audit Committee, internal audit function, scope of ICFR assessment and action plans

According to the Board of Directors Regulations, the Audit and Control Committee is responsible for supervising the assessment and presentation, as well as the integrity of the financial information on the Company and the Group, checking compliance with legal provisions, adequate definition of the consolidated group and correct application of the accounting principles, and regularly checking the effectiveness of the internal control, internal audit and risk management systems, including tax risks, ensuring that the principal risks, are identified, managed and reported adequately.

The Audit and Control Committee also analyzes and approves, where appropriate, the annual planning of the Internal Audit Department and other occasional or specific additional plans required as a result of changes in legislation or the needs of the business organization of the Group.

The annual planning of the Internal Audit Department is structured to assess and supervise the correct functioning and adequacy of the Group's internal control and risk management systems (operational, strategic, financial and compliance).

The Audit, Control and Risks Division reports to the Audit and Control Committee and performs its duties established in international standards in line with the best market practices, as well as the requirements of the different regulatory frameworks applicable in the countries in which the Repsol Group has businesses and activities. It has a "Quality Assurance and Enhancement Plan", assessed regularly, to assure quality in its duties, the results of which are reported to the Audit and Control Committee.

The Audit, Control and Risks Division is responsible for seeing that the design and functioning of the Internal Control and Risk Management Systems in the Group are reasonable and adequate, contributing towards their improvement and covering the following control objectives:

- Any risks that may affect the organization are adequately identified, measured, prioritized and controlled in accordance with that established in the Risks Policy signed by the Board of Directors.
- Transactions are efficient and effective.
- Transactions are made in compliance of applicable laws, regulations and contracts and prevailing policies, rules or procedures.
- The assets are adequately protected and reasonably controlled.
- The most significant financial, management and operating information is prepared and reported adequately.

The Audit, Control and Risks Division reports to the Audit and Control Committee on the conclusions of all work performed, as well as the corrective measures proposed and the degree of compliance with these measures. This Division provides support for any significant irregularities, anomalies or non-compliance on the part of the audited units, reporting any cases that may entail a significant risk for the Group to the Board of Directors.

With regard to the System for Internal Control over Financial Reporting (ICFR), the Audit, Control and Risks Division provides support in the ICFR supervisory tasks carried out by the Board of Directors, the Audit and Control Committee and the Internal Transparency Committee and notifies the owners of the controls of any weakness or incident detected in the process of updating and assessing the ICFR system.

After the reporting date, the Audit, Control and Risks Division informs the Internal Transparency Committee, the Audit and Control Committee and the Board of Directors on the outcome of the ICFR system assessment and any defects found during the assessment.

The Audit, Control and Risks Division has assessed the effectiveness of the ICFR system corresponding to 2018, and did not find any significant or material weaknesses , concluding that it is effective, in accordance with the criteria established by COSO 2013.

Procedure for discussion with Senior Management, the Audit Committee and the Company's directors regarding any significant internal control weaknesses identified during the review processes and action plans

As indicated in a section below of this Report, the Audit, Control and Risks Division reports to the Audit and Control Committee on the conclusions of all work performed, as well as the corrective measures proposed and the degree of compliance with these measures.

One of the duties of the Audit and Control Committee is to establish appropriate relations with the External Auditor to receive regular information on the audit plan and the results of its implementation, and on any other issues concerning the audit process and corresponding rules and regulations. It also verifies that the management team bears in mind the recommendations made by the External Auditor.

The Audit and Control Committee also requires the External Auditor periodically, at least once a year, to assess the quality of the internal control procedures and systems and discuss with it any significant weaknesses detected during audit, and requests the External Auditor’s opinion on the effectiveness of the ICFR system. In this regard, the external auditor carried out its review of reasonable assurance on the design and effectiveness of the ICFR system for 2018 as well as the description of this system included in this Report.

Other relevant information

On November 2, 2018 the Repsol Group signed the final agreement for the acquisition of the assets corresponding to the unregulated low-emissions electricity generation businesses of Viesgo as well as its gas and electricity retail business.

At 2018 year-end, those processes and controls that reasonably ensure coverage of the risks arising from the inclusion of these assets in the Repsol Group's financial reporting were identified in the Repsol Group's ICFR system.

External auditor’s report

The Group submitted for review by the External Audit (PricewaterhouseCoopers Auditores, S.L.) the design and effectiveness of the System of Internal Control over Financial Reporting (ICFR), in relation to the financial information contained in the Repsol Group's consolidated financial statements at December 31, 2018, and the description thereof included in this Report.

Appendix I: Analysis of compliance with the recommendations of the Good Governance Code for Listed Companies

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 1 The bylaws of listed companies should not limit the maximum number of votes that may be cast by a single shareholder or impose other obstacles to the takeover of the company by means of share purchases on the market.	X				
Recommendation 2 When the parent company and a subsidiary are listed, they should both provide detailed disclosure on: a) The type of activity they engage in and any business dealings between them, and between the listed subsidiary and other group companies. b) The mechanisms in place to resolve any conflicts of interest.				X	
Recommendation 3 During the annual general meeting, the chairman of the board should verbally inform shareholders in sufficient detail of the most relevant aspects of the company's corporate governance, supplementing the written information circulated in the annual corporate governance report. In particular: a) Changes taking place since the previous annual general meeting. b) The specific reasons for the company not following a given Good Governance Code recommendation, and any alternative procedures followed in its stead.		X			During the General Shareholders' Meeting, the Chairman of the Board reports on the most relevant aspects of the corporate governance of the Company and, specifically, on the progress made in matters of corporate governance. The specific compliance information by Repsol with the Good Governance Code recommendations is already included in the Annual Corporate Governance Report, which is published as a Material Event and is made available to all shareholders and any interested parties on the website of the Company and the CNMV. Also, shareholders may request that the Annual Corporate Governance Report be sent in paper format prior to the AGM and it is also provided the day of the meeting. Therefore, a verbal report by the Chairman during the Meeting on compliance with the recommendations is not considered to provide any relevant additional information for shareholders.

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 4 The company should draw up and implement a policy of communication and contacts with shareholders, institutional investors and proxy advisors that complies in full with market abuse regulations and accords equitable treatment to shareholders in the same position. This policy should be disclosed on the company's website, complete with details of how it has been put into practice and the identities of the relevant interlocutors or those charged with its implementation.	X				
Recommendation 5 The board of directors should not make a proposal to the general meeting for the delegation of powers to issue shares or convertible securities without pre-emption rights for an amount exceeding 20% of capital at the time of such delegation. When a board approves the issuance of shares or convertible securities without pre-emption rights, the company should immediately post a report on its website explaining the exclusion as envisaged in company legislation.	X				
Recommendation 6 Listed companies drawing up the following reports on a voluntary or compulsory basis should publish them on their website well in advance of the annual general meeting, even if their distribution is not obligatory: a) Report on auditor's independence. b) Reviews of the operation of the audit committee and the appointments and remuneration committee. c) Audit committee report on related party transactions. d) Report on corporate social responsibility policy.	X				
Recommendation 7 The company should broadcast its general meetings live on the corporate website.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 8 The audit committee should strive to ensure that the board of directors can present the company's accounts to the general meeting without reservations or qualifications in the auditor's report. In the exceptional case that qualifications exist, both the chairman of the audit committee and the auditors should give a clear account to shareholders of their scope and content.	X				
Recommendation 9 The company should disclose its conditions and procedures for admitting share ownership, the right to attend general meetings and the exercise or delegation of voting rights, and display them permanently on its website. Such conditions and procedures should encourage shareholders to attend and exercise their rights and be applied in a non-discriminatory manner.	X				
Recommendation 10 When an accredited shareholder exercises the right to supplement the agenda or submit new proposals prior to the general meeting, the company should: a) Immediately circulate the supplementary items and new proposals. b) Disclose the model of attendance card or proxy appointment or remote voting form duly modified so that new agenda items and alternative proposals can be voted on in the same terms as those submitted by the board of directors. c) Put all these items or alternative proposals to the vote applying the same voting rules as for those submitted by the board of directors, with particular regard to presumptions or deductions about the direction of votes. d) After the general meeting, disclose the breakdown of votes on such supplementary items or alternative proposals.				X	
Recommendation 11 In the event that a company plans to pay for attendance at the general meeting, it should first establish a general, long-term policy in this respect.				X	

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 12 The board of directors should perform its duties with unity of purpose and independent judgement, according the same treatment to all shareholders in the same position. It should be guided at all times by the company's best interest, understood as the creation of a profitable business that promotes its sustainable success over time, while maximizing its economic value. In pursuing the corporate interest, it should not only abide by laws and regulations and conduct itself according to principles of good faith, ethics and respect for commonly accepted customs and good practices, but also strive to reconcile its own interests with the legitimate interests of its employees, suppliers, clients and other stakeholders, as well as with the impact of its activities on the broader community and the natural environment.	X				
Recommendation 13 The board of directors should have an optimal size to promote its efficient functioning and maximize participation. The recommended range is accordingly between five and fifteen members.	X				
Recommendation 14 The board of directors should approve a director selection policy that: a) Is concrete and verifiable; b) Ensures that appointment or re-election proposals are based on a prior analysis of the board's needs; and c) Favors a diversity of knowledge, experience and gender. The results of the prior analysis of board needs should be written up in the Nomination Committee's explanatory report, to be published when the general meeting is convened that will ratify the appointment and re-election of each director. The director selection policy should pursue the goal of having at least 30% of total board places occupied by women directors before the year 2020. The Nomination Committee should run an annual check on compliance with the director selection policy and set out its findings in the annual corporate governance report.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 15 Proprietary and independent directors should constitute an ample majority on the board of directors, while the number of executive directors should be the minimum necessary, bearing in mind the complexity of the corporate group and the ownership interests they control.	X				
Recommendation 16 The percentage of proprietary directors out of all non-executive directors should be no greater than the proportion of the capital represented on the board by these directors to the remainder of the company's capital. This criterion can be relaxed: a) In large cap companies where few or no equity stakes attain the legal threshold for significant shareholdings. b) In companies with a plurality of shareholders represented on the board but not otherwise related.	X				
Recommendation 17 The number of independent directors should be at least half of all board members. However, when the company does not have a large market capitalization, or when a large cap company has shareholders individually or concertedly controlling over 30% of capital, independent directors should occupy, at least, a third of board places.	X				
Recommendation 18 Companies should disclose the following director particulars on their websites and keep them regularly updated: a) Professional experience and background. b) Directorships held in other companies, listed or otherwise, and other paid activities they engage in, of whatever nature. c) Statement of the director category to which they belong, in the case of proprietary directors indicating the shareholder they represent or with whom they have ties. d) Dates of their first appointment as a board member and subsequent re-elections. e) Shares held in the company, and any options on the same.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 19 Following verification by the Nomination Committee, the annual corporate governance report should disclose the reasons for the appointment of proprietary directors at the urging of shareholders controlling less than 3% of capital; and explain any rejection of a formal request for a board place from shareholders whose equity stake is equal to or greater than that of others applying successfully for a proprietary directorship.				X	
Recommendation 20 Proprietary directors should resign when the shareholders they represent dispose of their ownership interest in its entirety. If such shareholders reduce their stakes, thereby losing some of their entitlement to proprietary directors, the latter's number should be reduced accordingly.				X	
Recommendation 21 The board of directors should not propose the removal of independent directors before the expiry of their tenure as mandated by the bylaws, except where they find just cause, based on a proposal from the Nomination Committee. In particular, just cause will be presumed when directors take up new posts or responsibilities that prevent them allocating sufficient time to the work of a board member, or are in breach of their fiduciary duties or come under one of the disqualifying grounds for classification as independent enumerated in the applicable legislation. The removal of independent directors may also be proposed when a takeover bid, merger or similar corporate transaction alters the company's capital structure, provided the changes in board membership ensue from the proportionality criterion set out in recommendation 16.	X				
Recommendation 22 Companies should establish rules obliging directors to disclose any circumstance that might harm the organization's name or reputation, tendering their resignation as the case may be, and, in particular, to inform the board of any criminal charges brought against them and the progress of any subsequent trial. The moment a director is indicted or tried for any of the offences stated in company legislation, the board of directors should open an investigation and, in light of the particular circumstances, decide whether or not he or she should be called on to resign. The board should give a reasoned account of all such determinations in the annual corporate governance report.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 23 Directors should express their clear opposition when they feel a proposal submitted for the board's approval might damage the corporate interest. In particular, independents and other directors not subject to potential conflicts of interest should strenuously challenge any decision that could harm the interests of shareholders lacking board representation. When the board makes material or reiterated decisions about which a director has expressed serious reservations, then he or she must draw the pertinent conclusions. Directors resigning for such causes should set out their reasons in the letter referred to in the next recommendation. The terms of this recommendation also apply to the secretary of the board, even if he or she is not a director.				X	
Recommendation 24 Directors who give up their place before their tenure expires, through resignation or otherwise, should state their reasons in a letter to be sent to all members of the board. Whether or not such resignation is disclosed as a material event, the motivating factors should be explained in the annual corporate governance report.	X				
Recommendation 25 The Nomination Committee should ensure that non-executive directors have sufficient time available to discharge their responsibilities effectively. The board of directors regulations should lay down the maximum number of company boards on which directors can serve.	X				
Recommendation 26 The board should meet with the necessary frequency to properly perform its functions, eight times a year at least, in accordance with a calendar and agendas set at the start of the year, to which each director may propose the addition of initially unscheduled items.	X				
Recommendation 27 Director absences should be kept to a strict minimum and quantified in the annual corporate governance report. In the event of absence, directors should delegate their powers of representation with the appropriate instructions.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 28 When directors or the secretary express concerns about some proposal or, in the case of directors, about the company's performance, and such concerns are not resolved at the meeting, they should be recorded in the minute book if the person expressing them so requests.				X	
Recommendation 29 The company should provide suitable channels for directors to obtain the advice they need to carry out their duties, extending if necessary to external assistance at the company's expense.	X				
Recommendation 30 Regardless of the knowledge directors must possess to carry out their duties, they should also be offered refresher programs when circumstances so advise.	X				
Recommendation 31 The agendas of board meetings should clearly indicate on which points directors must arrive at a decision, so they can study the matter beforehand or gather together the material they need. For reasons of urgency, the chairman may wish to present decisions or resolutions for board approval that were not on the meeting agenda. In such exceptional circumstances, their inclusion will require the express prior consent, duly minuted, of the majority of directors present.	X				
Recommendation 32 Directors should be regularly informed of movements in share ownership and of the views of major shareholders, investors and rating agencies on the company and its group.	X				
Recommendation 33 The chairman, as the person charged with the efficient functioning of the board of directors, in addition to the functions assigned by law and the company's bylaws, should prepare and submit to the board a schedule of meeting dates and agendas; organize and coordinate regular evaluations of the board and, where appropriate, the company's chief executive; exercise leadership of the board and be accountable for its proper functioning; ensure that sufficient time is given to the discussion of strategic issues, and approve and review refresher courses for each director, when circumstances so advise.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 34 When a lead independent director has been appointed, the bylaws or board of directors regulations should grant him or her the following powers over and above those conferred by law: chair the board of directors in the absence of the chairman or deputy chairmen; give voice to the concerns of non-executive directors; maintain contacts with investors and shareholders to hear their views and develop a balanced understanding of their concerns, especially those to do with the company's corporate governance; and coordinate the chairman's succession plan.	X				
Recommendation 35 The board secretary should strive to ensure that the board's actions and decisions are informed by the governance recommendations of the Good Governance Code of relevance to the company.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 36 The board in plenary session should conduct an annual evaluation, adopting, where necessary, an action plan to correct weakness detected in: a) The quality and efficiency of the board's operation. b) The performance and membership of its committees. c) The diversity of board membership and competences. d) The performance of the chairman of the board of directors and the company's chief executive. e) The performance and contribution of individual directors, with particular attention to the chairmen of board committees. The evaluation of board committees should start from the reports they send the board of directors, while that of the board itself should start from the report of the Nomination Committee. Every three years, the board of directors should engage an external facilitator to aid in the evaluation process. This facilitator's independence should be verified by the Nomination Committee. Any business dealings that the facilitator or members of its corporate group maintain with the company or members of its corporate group should be detailed in the annual corporate governance report. The process followed and areas evaluated should be detailed in the annual corporate governance report.	X				
Recommendation 37 When an executive committee exists, its membership mix by director class should resemble that of the board. The secretary of the board should also act as secretary to the executive committee.	X				
Recommendation 38 The board of directors should be kept fully informed of the business transacted and decisions made by the executive committee. To this end, all board members should receive a copy of the committee's minutes.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 39 All members of the audit committee, particularly its chairman, should be appointed with regard to their knowledge and experience in accounting, auditing and risk management matters. A majority of committee places should be held by independent directors.	X				
Recommendation 40 Listed companies should have a unit in charge of the internal audit function, under the supervision of the audit committee, to monitor the effectiveness of reporting and control systems. This unit should report functionally to the board's non-executive chairman or the chairman of the audit committee.	X				
Recommendation 41 The head of the unit handling the internal audit function should present an annual work program to the audit committee, inform it directly of any incidents arising during its implementation and submit an activities report at the end of each year.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 42 The audit committee should have the following functions over and above those legally assigned: 1. With respect to internal control and reporting systems: a) Monitor the preparation and the integrity of the financial information prepared on the company and, where appropriate, the group, checking for compliance with legal provisions, the accurate demarcation of the consolidation perimeter, and the correct application of accounting principles. b) Monitor the independence of the unit handling the internal audit function; propose the selection, appointment, re-election and removal of the head of the internal audit service; propose the service's budget; approve its priorities and work programs, ensuring that it focuses primarily on the main risks the company is exposed to; receive regular report-backs on its activities; and verify that senior management are acting on the findings and recommendations of its reports. c) Establish and supervise a mechanism whereby staff can report, confidentially and, if appropriate and feasible, anonymously, any significant irregularities that they detect in the course of their duties, in particular financial or accounting irregularities. 2. With regard to the external auditor: a) Investigate the issues giving rise to the resignation of the external auditor, should this come about. b) Ensure that the remuneration of the external auditor does not compromise its quality or independence. c) Ensure that the company reports any change in the external auditor to the CNMV as a material event, accompanied by a statement of any disagreements arising with the outgoing auditor and the reasons behind them. d) Ensure that the external auditor has a yearly meeting with the board in plenary session to inform it of the work undertaken and developments in the company's risk and accounting positions. e) Ensure that the company and the external auditor adhere to current regulations on the provision of non-audit services, limits on the concentration of the auditor's business and other requirements concerning auditor independence.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 43 The audit committee should be empowered to meet with any company employee or manager, even ordering their appearance without the presence of another senior manager.	X				
Recommendation 44 The audit committee should be informed of any fundamental changes or corporate transactions the company is planning, so the committee can analyze the operation and report to the board beforehand on its economic conditions and accounting impact and, when applicable, the exchange ratio proposed.	X				
Recommendation 45 Risk control and management policy should identify at least: a) The different types of financial and non-financial risk (including operational, technological, financial, legal, social, environmental, political and reputational risks) that the company is exposed to, with the inclusion under financial or economic risks of contingent liabilities and other off-balance-sheet risks. b) The determination of the risk level the company sees as acceptable. c) The measures in place to mitigate the impact of the identified risks, should they occur. d) The internal control and reporting systems to be used to control and manage the above risks, including contingent liabilities and off-balance-sheet risks.	X				
Recommendation 46 Companies should establish an internal risk control and management function, performed by one of the company's internal units or departments, and under the direct supervision of the audit committee or, where applicable, some other dedicated board committee. This function should be expressly charged with the following responsibilities: a) Ensure that risk control and management systems are functioning correctly and, specifically, that major risks to which the company is exposed are correctly identified, managed and quantified. b) Participate actively in the preparation of risk strategies and in key decisions about their management. c) Ensure that risk control and management systems are mitigating risks effectively within the framework of the policy defined by the board of directors.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 47 Appointees to the appointments and remuneration committee – or of the Nomination Committee and the remuneration committee, if separately constituted – should have the right balance of knowledge, skills and experience for the functions they are called on to discharge. The majority of their members should be independent directors.	X				
Recommendation 48 Large cap companies should operate separately constituted appointment and remuneration committees.	X				
Recommendation 49 The Nomination Committee should consult with the company's chairman and chief executive, especially on matters relating to executive directors. When there are vacancies on the board, any director may approach the Nomination Committee to propose candidates that they might consider suitable.	X				
Recommendation 50 The remuneration committee should operate independently and have the following functions in addition to those assigned by law: a) Propose to the board the standard conditions for senior manager contracts. b) Monitor compliance with the remuneration policy set by the company. c) Periodically review the remuneration policy for directors and senior managers, including share-based remuneration systems and their application, and ensure that their individual compensation is proportionate to the amounts paid to other directors and senior managers in the company. d) Ensure that conflicts of interest do not undermine the independence of any external advice the committee engages. e) Verify the information on director and senior managers' pay contained in corporate documents, including the annual report on directors' remuneration.	X				
Recommendation 51 The remuneration committee should consult with the company's chairman and chief executive, especially on matters relating to executive directors and senior managers.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 52 The terms of reference of supervision and control committees should be set out in the board of directors regulations and aligned with those governing legally mandatory board committees as specified in the preceding sets of recommendations. They should include at least the following terms: a) Committees should be formed exclusively by non-executive directors, with a majority of independent directors. b) They should be chaired by independent directors. c) The board should appoint the members of such committees having regard to the knowledge, skills and experience of its directors and the remit of each committee, and discuss their proposals and reports; and the committees should report the business transacted and account for the work performed at the first board plenary session following each committee meeting. d) They may engage external advice, when they feel it necessary for the discharge of their functions. e) Meeting proceedings should be minuted and a copy made available to all board members.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 53 The task of supervising compliance with corporate governance rules, internal codes of conduct and corporate social responsibility policy should be assigned to one board committee or split between several, which could be the audit committee, the Nomination Committee, the corporate social responsibility committee, where one exists, or a dedicated committee established ad hoc by the board under its powers of self-organization, with at the least the following functions: a) Monitor compliance with the company's internal codes of conduct. b) Oversee the communication and relations strategy with shareholders and investors, including small and medium-sized shareholders. c) Periodically evaluate the effectiveness of the company's corporate governance system, to confirm that it is fulfilling its mission to promote the corporate interest and catering, as appropriate, to the legitimate interests of remaining stakeholders. d) Review the company's corporate social responsibility policy, ensuring that it is geared to value creation. e) Monitor corporate social responsibility strategy and practices and assess their degree of fulfillment. f) Monitor and evaluate the company's interaction with its stakeholders. g) Evaluate all aspects of the non-financial risks the company is exposed to, including operational, technological, legal, social, environmental, political and reputational risks. h) Coordinate non-financial and diversity reporting processes in accordance with applicable legislation and international benchmarks.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 54 The corporate social responsibility policy should state the principles or commitments the company will voluntarily adhere to in its dealings with stakeholders, specifying at least: a) The goals of its corporate social responsibility policy and the support instruments to be deployed. b) The corporate strategy with regard to sustainability, the environment and social issues. c) Specific practices in matters related to: shareholders, employees, clients, suppliers, social welfare issues, the environment, diversity, fiscal responsibility, respect for human rights and the prevention of illegal conducts. d) The methods or systems for monitoring the results of the practices referred to above, and identifying and managing related risks. e) The mechanisms for supervising non-financial risk, ethics and business conduct. f) Channels for stakeholder communication, participation and dialogue. g) Responsible communication practices that prevent the manipulation of information and protect the company's honor and integrity.	X				
Recommendation 55 The company should report on corporate social responsibility developments in its directors' report or in a separate document, using an internationally accepted methodology.	X				
Recommendation 56 Director remuneration should be sufficient to attract individuals with the desired profile and compensate the commitment, abilities and responsibility that the post demands, but not so high as to compromise the independent judgement of non-executive directors.	X				
Recommendation 57 Variable remuneration linked to the company's profit and the director's performance, the award of shares, options or any other right to acquire shares or to be remunerated on the basis of share price movements, and membership of long-term savings schemes such as pension plans should be confined to executive directors. The company may consider the share-based remuneration of non-executive directors provided they retain such shares until the end of their mandate. The above condition will not apply to any shares that the director must dispose of to defray costs related to their acquisition.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 58 In the case of variable remuneration, remuneration policies should include limits and technical safeguards to ensure such remuneration reflects the professional performance of the beneficiaries and not simply the general performance of the markets or the company's sector or other similar circumstances. In particular, variable remuneration items should meet the following conditions: a) Be subject to predetermined and measurable performance criteria that factor the risk assumed to obtain a given outcome. b) Promote the long-term sustainability of the company and include non-financial criteria that are relevant for the company's long-term value, such as compliance with its internal rules and procedures and its risk control and management policies. c) Be focused on achieving a balance between the delivery of short, medium and long-term objectives, such that performance-related pay rewards ongoing achievement, maintained over sufficient time to appreciate its contribution to long-term value creation. This will ensure that performance measurement is not based solely on one-off, occasional or extraordinary events.	X				
Recommendation 59 A major part of variable remuneration components should be deferred for a long enough period to ensure that predetermined performance criteria have effectively been met.	X				
Recommendation 60 Remuneration linked to company earnings should bear in mind any qualifications stated in the external auditor's report that reduce their amount.				X	
Recommendation 61 A major part of executive directors' variable remuneration should be linked to the award of shares or financial instruments whose value is linked to the share price.	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
Recommendation 62 Following the award of shares, share options or other rights on shares derived from the remuneration system, directors should not be allowed to transfer a number of shares equivalent to twice their annual fixed remuneration, or to exercise the share options or other rights on shares for at least three years after their award. The above condition will not apply to any shares that the director must dispose of to defray costs related to their acquisition.	X				
Recommendation 63 Contractual arrangements should include provisions that permit the company to reclaim variable components of remuneration when payment was out of step with the director's actual performance or based on data subsequently found to be misstated.	X				
Recommendation 64 Termination payments should not exceed a fixed amount equivalent to two years of the director's total annual remuneration and should not be paid until the company confirms that he or she has met the predetermined performance criteria.	X				

Mr. Luis Suárez de Lezo Mantilla, Secretary of the Board of Directors of Repsol, S.A.

I certify: That the preceding pages contain the Consolidated Financial Statements and the Consolidated Management Report of Repsol, S.A. as its subsidiaries for the fiscal year ended December 31, 2018, as approved by its Board of Directors on February 27, 2019, following which this page was signed by the members of the Board of Directors at the date of such approval.

The members of the Board of Directors of Repsol, S.A. declare that, to the best of their knowledge, the Consolidated Financial Statements for the fiscal year ended on December 31, 2018, approved at its meeting held on February 27, 2019 and prepared in accordance with applicable accounting principles, fairly present the equity, financial position and results of Repsol, S.A., and the companies that form part of consolidation taken as a whole, and that the Consolidated Management Report includes a fair depiction of the development and business results and the financial position of Repsol, S.A., and the companies that form part of the consolidation taken as a whole, together with a description of its principal risks and uncertainties.

Mr. Antonio Brufau Niubó *Chairman*	Mr. Manuel Manrique Cecilia *Vice Chariman*
Mr. Josu Jon Imaz San Miguel *CEO*	Ms. María Teresa Ballester Fornés *Director*
Mr. Luis Carlos Croissier Batista *Director*	Mr. Rene Dahan *Director*
Mr. Ángel Durández Adeva *Director*	Ms. Carmina Ganyet i Cirera *Director*
Mr. José Manuel Loureda Mantiñán *Director*	Mr. Ignacio Martín San Vicente *Director*
Mr. Mariano Marzo Carpio *Director*	Mr. Henri Philippe Reichstul *Director*
Ms. Isabel Torremocha Ferrezuelo *Director*	Mr. J. Robinson West *Director*
Mr. Luis Suárez de Lezo Mantilla *Director and Secretary*	

The Secretary of the Board of Directors also certifies that Mr. Rene Dahan, who attended to the meeting of the Board of Directors held on February 27, 2019 by telephonic means, has not signed this document. However, the Board minutes will include the vote in favor of Mr. Rene Dahan to the approval of the Consolidated Financial Statements and the Consolidated Management Report of Repsol, S.A. and its subsidiaries for the fiscal year ended December 31, 2018.

Mr. Luis Suárez de Lezo Mantilla
Director and Secretary

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 REASONABLE ASSURANCE REPORT ON THE DESIGN AND EFFECTIVENESS OF THE INTERNAL CONTROL OVER FINANCIAL REPORTING (ICFR)

To the Board of Directors of Repsol, S.A.:

We have carried out a reasonable assurance report of the design and effectiveness of the Internal Control over Financial Reporting (hereinafter, ICFR) and the description of it that is included in the attached Report that forms part of the corresponding section of the Annual Corporate Governance Report of the Directors Report accompanying the consolidated financial statements of Repsol, S.A. and investees comprising the Repsol Group (hereinafter, the Repsol Group) as at December 31, 2018. This system is based on the criteria and policies defined by the Repsol Group in accordance with the guidelines established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its "Internal Control-Integrated Framework 2013" report.

An Internal Control over Financial Reporting is a process designed to provide reasonable assurance over the reliability of financial information in accordance with the applicable financial reporting framework and includes those policies and procedures that: (i) enable the records reflecting the transactions performed to be kept accurately and with a reasonable level of detail; (ii) provide reasonable assurance as to the proper recognition of transactions to make it possible to prepare the financial information in accordance with the accounting principles and standards applicable to it and that they are made only in accordance with established authorizations; and (iii) provide reasonable assurance in relation to the prevention or timely detection of unauthorised acquisitions, use or sales of the Group's assets that could have material effect on the financial information.

Inherent Limitations

In this regard, it should be borne in mind that, given the inherent limitations of any Internal Control over Financial Reporting, regardless of the quality of the design and operation of the system, it can only allow reasonable, but not absolute security, in relation to the objectives it pursues, which may lead to errors, irregularities or fraud that may not be detected. On the other hand, the projection to future periods of the evaluation of internal control is subject to risks such that said internal control being inadequate as a result of future changes in the applicable conditions, or that in the future the level of compliance of the established policies or procedures may be reduced.

Director's responsibility

The Directors of Repsol, S.A. are responsible for taking the necessary measures to reasonably ensure the implementation, maintenance and supervision of an appropriate Internal Control over Financial Reporting, as well as the evaluation of its effectiveness, the development of improvements to that system and the preparation and establishment of the content of the information relating to the ICFR attached.

R. M. Madrid, hoja 87.250-1, folio 75, tomo 9.267, libro 8.054, sección 3ª
Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79 031290

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Our Responsability

Our responsibility is to issue a reasonable assurance report on the design and effectiveness of the Repsol Group Internal Control over Financial Reporting, based on the work we have performed and on the evidence we have obtained. We have performed our reasonable assurance engagement in accordance with "International Standard on Assurance Engagements 3000 (ISAE 3000)" (Revised), "Assurance Engagements other than Auditing or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC).

A reasonable assurance report includes the understanding of the Internal Control over Financial Reporting, assessing the risk of material weaknesses in the internal control, that the controls are not properly designed or they do not operate effectively, the execution of tests and evaluations on the design and effective implementation of this ICFR, based on our professional judgment, and the performance of such other procedures as may be deemed necessary.

We believe that the evidence we have obtained provides a sufficient and adequate basis for our opinion.

Our Independence and Quality Control

We have complied with the independence requirements and other ethical requirements of the Accounting Professionals Code of Ethics issued by the International Ethics Standards Board for Accountants (IESBA), which is based on the fundamental principles of integrity, objectivity, professional competence and diligence, confidentiality and professional behavior.

Our firm applies the "International Standard on Quality Control 1 (ISQC 1)" and maintains an exhaustive qualitative control system that includes documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory provisions.

Opinion

In our opinion, the Repsol Group maintained, as at December 31, 2018, in all material respects, an effective Internal Control over Financial Reporting for the period ended at December 31, 2018, which is based on the criteria and the policies defined by the Repsol Group's management in accordance with the guidelines established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its "Internal Control-Integrated Framework 2013" report.

In addition, the attached description of the ICFR Report as at December 31, 2018 has been prepared, in all material respects, in accordance with the requirements established by article 540 of the Consolidated Text of the Capital Companies Act and with the Circular 5/2013 of June 12, 2013 of the CNMV, as amended by CNMV Circular No. 7/2015 dated December 22, 2015 and CNMV Circular No. 2/2018 dated June 12, 2018 for the purposes of the description of the ICFR in the Annual Reports of Corporate Governance.

This work does not constitute an audit nor is it subject to the regulations governing the audit activity in force in Spain, so we do not express any audit opinion in the terms provided in the aforementioned regulations.

PricewaterhouseCoopers Auditores, S.L.

Iñaki Goiriena Basualdu

February 28, 2019

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.

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Inscrita en el R.O.A.C. con el número S0242 - CIF: B-79 031290

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.

Original in Spanish signed by Pablo Bascones

28 February 2019

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